



CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DRWG NO. REV GID
E1000857-v1

SHEET 1 OF 1

ASSEMBLY NO:

D1003275-V1

OVERALL BILL OF MATERIALS

TITLE: BOM-ITM ELLIPTICAL BAFFLE RIGHT PARTS & QUANTITIES

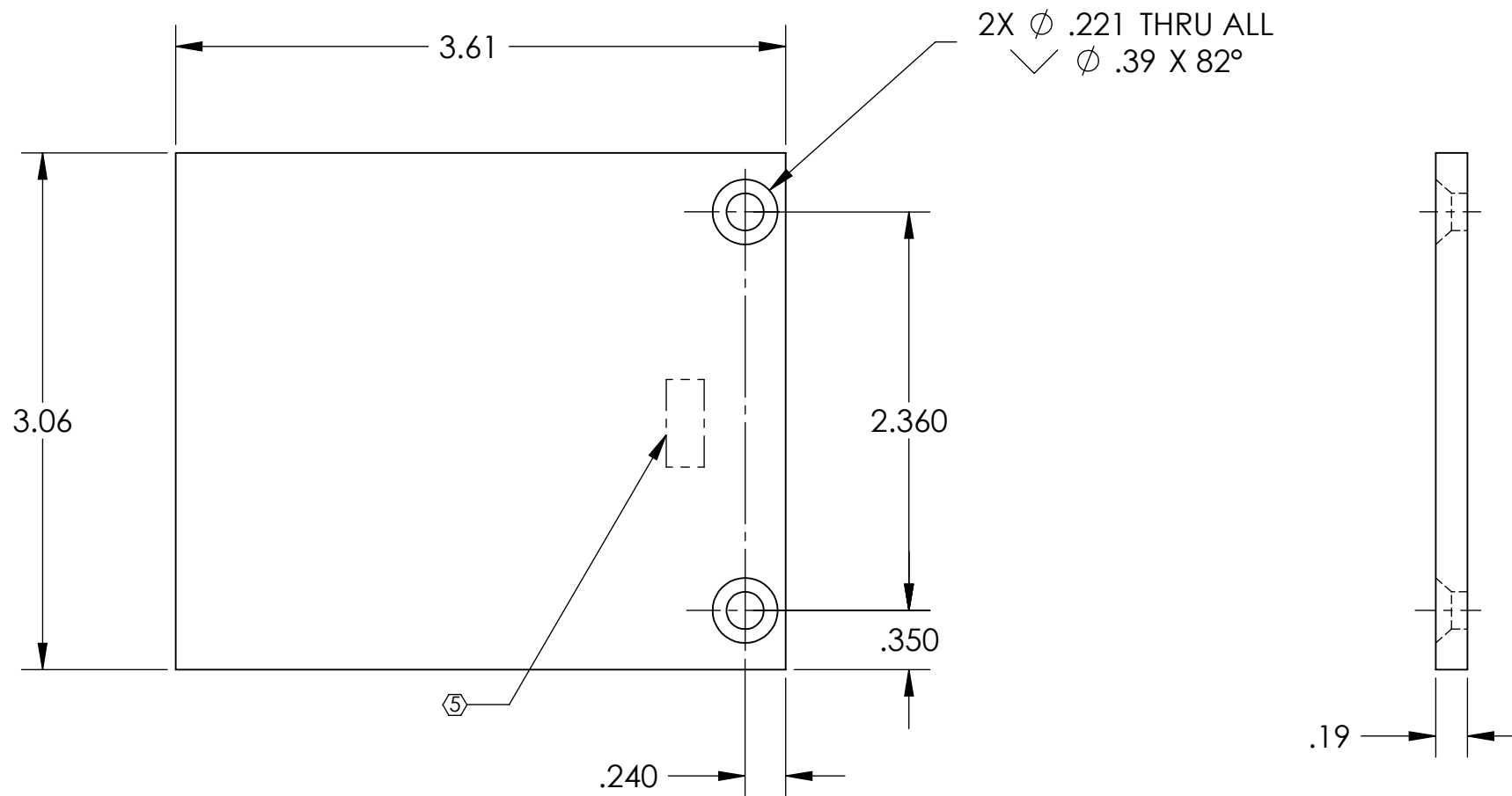
	APPROVALS:	DATE:	REV	DCN NO.	BY	CHECK	DCC	DATE
DRAWN / AUTHOR: (REFERENCE CONTENTS)	CIT, CC	13-Dec-10	v1	E1000855	MRUIZ			
CHECKED:								
APPROVED:								
DCC RELEASE								

ITEM NO	REQ.	SPARE	TOT.	PART NUMBER	REVISION	DESCRIPTION	MATERIAL
1	1	0	1	D1001044	V1	ITM ELLIPTICAL DOWN TUBE	6061-T6
2	1	0	1	D1002753	V1	ITM ELLIPTICAL BLADE	MARAGING SSTL C250
3	1	0	1	D1002764	V1	ITM ELLIPTICAL BAFFLE SKIN	A424 TYPE I, 18GA SSTL
4	1	0	1	D1002765	V1	ITM ELLIPTICAL UPPER CAP SKIN	A424 TYPE I, 18GA SSTL
5	1	0	1	D1002766	V1	ITM ELLIPTICAL LOWER CAP SKIN	A424 TYPE I, 18GA SSTL
6	1	0	1	D1002816	V1	ITM ELLIPTICAL BAFFLE TUBE MOUNT	6061-T6
7	2	0	2	D1002928	V1	ITM ELLIPTICAL BAFFLE HATSECTION	A424 TYPE I, 18GA SSTL
8	1	0	1	D1003122	V1	ITM ELLIPTICAL BAFFLE SUPPORT	6061-T6
9	1	0	1	D1002618	V1	SLC TUBE LOWER CONNECTOR PLATE	6061-T6
10	1	0	1	D1000930	V1	SLC MAGNET HOLDER STEEL PLATE	430F OR 430FR
11	1	0	1	D1002560	V1	SLC DAMPING TUBE TOP PLATE	6061-T6
12	1	0	1	D1002561	V1	SLC DAMPING 8" DIA TUBE	6061-T6
13	1	0	1	D1002617	V1	SLC DAMPING TUBE LOWER PLATE	6061-T6
14	1	0	1	D1000929	V1	SLC COPPER SUPPORT PLATE	6061-T6
15	1	0	1	D1000909	V1	SLC COPPER PLATE	COPPER
16	2	0	2	D1001120	V1	SLC EARTHQUAKE STOP RING	6061-T6
17	1	0	1	D1002609	V1	SLC BLADE MOUNTING BRACKET	6061-T6
18	1	0	1	D1002756	V1	ITM ELLIPTICAL INTERFACE MOUNTING PLATE	304 SSTL
19	1	0	1	D1002340	V1	SLC ACB SUSPENSION ROD	316 SSTL
20	1	0	1	D1002612	V1	SLC UPPER TUBE	6061-T6
21	1	0	1	D1002610	V1	SLC TUBE UP CONNECTOR PLATE	6061-T6
22	1	0	1	D1002581	V1	SLC SUSPENSION ROD SUPPORT	6061-T6

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, 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. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

- 6. APPROXIMATE WEIGHT = X.XXX LB.
- 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
- 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
- 9. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO. REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 JUN 2010	E1000191	



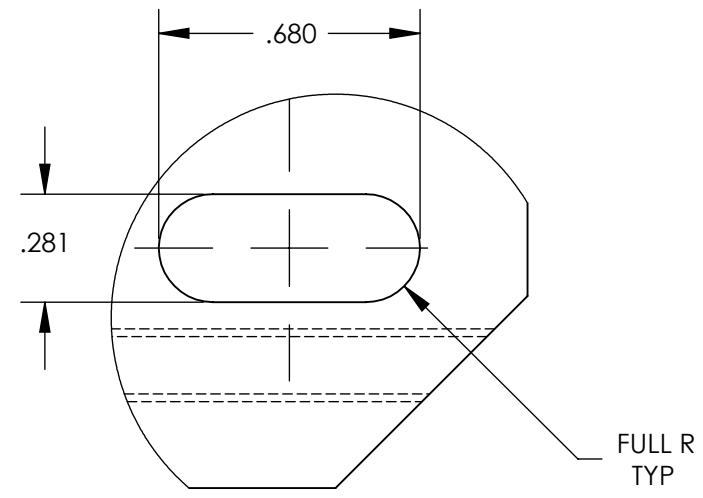
D1000909_AdlIGO_AOS_SLC 4-Way Copper Plate, PART PDM REV: X-010, DRAWING PDM REV: X-017

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES		1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
TOLERANCES: .XX ± .01 .XXX ± .005		MATERIAL 99.999% COPPER		NEXT ASSY D1000863, D1002564		DESIGNER N.Nguyen	
ANGULAR ± 1.0°		FINISH 63 μinch		DRAFTER TQ. NGUYEN		DATE 01 Jun 2010	
				CHECKER M. SMITH		SIZE DWG. NO. B D1000909	
				APPROVAL D. COYNE		REV. v1	
				SCALE: 1:1		PROJECTION:	
						SHEET 1 OF 1	

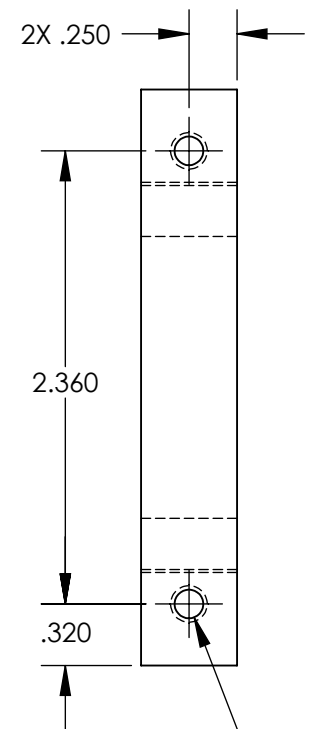
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY.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

REV.	DATE	DCN #	DRAWING TREE #
v1	07 JUN 2010	E1000191	

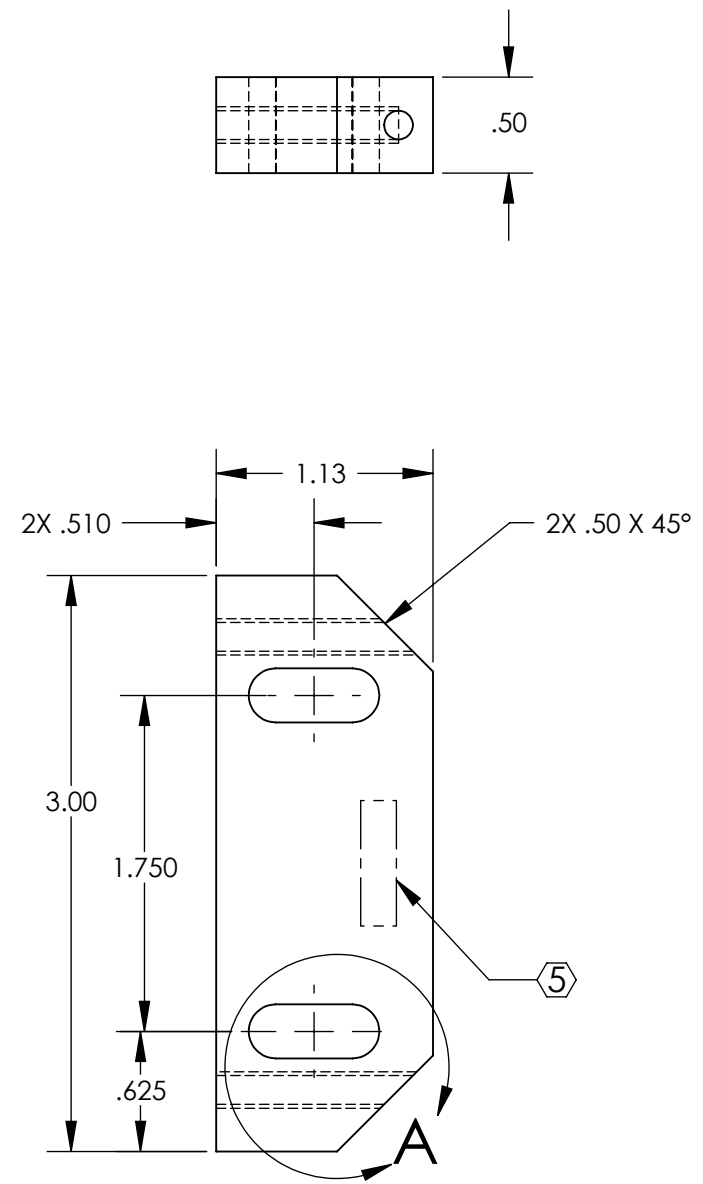
- D
 6. APPROXIMATE WEIGHT = .13 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.



DETAIL A
 SCALE 2:1
 2X



2X DRILL AND TAP
 10-24 UNC -2B THRU
 +.005 OVERSIZE TAP



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES	
TOLERANCES: .XX ± .01 .XXX ± .005	
ANGULAR ± 1.0°	
1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	FINISH
6061-T6 Al	63 μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO SUB-SYSTEM: AOS

NEXT ASSY: D100863, D1002564

PART NAME				SLC COPPER SUPPORT PLATE			
DESIGNER	N.Nguyen	01 Jun 2010	SIZE	DWG. NO.	REV.		
DRAFTER	TQ. NGUYEN	19 MAY 2010	B	D1000929	v1		
CHECKER	M. SMITH	30 JUN 2010	SCALE:	1:1	PROJECTION:		
APPROVAL	D. COYNE	10 SEP 2010			SHEET 1 OF 1		

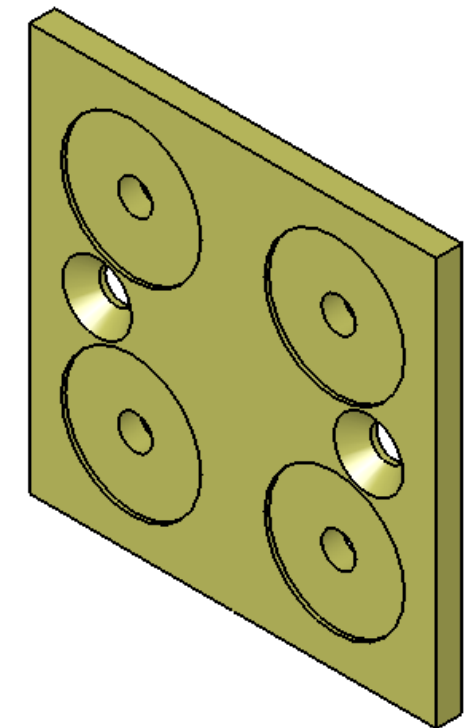
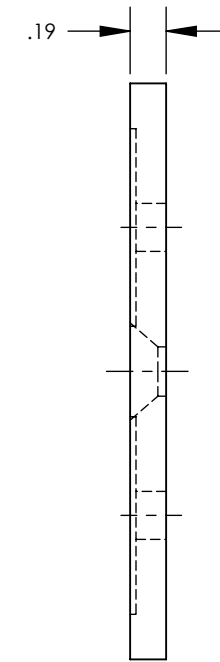
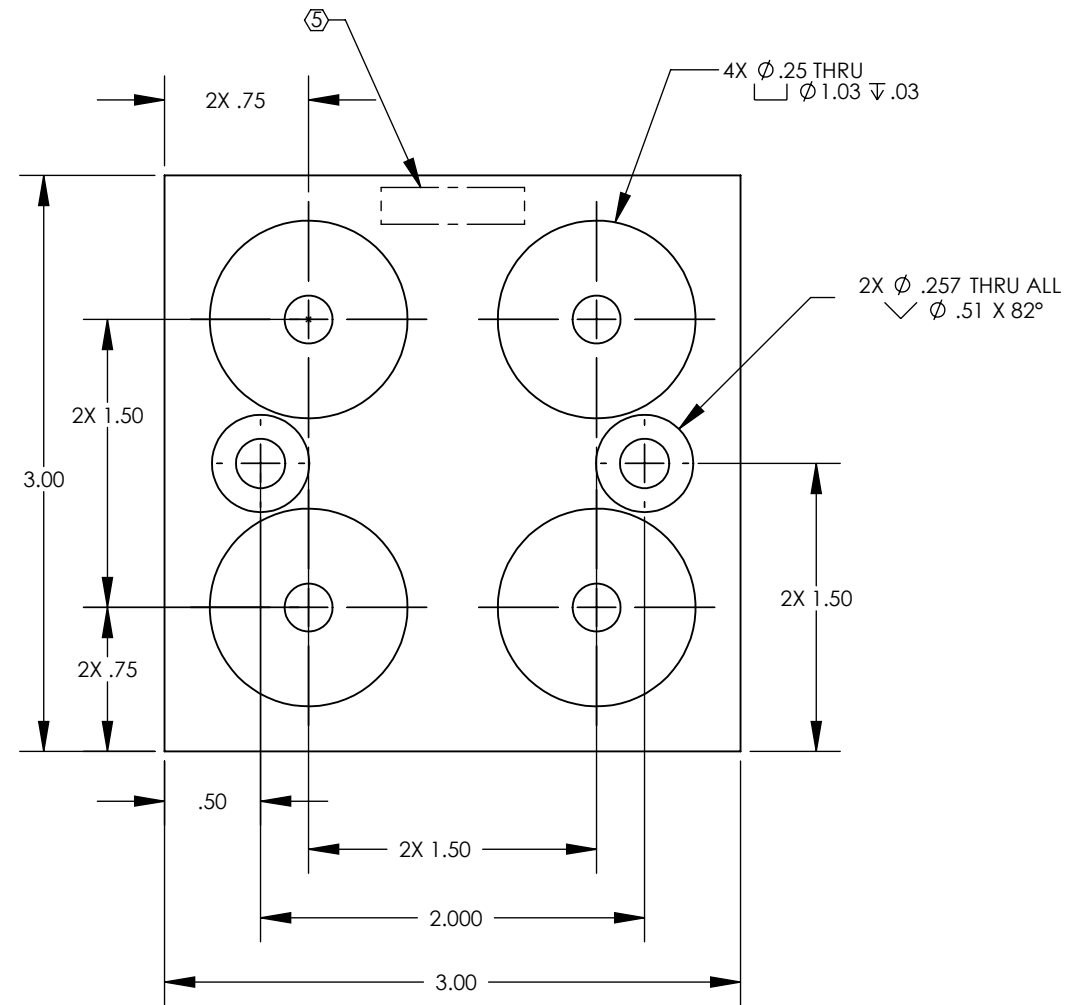
D1000929_AdlLIGO_AOS_SLC Copper Support Plate, PART PDM REV: X-005, DRAWING PDM REV: X-005

D1000930_AdlIGO_AOS_SLC Magnet Holder Steel Plate, PART PDM REV: X-011, DRAWING PDM REV: X-016

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, 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. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = .44 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
 9. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 JUN 2010	E1000191	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 1.0°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, R.02 MIN.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL 416 SSSL **FINISH** 63 μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO **SUB-SYSTEM** AOS

NEXT ASSY D1001007

PART NAME			SLC MAGNET HOLDER STEEL PLATE		
DESIGNER	N.Nguyen	01 Jun 2010	SIZE	DWG. NO.	REV.
DRAFTER	TQ. NGUYEN	19 MAY 2010	B	D1000930	v1
CHECKER	M. SMITH	30 JUN 2010	SCALE: 1:1	PROJECTION:	SHEET 1 OF 1
APPROVAL	D. COYNE	01 SEP 2010			

D1001044_AdlIGO_AOS_Beam Dump FM Elliptical Down Tube, PART PDM REV: X-001, DRAWING PDM REV: X-001

- NOTES CONTINUED:**
- ⑤ SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
EXAMPLE (PART): 001-v1
EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD
 - D 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 - 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
 - 8. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO. REFER TO LIGO-E0900364.
 - 9. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.
 - ⑩ ELECTROPOLISHING PER E0900364, SECTION 5.1 TO REMOVE ALL SURFACE OXIDES AND POTENTIALLY EMBEDDED CONTAMINANTS.

REV.	DATE	DCN #	DRAWING TREE #
v1	18 NOV 2010	E1000736	-
-	-	-	-
-	-	-	-

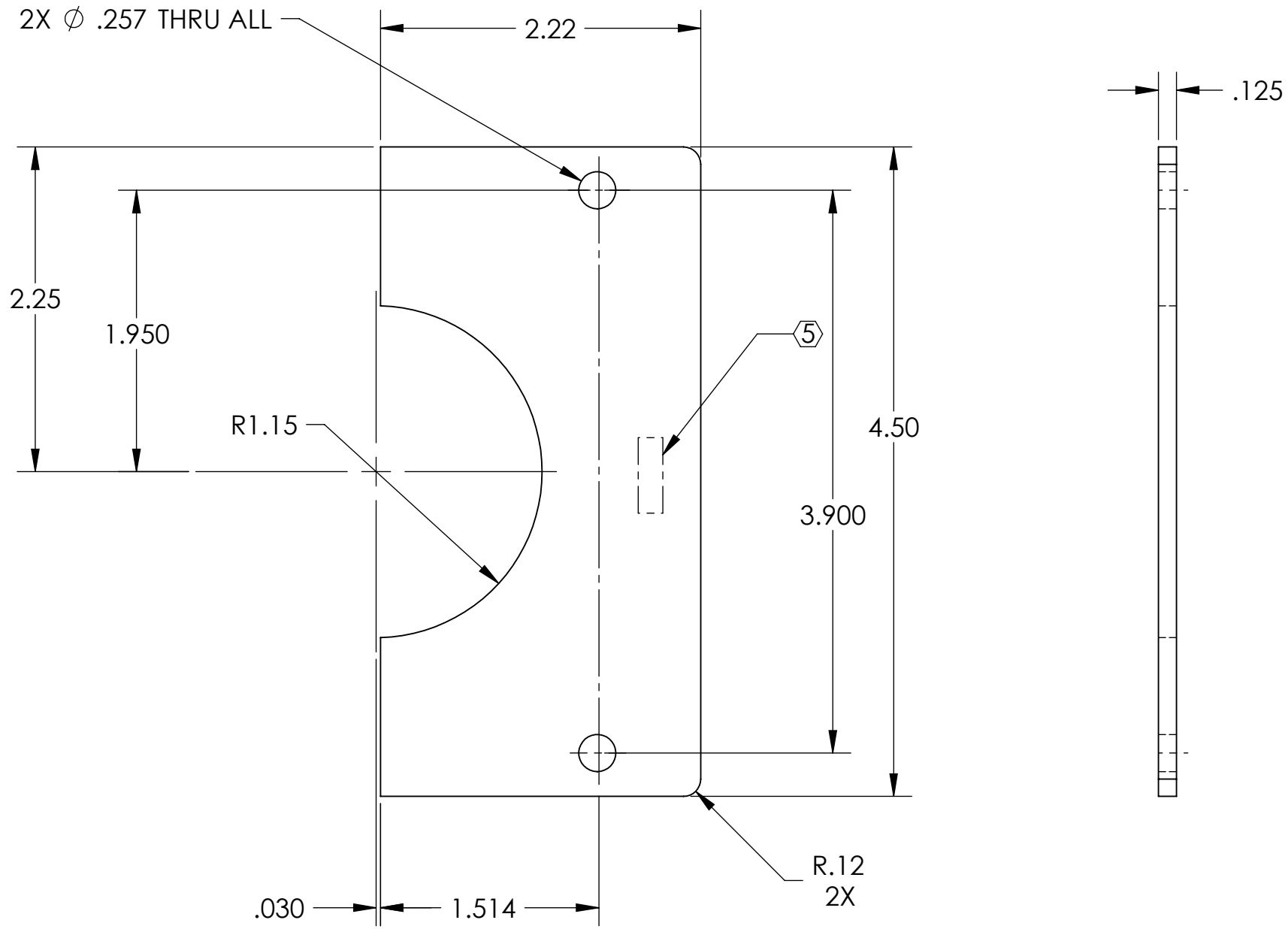


NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME BEAM DUMP FM ELLIPTICAL DOWN TUBE				
DIMENSIONS ARE IN		1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SYSTEM	SUB-SYSTEM	DESIGNER	DATE	SIZE	DWG. NO.	REV.
TOLERANCES: .XX ± .02 .XXX ± .010		MATERIAL	FINISH	NEXT ASSY		MRUIZ	05 NOV 2010	B	D1001044	v1
ANGULAR ± .5°		6061-T6 Al, TUBE	⑩	D1002850				SCALE: 1:3	PROJECTION:	SHEET 1 OF 1

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, 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. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = .096 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
 9. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 JUN 2010	E1000191	



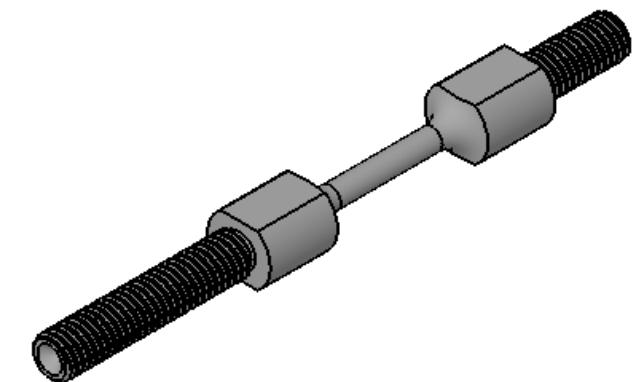
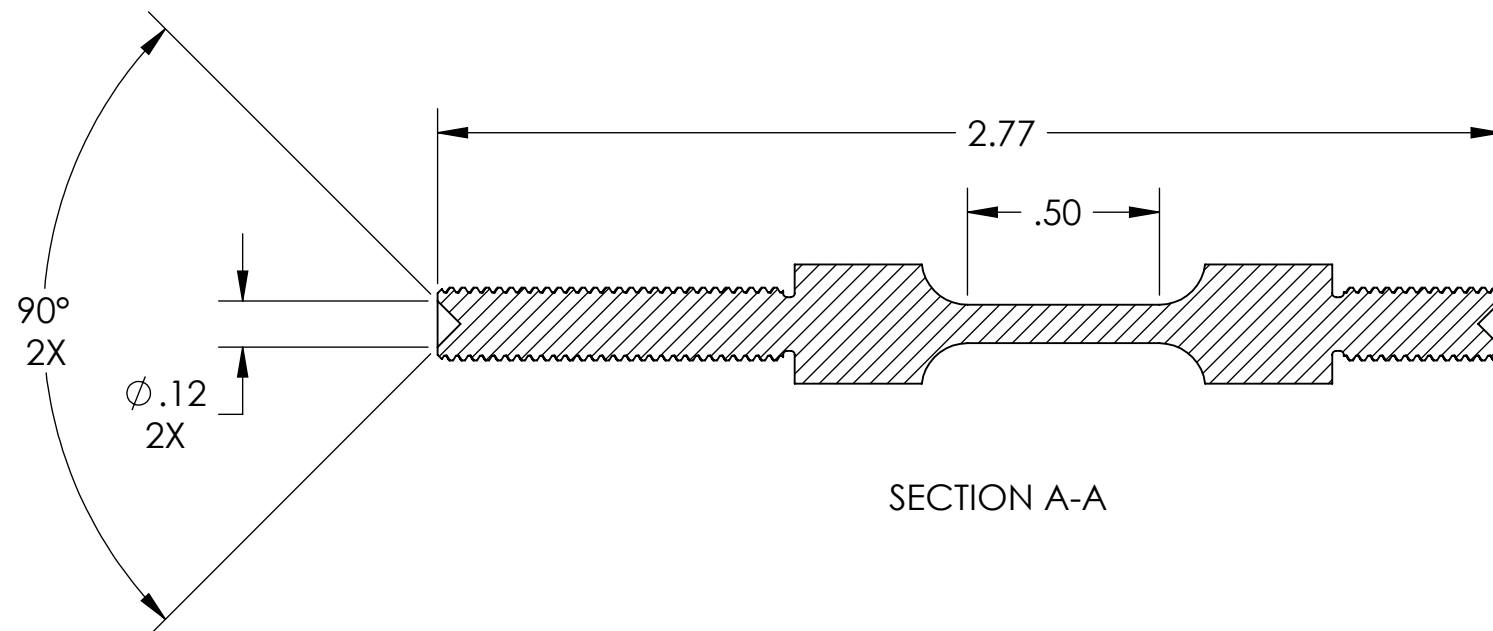
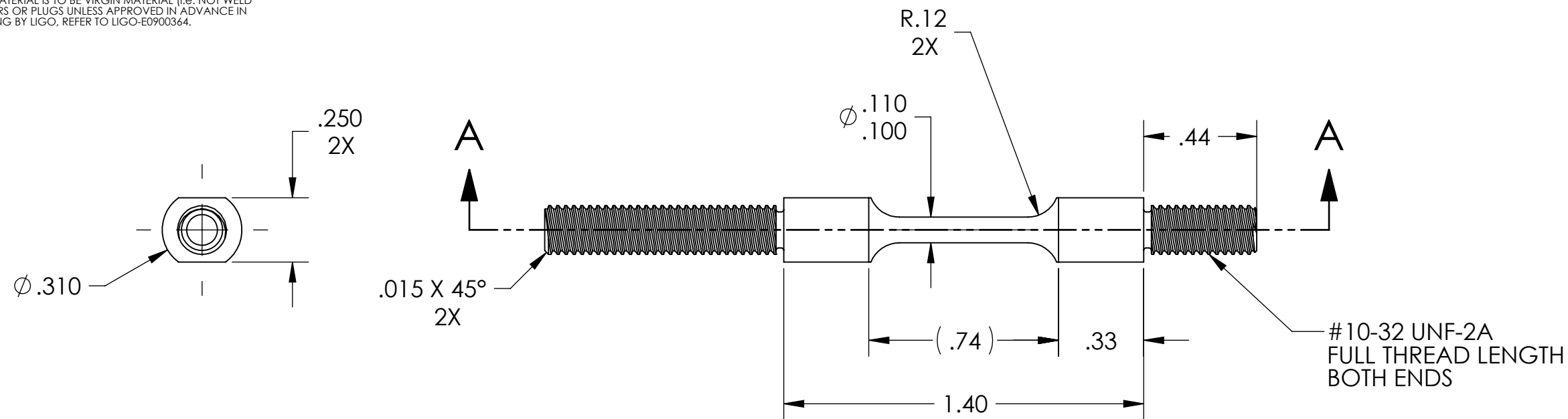
D1001120_AdlIGO_AOS_SLC Earthquake Stop Ring, PART PDM REV: X-012, DRAWING PDM REV: X-018

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		SLC EARTHQUAKE STOP RING	
TOLERANCES: .XX ± .01 .XXX ± .005				SUB-SYSTEM AOS		DESIGNER	N.Nguyen 01 Jun 20
ANGULAR ± 1.0°				NEXT ASSY D1000863, D1002564		DRAFTER	TQ. NGUYEN 19 MAY 2010
MATERIAL 6061-T6 Al		FINISH 63 μinch		CHECKER	M. SMITH 30 JUN 2010	SIZE DWG. NO.	B D1001120
				APPROVAL	D. COYNE 10 SEP 2010	REV.	v1
						SCALE:	1:1
						PROJECTION:	ASME
						SHEET 1 OF 1	

NOTES CONTINUED:

- 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
EXAMPLE (PART): 001-v1
EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD
- 6. APPROXIMATE WEIGHT = X.XXX LB.
- 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
- 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
- 9. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	18 OCT 2010	E1000285	-
-	-	-	-
-	-	-	-



ISO VIEW FOR REFERENCE ONLY

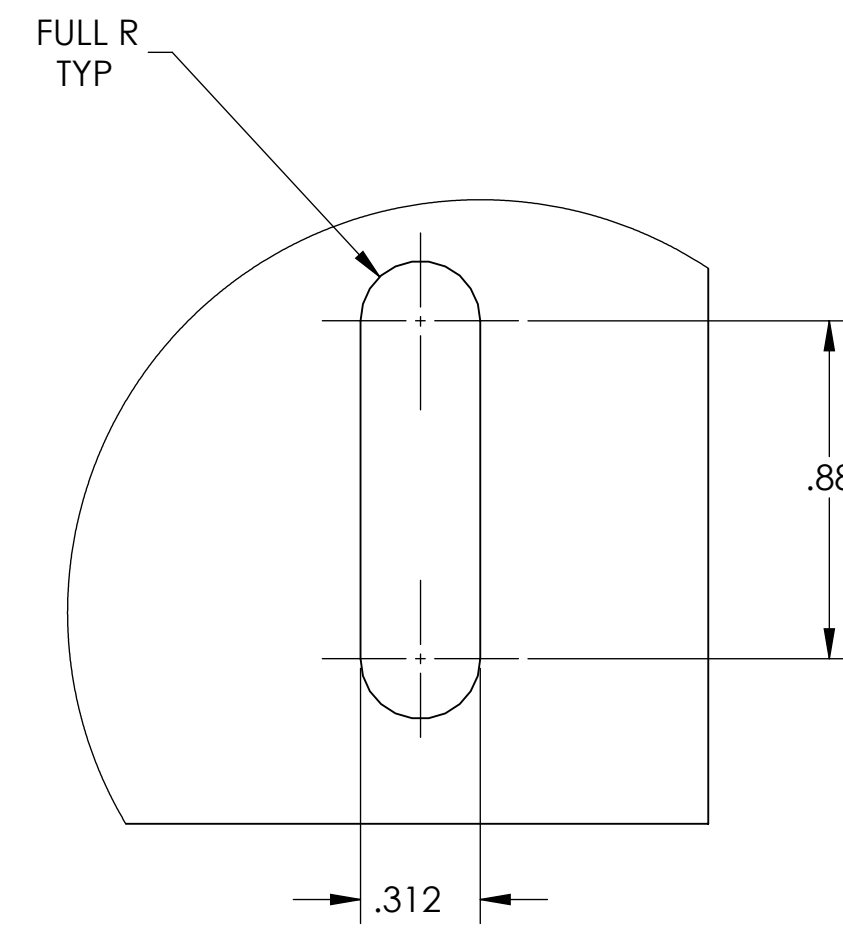
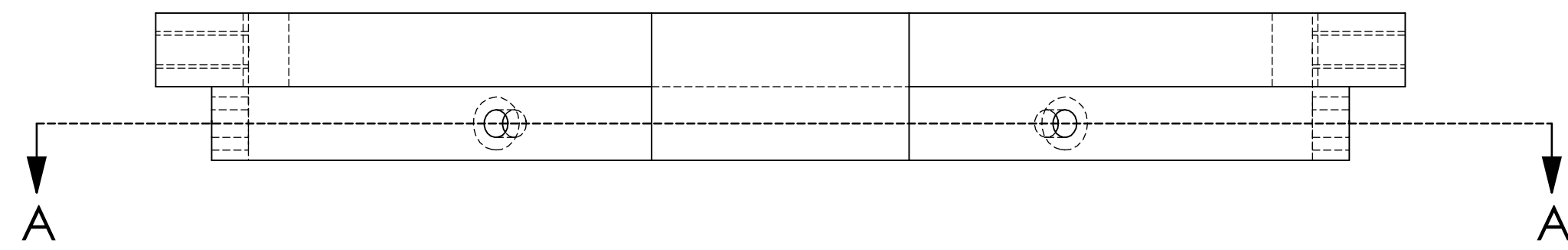
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		SLC ACB SUSPENSION ROD	
TOLERANCES: .XX ± .01 .XXX ± .005				SUB-SYSTEM AOS		DESIGNER	N.Nguyen
ANGULAR ± 0.5°				NEXT ASSY D1001005		DRAFTER	TQ. NGUYEN
MATERIAL 316 SSSL				FINISH 63 μinch		CHECKER	M. SMITH
						APPROVAL	D. COYNE
						SCALE	2:1
						PROJECTION	ASME
						SIZE DWG. NO.	B D1002340
						REV.	v1
						SHEET 1 OF 1	

D1002340_AdlIGO_AOS_SLC Suspension Rod, PART PDM REV: X-005, DRAWING PDM REV: X-011

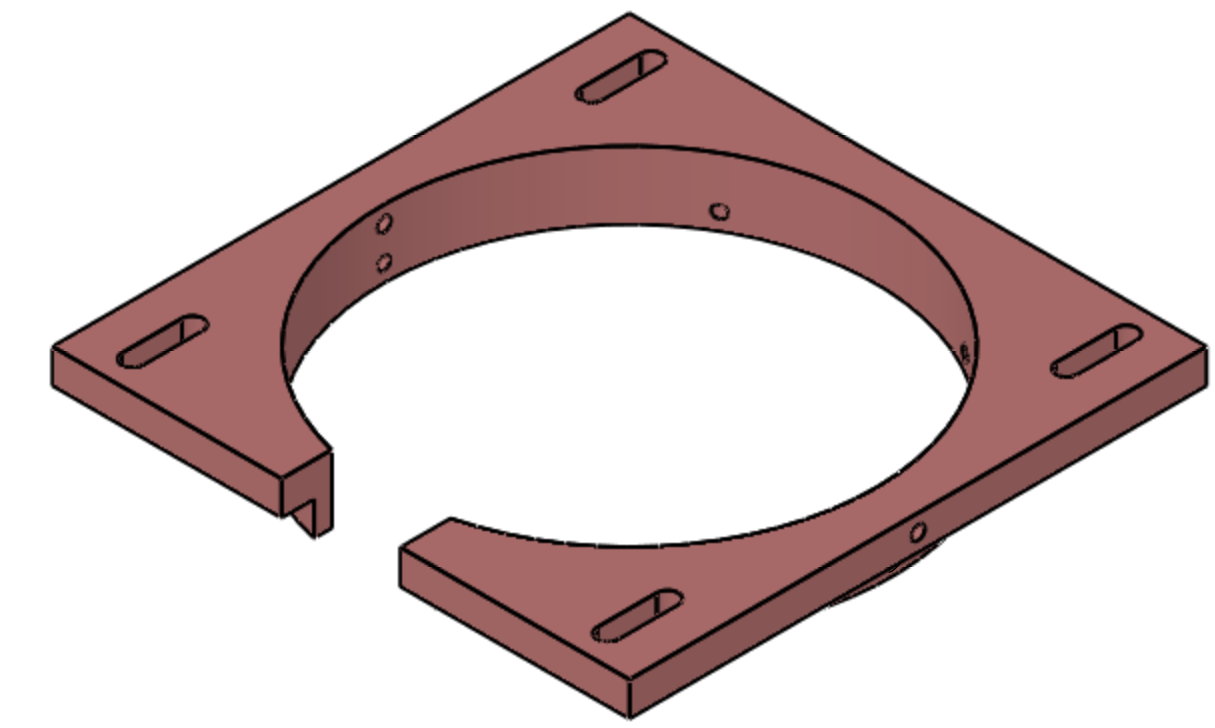
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR TYPE IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY.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

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

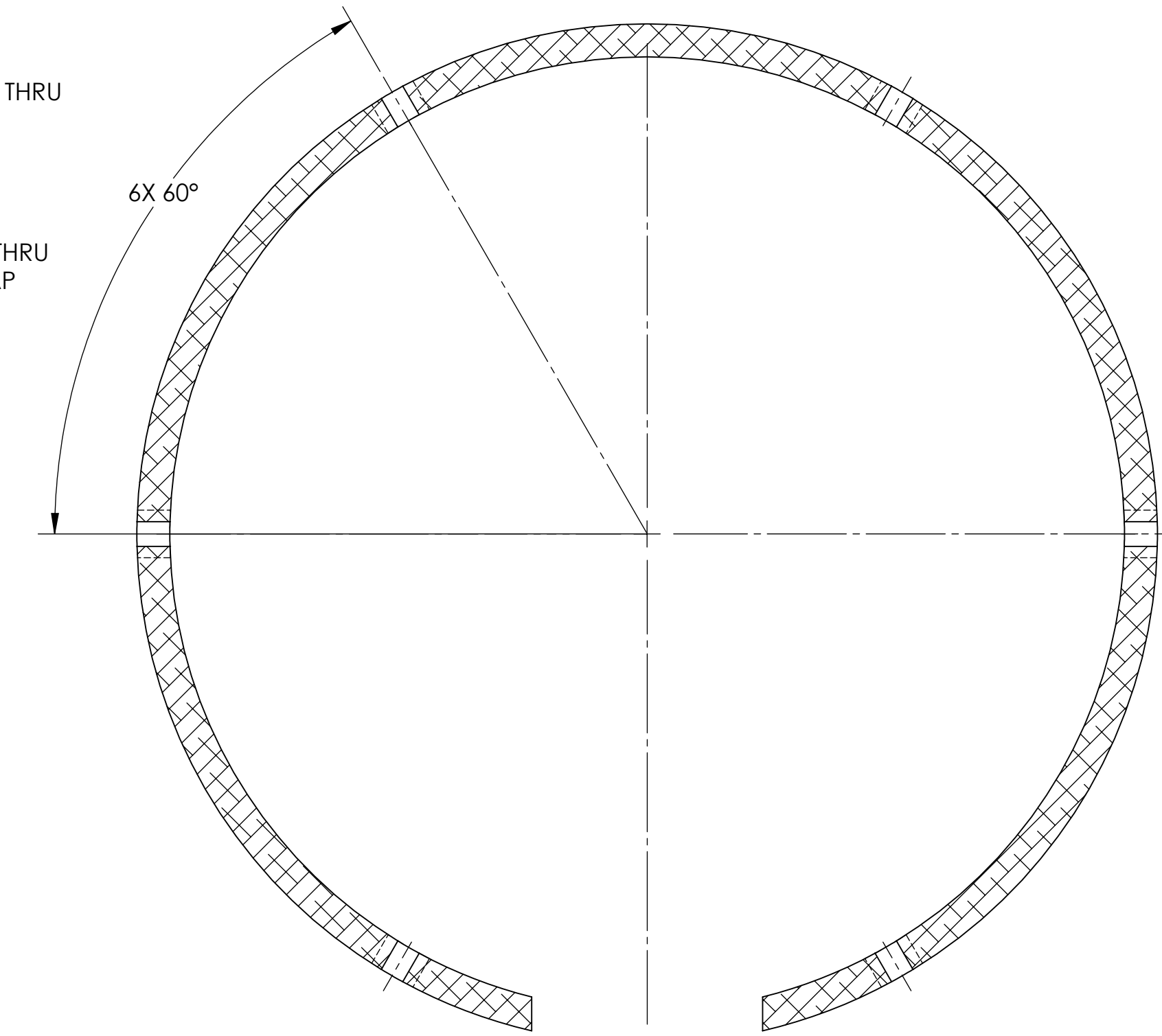
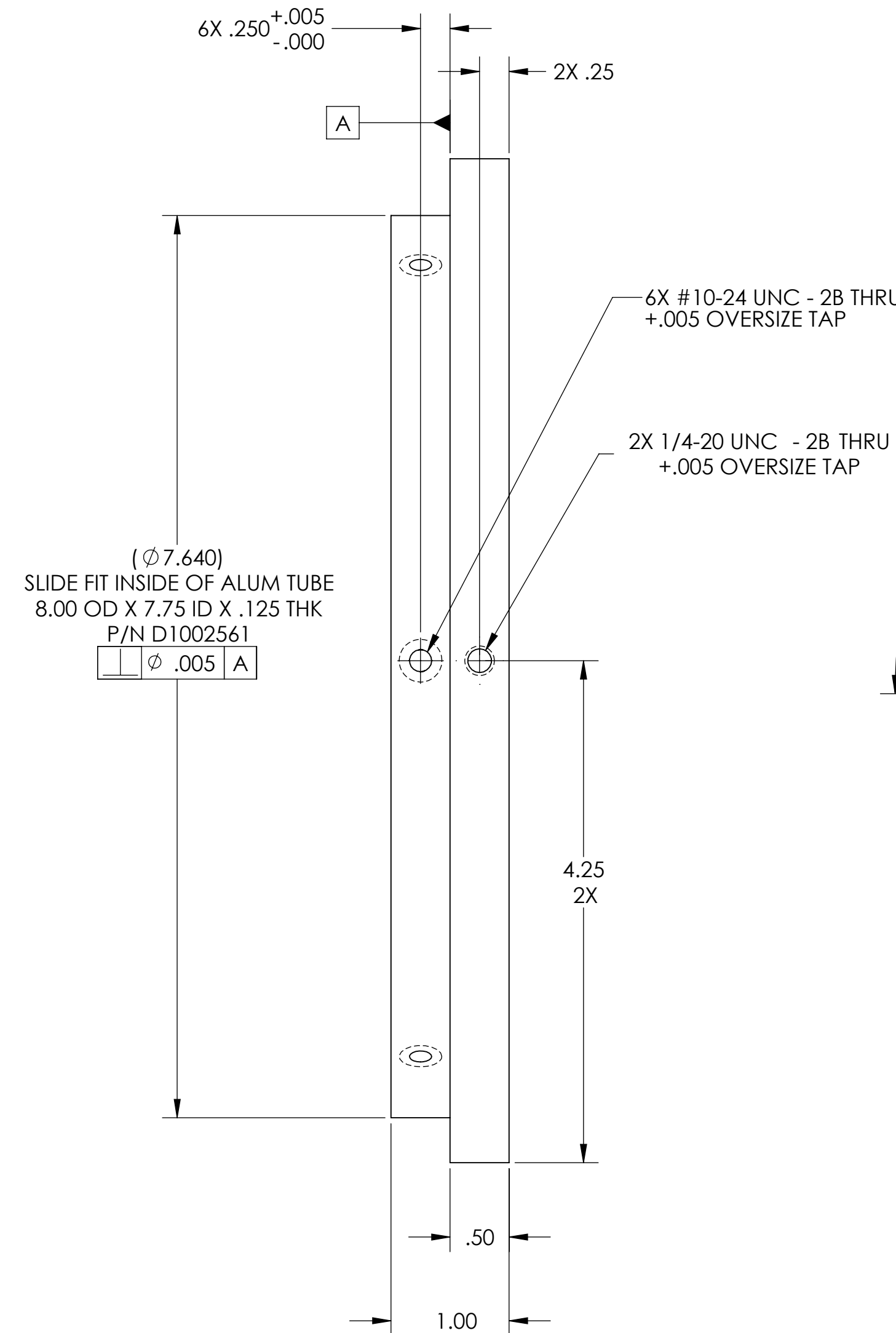
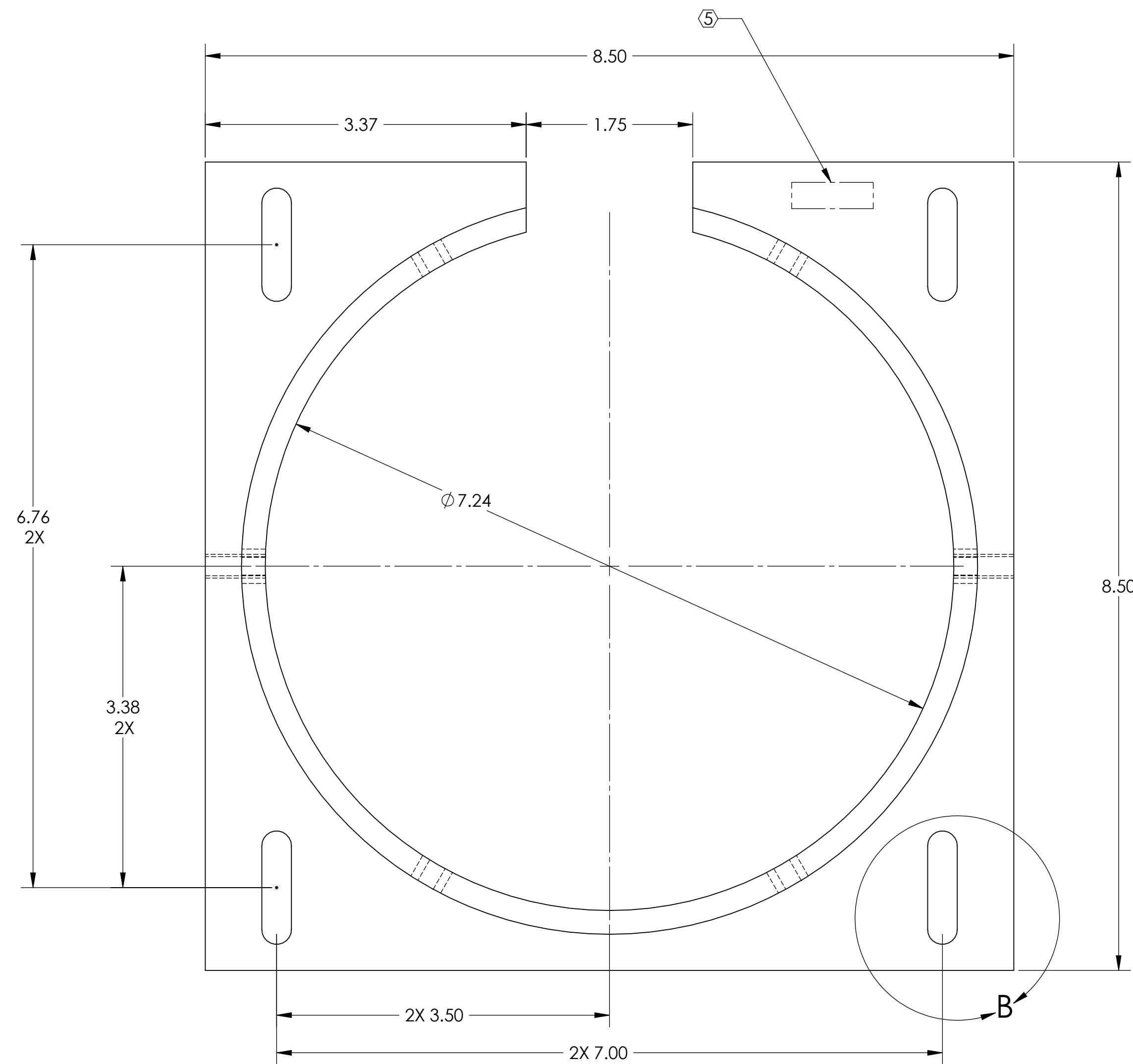
REV.	DATE	DCN #	DRAWING TREE #
v1	03 JUN 2010	E1000285	



DETAIL B
SCALE 2 : 1
4X



FOR REFERENCE VIEW ONLY
NO SCALE



SECTION A-A

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN INCHES	
TOLERANCES: .XX ± .01 .XXX ± .005	
ANGULAR ± .5°	
MATERIAL	FINISH
6061-T6 Al	63 μinch

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SYSTEM	SUB-SYSTEM
ADVANCED LIGO	AOS
NEXT ASSY	D1002563

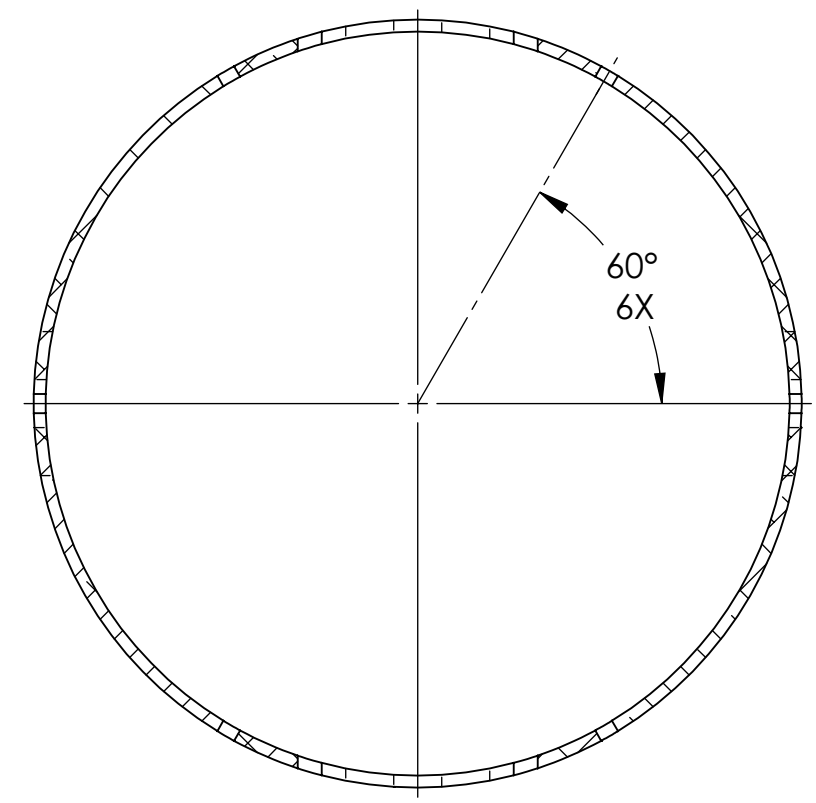
PART NAME		SLC DAMPING TUBE TOP PLATE	
DESIGNER	N.Nguyen	01 Jun 2010	SIZE DWG. NO.
DRAFTER	TG. NGUYEN	21 MAY 2010	D D1002560
CHECKER	M. SMITH	01 NOV 2010	
APPROVAL	D. COYNE	10 NOV 2010	SCALE: 1:1
PROJECTION:		SHEET 1 OF 1	

D1002560_AudiLIGO_AOS_SLC Damping Tube Top Plate_PART PDM REV: X.008_DRAWING PDM REV: X.007

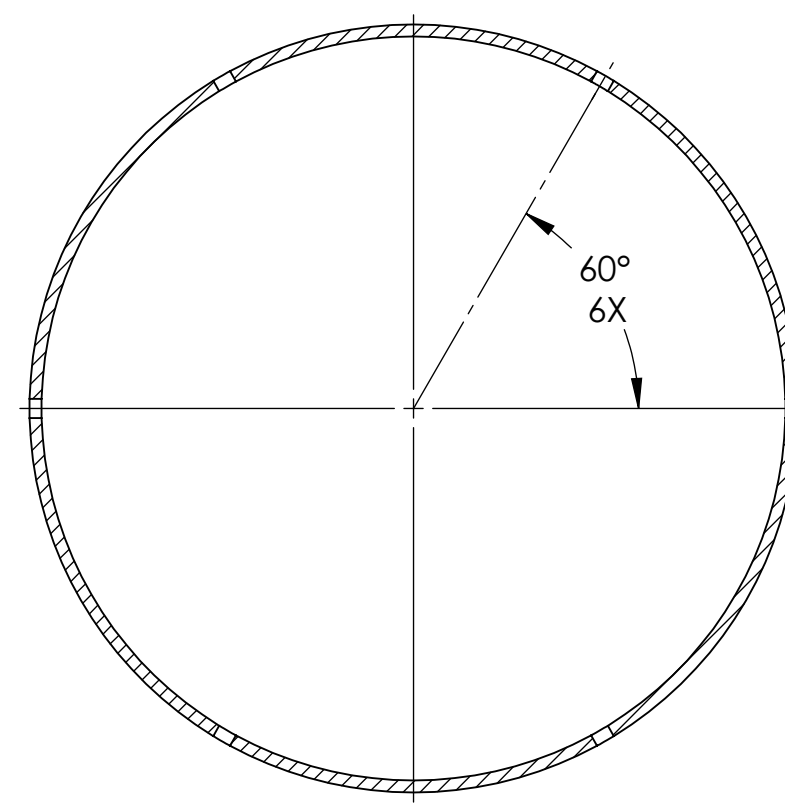
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR TYPE IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY.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

6. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
 7. ELECTROPOLISHING PER E0900364, SECTION 5.1, TO REMOVE ALL SURFACE OXIDES AND POTENTIALLY EMBEDDED CONTAMINANTS.
 8. SUGGESTING RESOURCE: COAST ALUMINUM AND ARCM P/N 818TB61 Phone: 800-810 6061 Fax: 562-946 4188

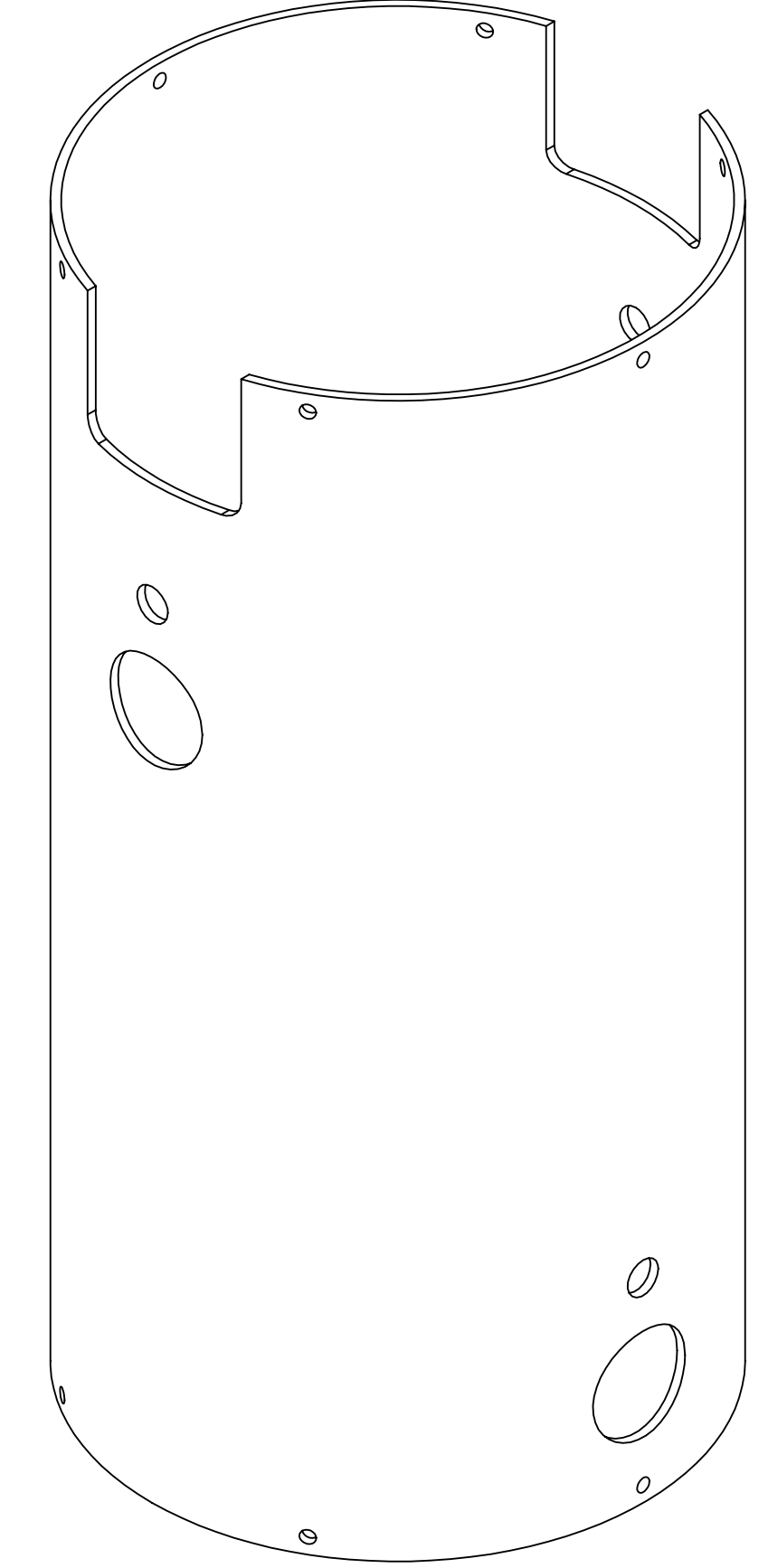
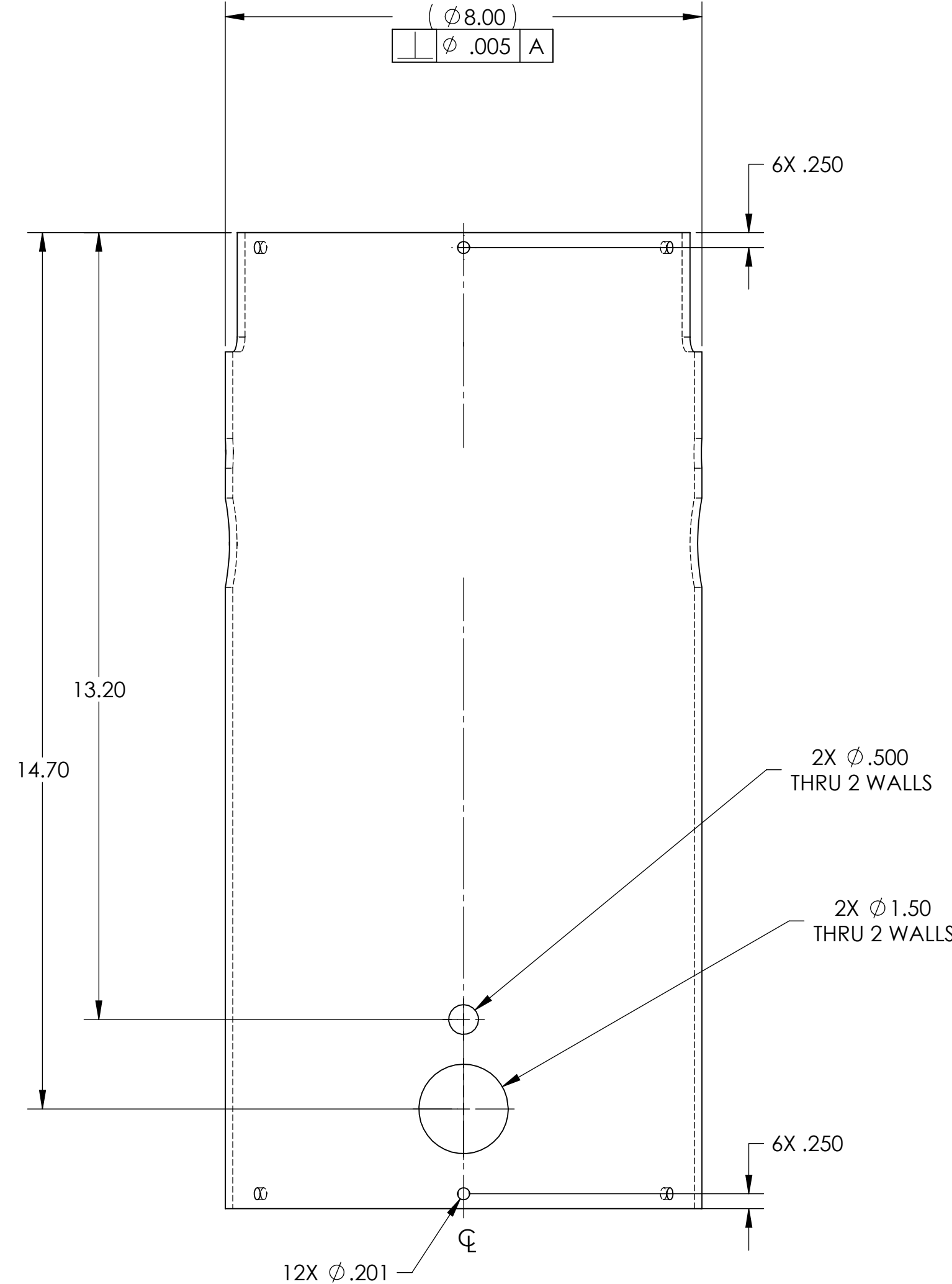
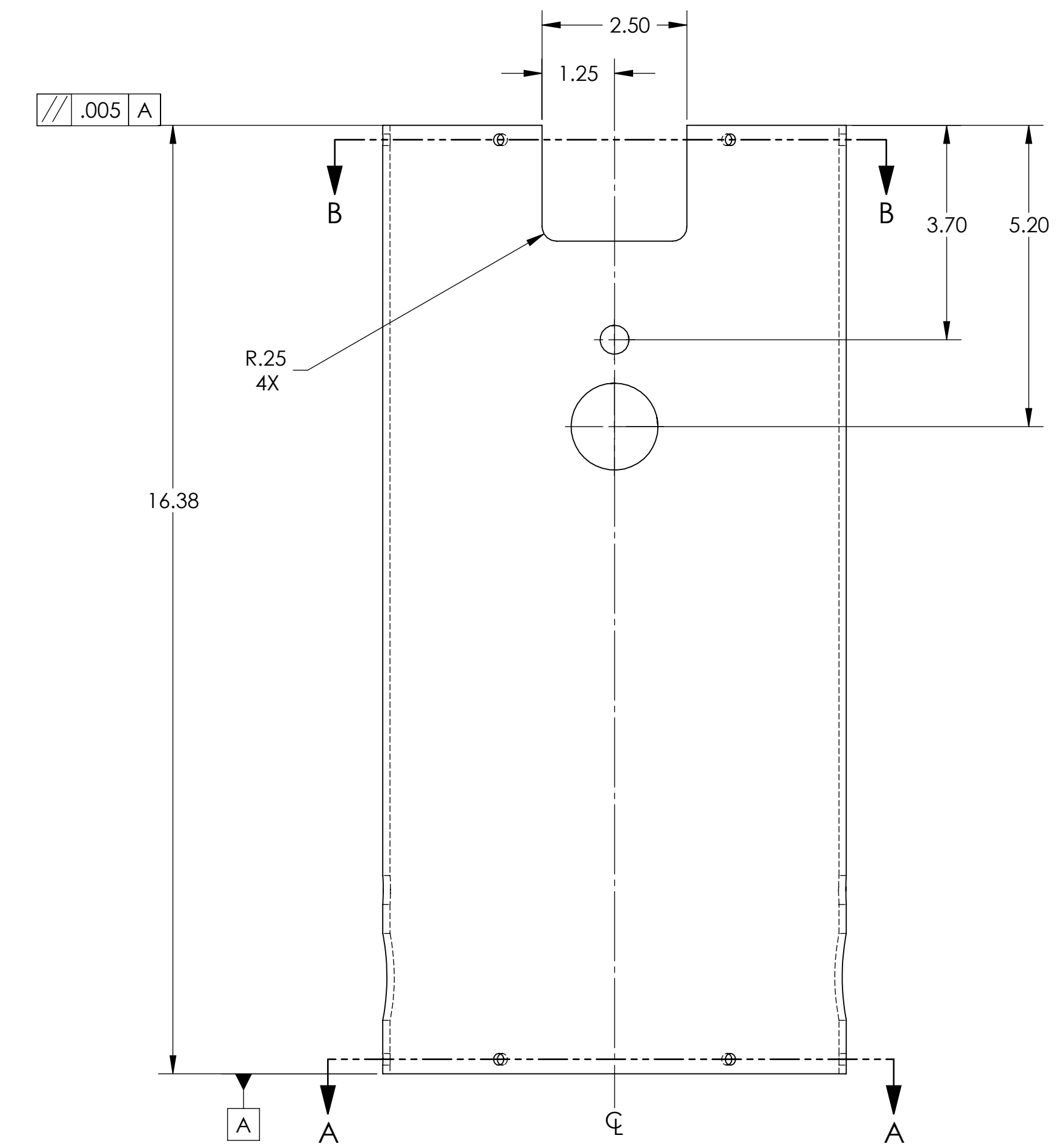
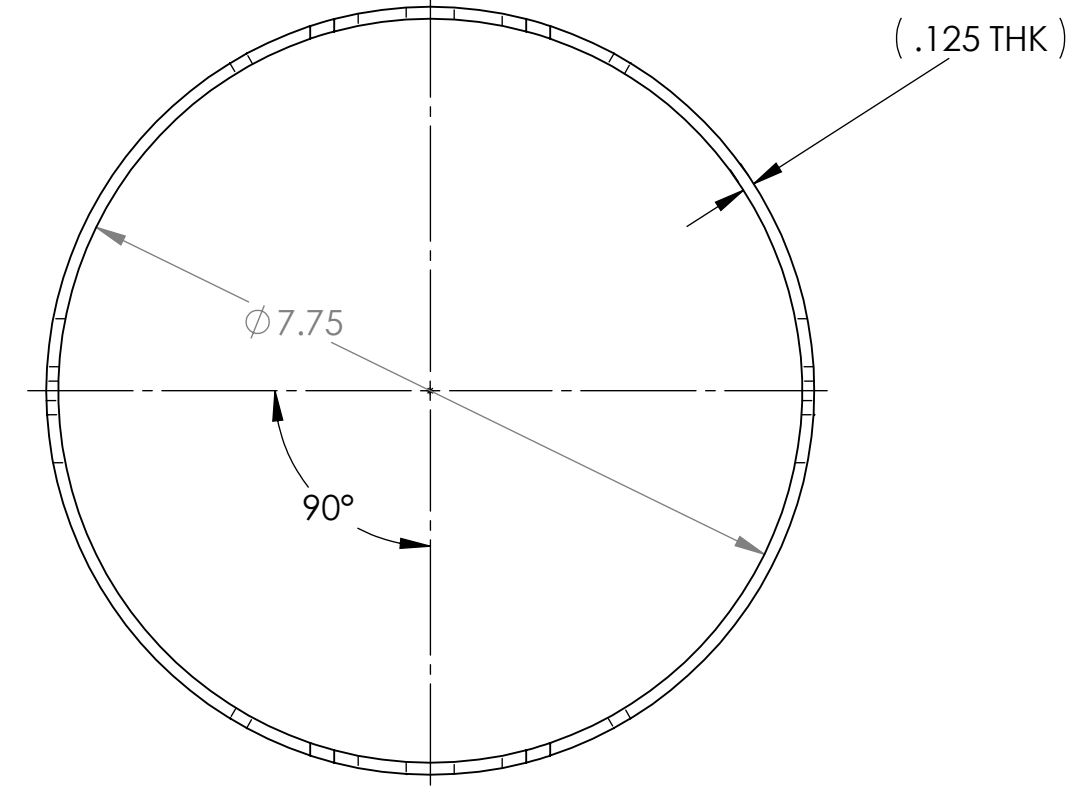
REV.	DATE	DCN #	DRAWING TREE #
v1	03 JUN 2010	E1000285	-
-	-	-	-
-	-	-	-



SECTION B-B



SECTION A-A



FOR REFERENCE ONLY
NO SCALE

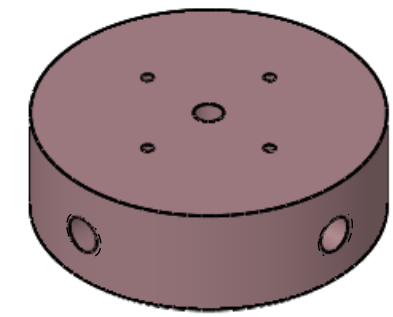
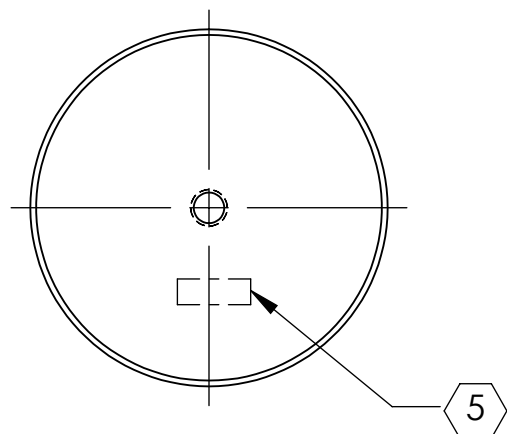
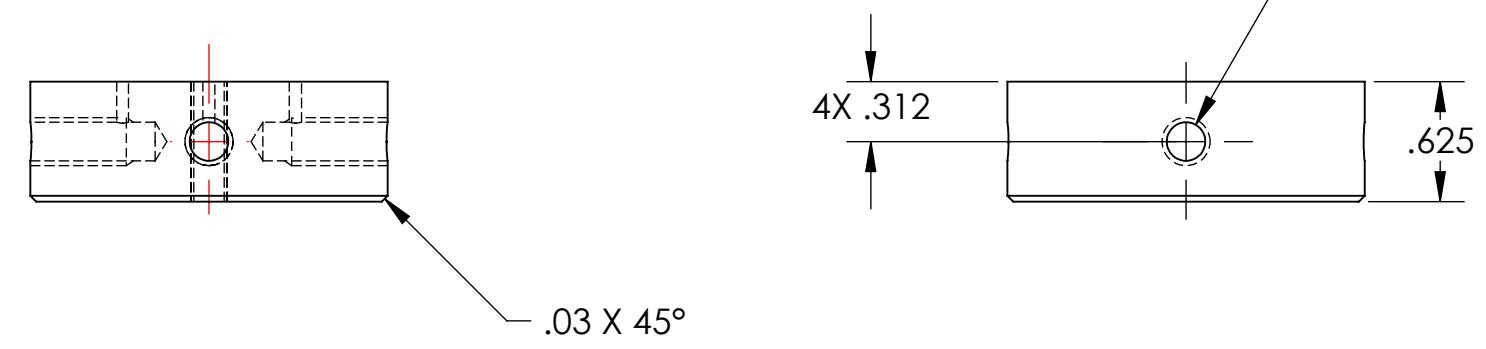
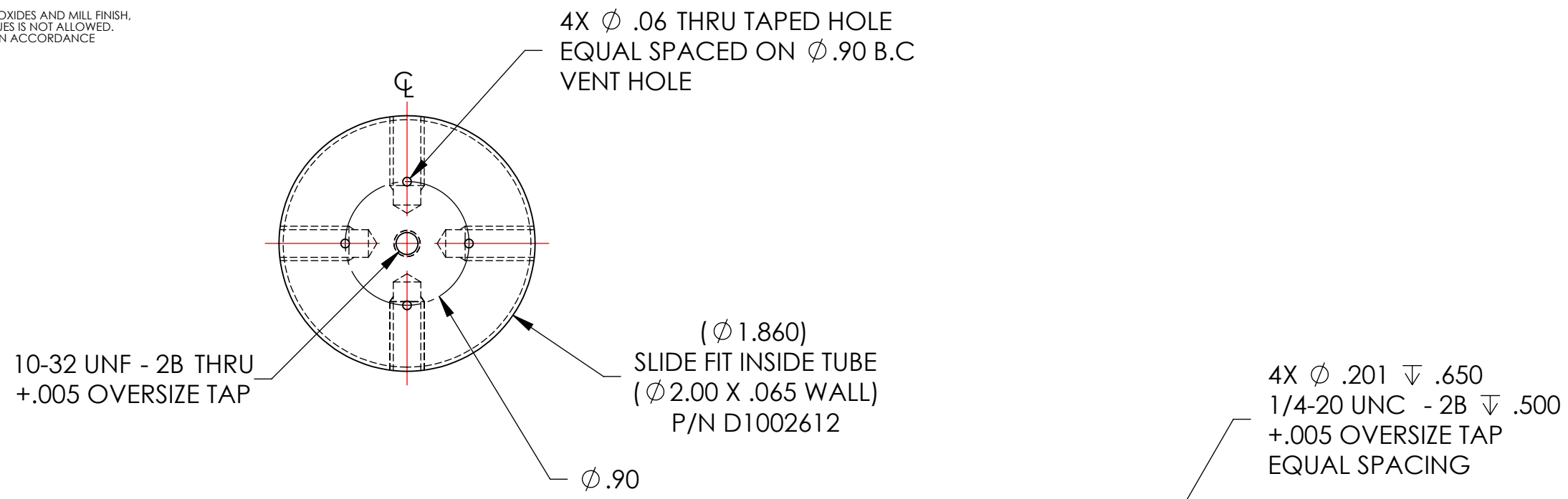
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY				PART NAME							
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 1.0°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.				ADVANCED LIGO				SLC DAMPING 8 DIA TUBE			
								MATERIAL: 6061-T6 Al				FINISH: 63 μinch			
NEXT ASSY: D1002563				DESIGNER: N.Nguyen				DATE: 01 Jul 2010							
CHECKER: M. SMITH				DATE: 15 Jul 2010				SIZE: D							
APPROVAL: D. COYNE				DATE: 01 Nov 2010				DWG. NO.: D1002561							
SCALE: 1:2				PROJECTION:				REV. v1							
SHEET 1 OF 1				SHEET 1 OF 1				SHEET 1 OF 1							

D:\002561_Audi\GO_AOS_SLC Damping 8 Dia Tube_PART PDM REV: X-003_DRAWING PDM REV: X-008

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, 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. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	02 JUNE 2010	E1000285	



ISO VIEW

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 1.0°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SLC SUSPENSION ROD SUPPORT	
MATERIAL		FINISH		SYSTEM		SUB-SYSTEM	
6061-T6 Al		63 μinch		ADVANCED LIGO		AOS	
				NEXT ASSY		DESIGNER	
				D1002582		N.Nguyen 01 Jun 2010	
						DRAFTER	
						TQ. NGUYEN 24 MAY 2010	
						CHECKER	
						M. SMITH 01 NOV 2010	
						APPROVAL	
						D. COYNE 10 NOV 2010	
						SIZE DWG. NO.	
						B D1002581	
						REV.	
						v1	
						SCALE: 1:1	
						PROJECTION:	
						SHEET 1 OF 1	

D1002581_AdlIGO_AOS_SLC Suspension Rod Support, PART PDM REV: X-004, DRAWING PDM REV: X-004

NOTES CONTINUED:

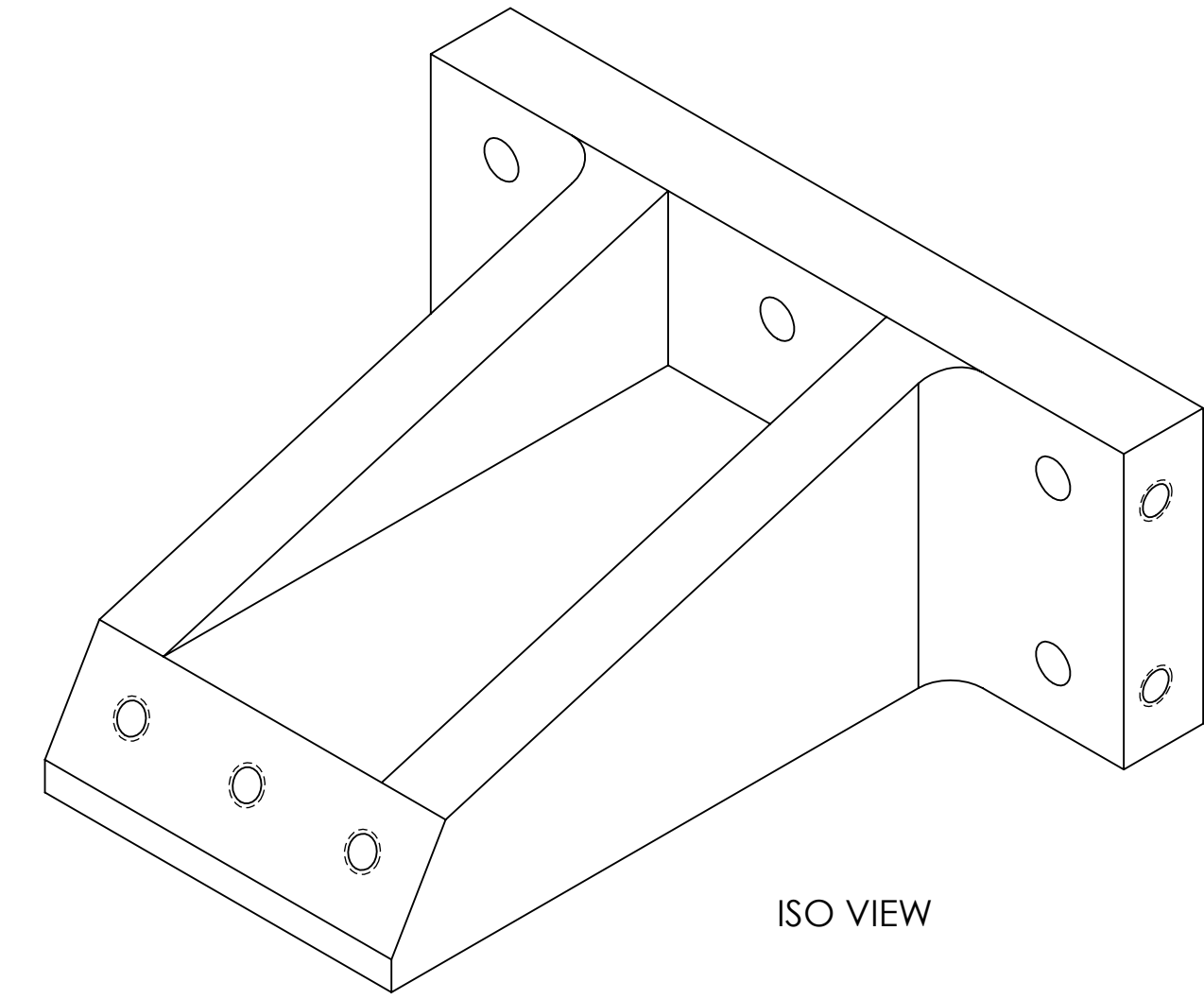
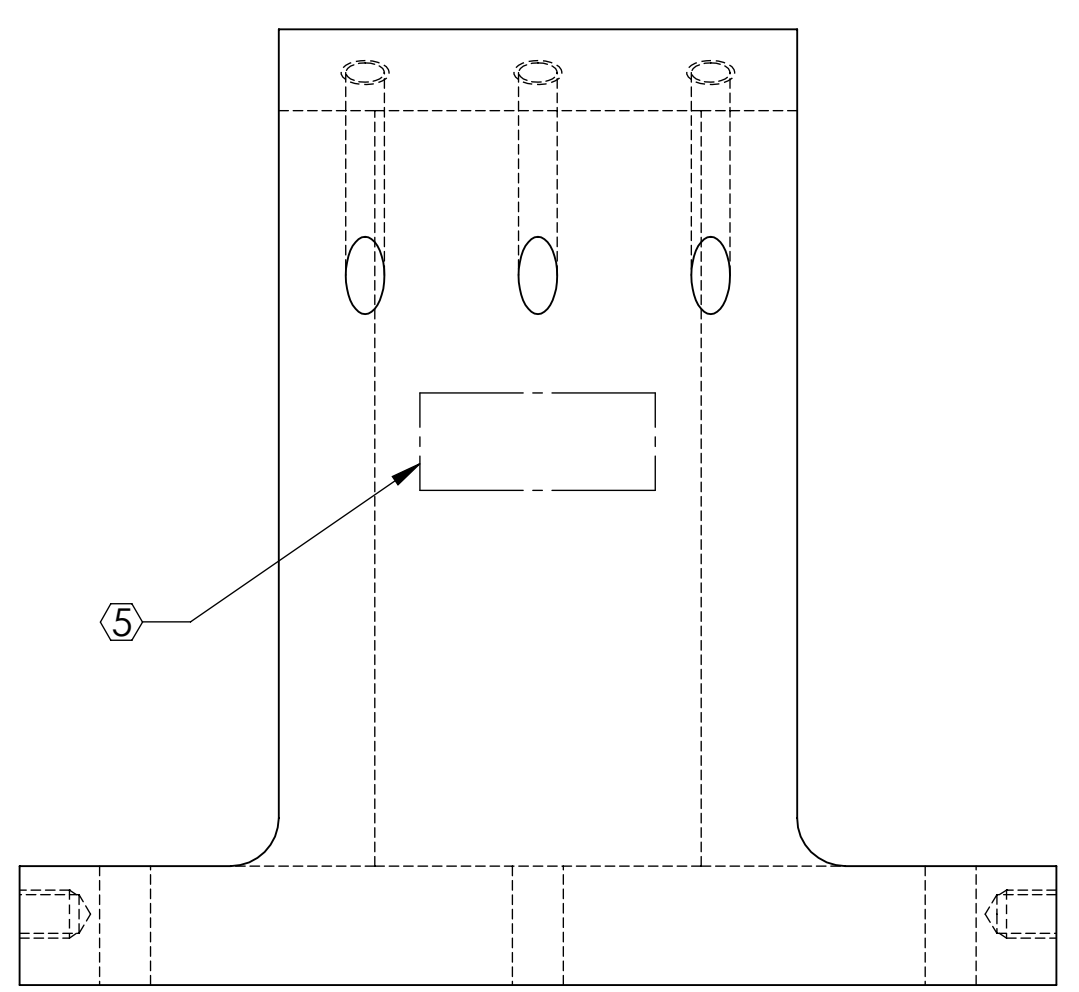
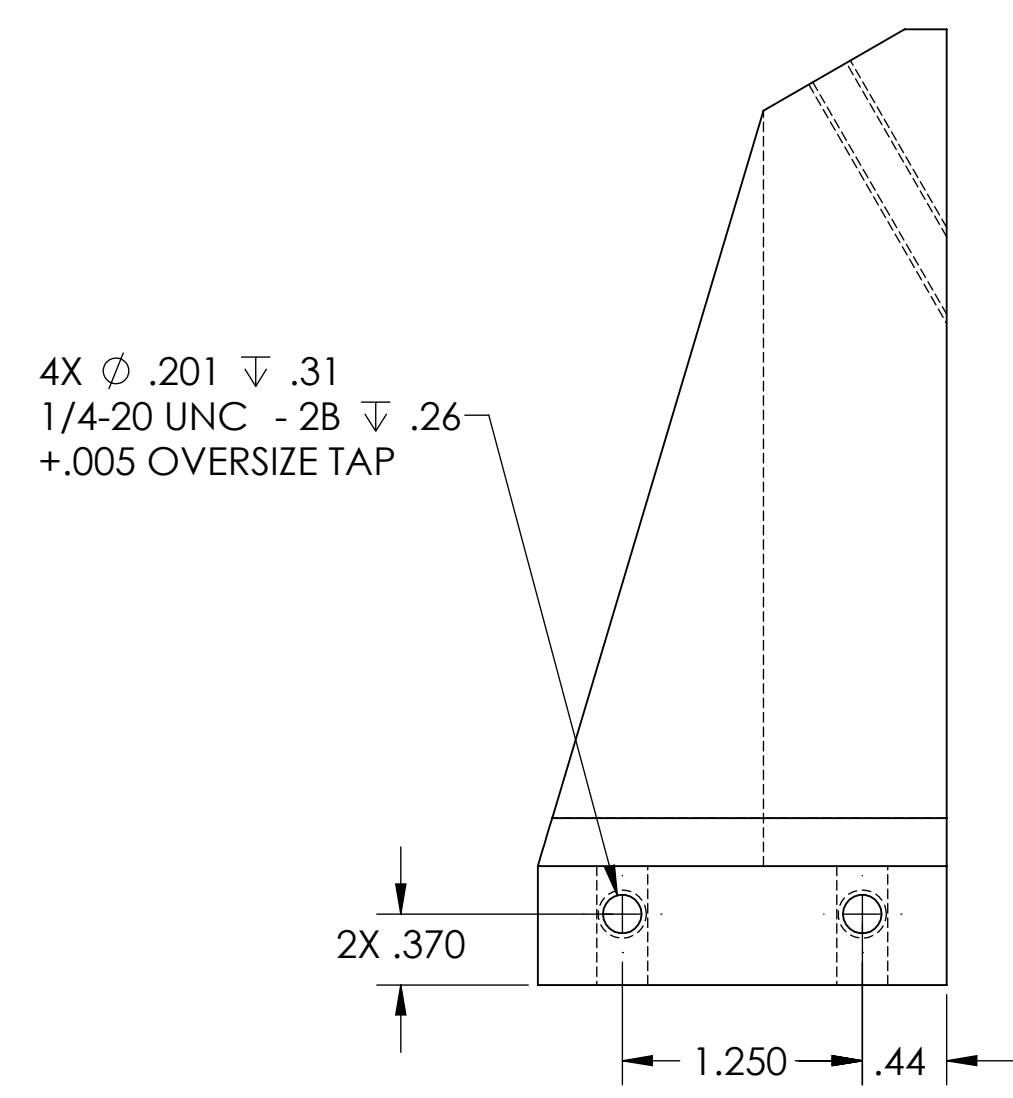
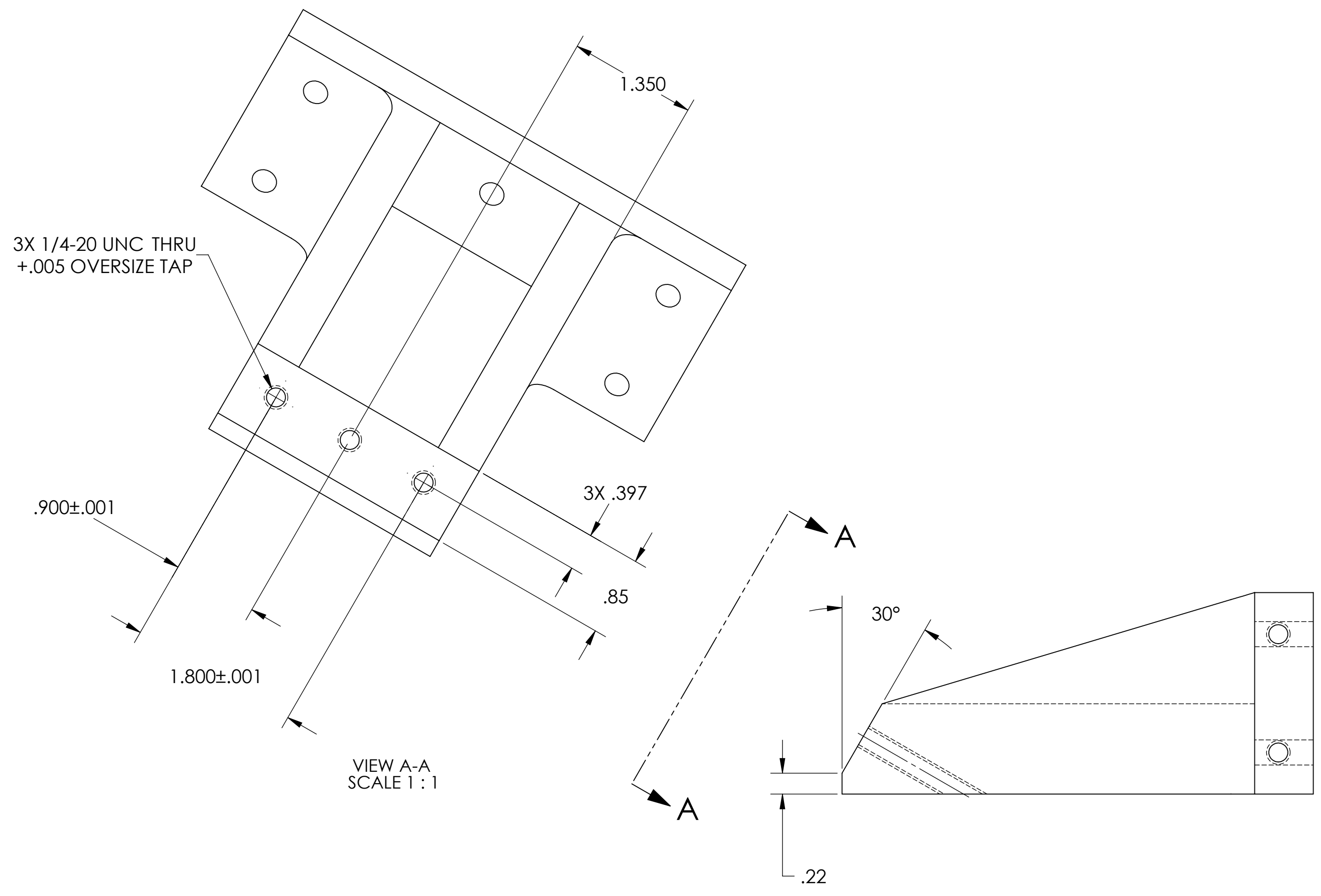
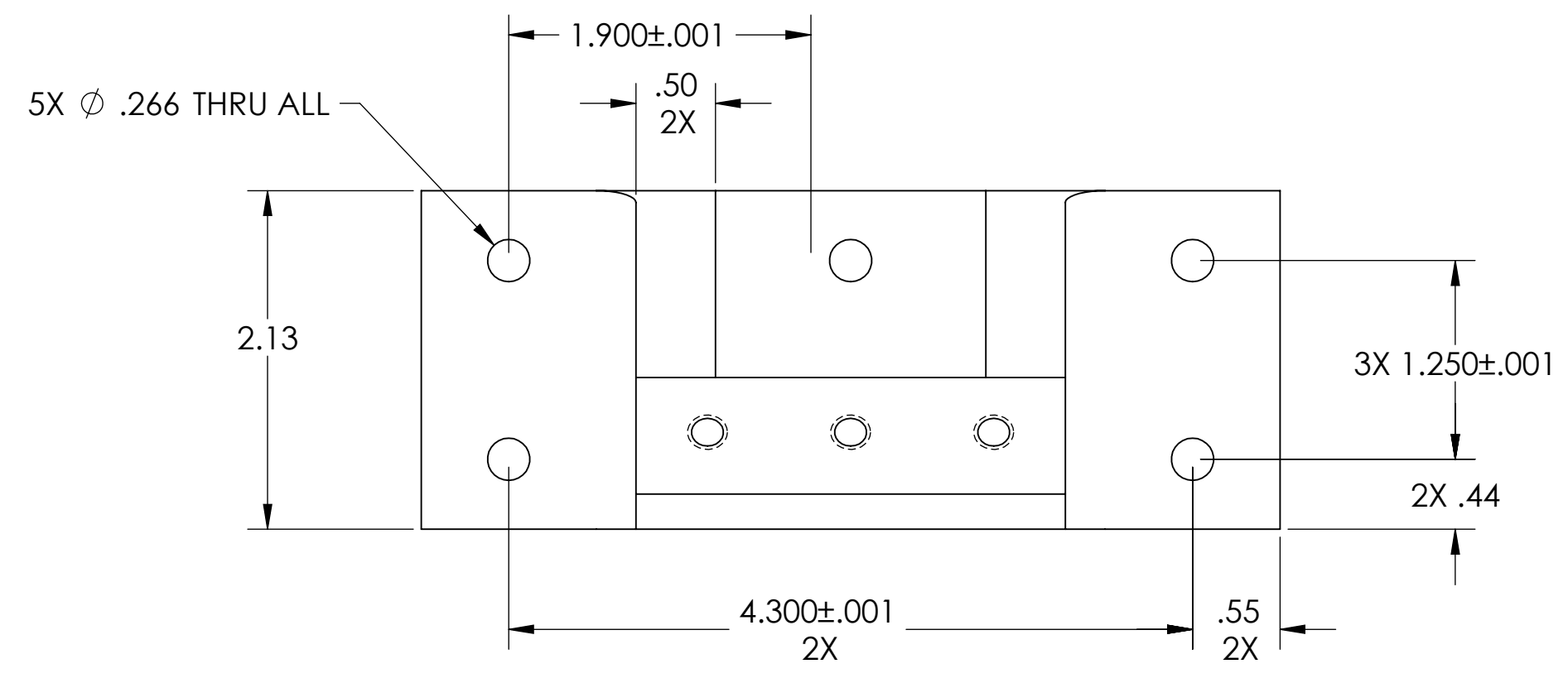
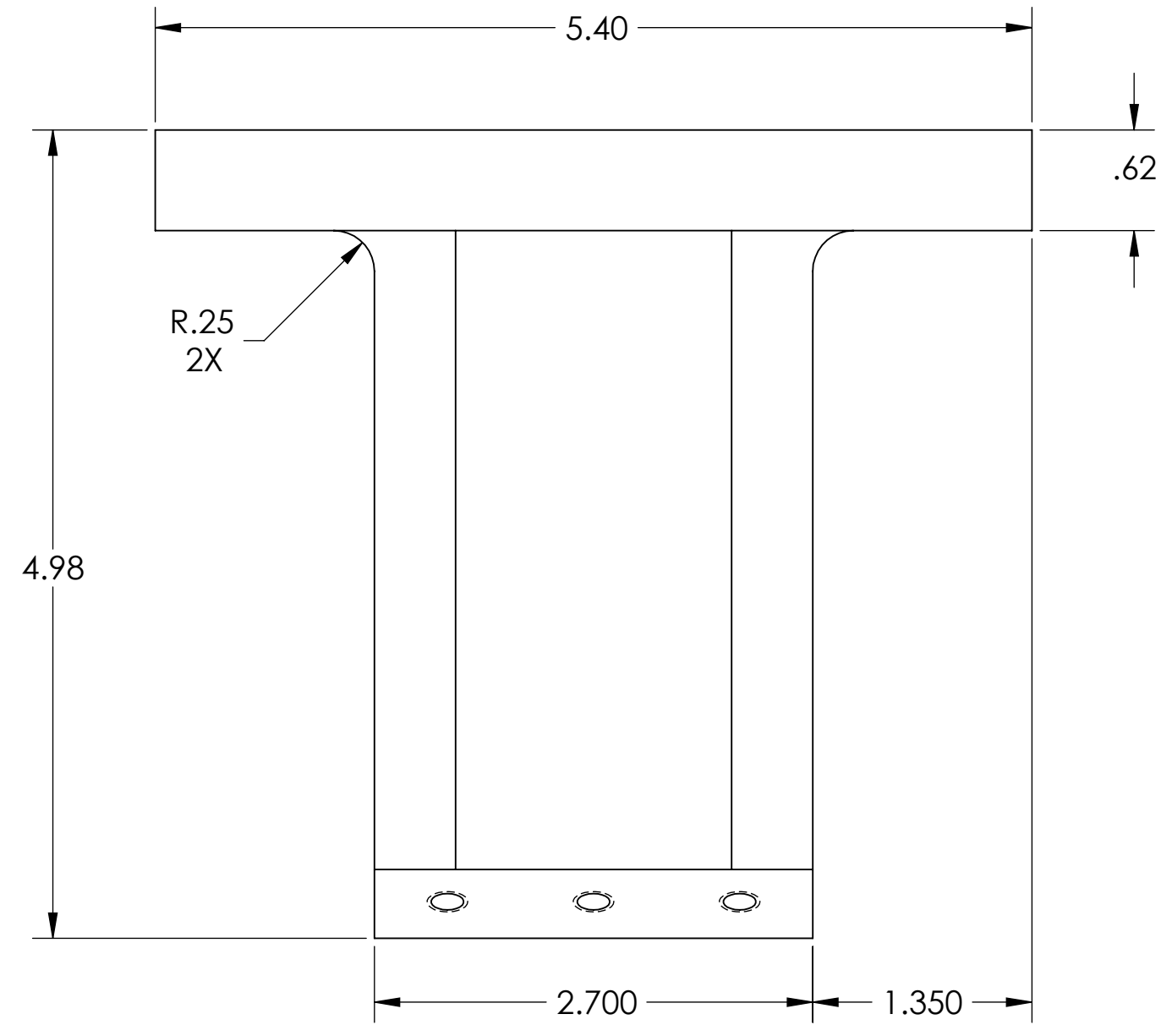
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR TYPE IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12"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

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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

8. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	10 SEP 2010	D1000285	



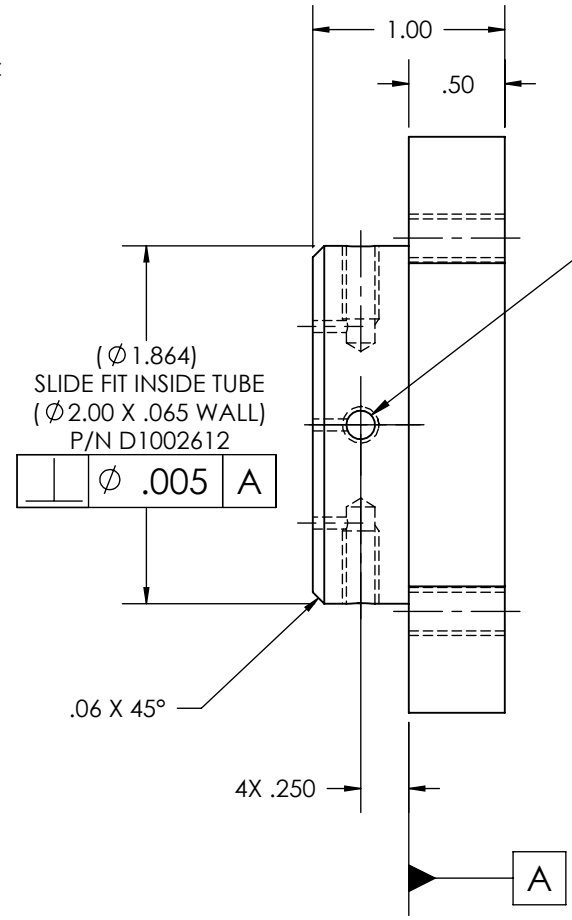
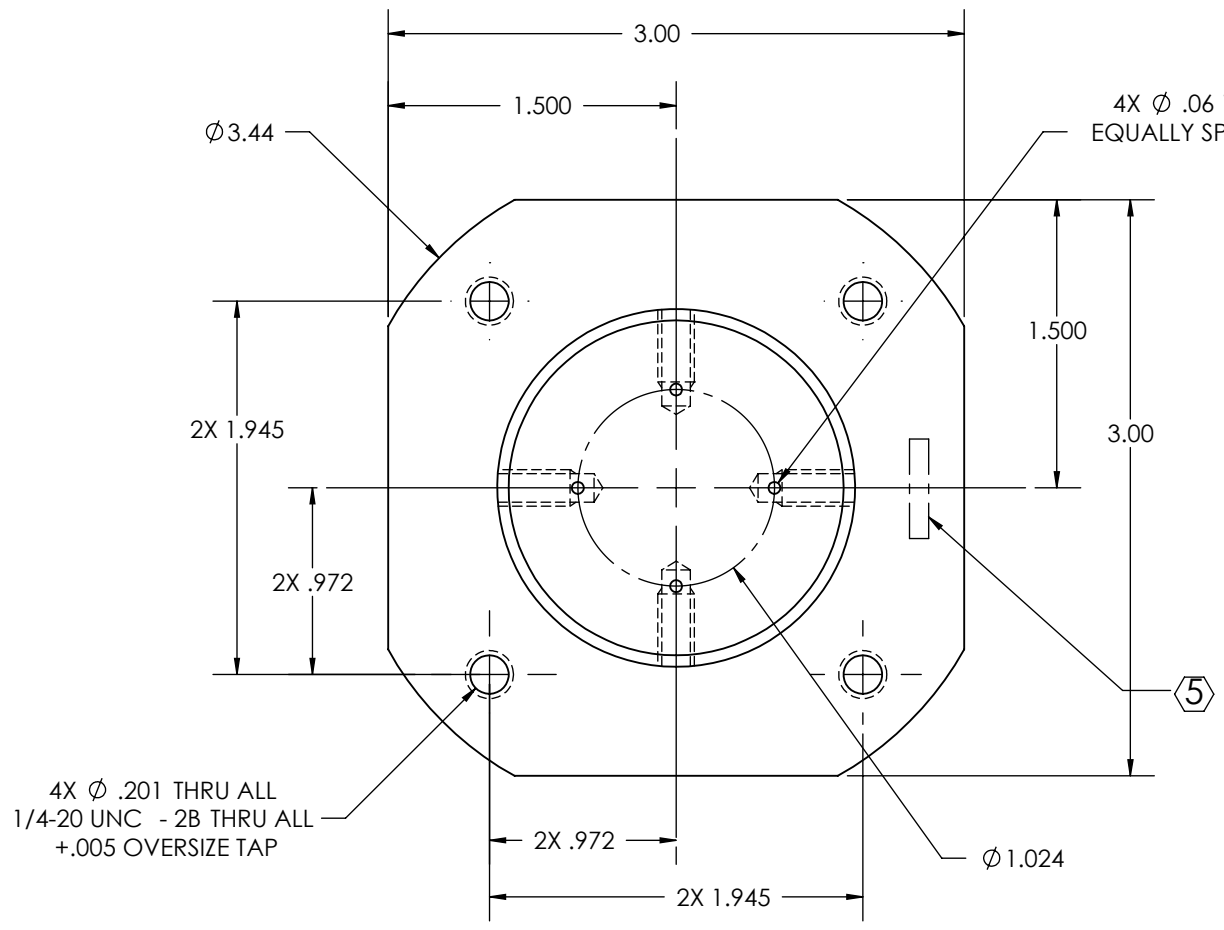
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 1.0°		1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SLC BLADE MOUNTING BRACKET	
MATERIAL: 6061-T6 Al FINISH: 63 μinch		SYSTEM: ADVANCED LIGO SUB-SYSTEM: AOS NEXT ASSY: D1001005		DESIGNER: N.Nguyen 01 Jun 2010 DRAFTER: TG. NGUYEN 25 AUG 2010 CHECKER: M. SMITH 01 NOV 2010 APPROVAL: D. COYNE 20 NOV 2010	
		SIZE: D DWG. NO.: D1002609		REV.: v1	
		SCALE: 1:2 PROJECTION:		SHEET 1 OF 1	

D1002609_AutLIGO_AOS_SLC Blade Mounting Bracket_PART FDM REV: X.005 DRAWING FDM REV: X.005

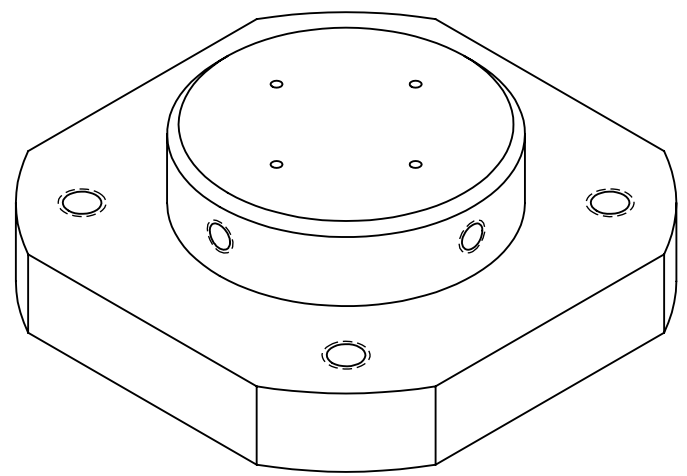
D1002610_AdLIGO_AOS_SLC Tube Up Connector Plate, PART PDM REV: X-002, DRAWING PDM REV: X-004

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD
 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	19 JUN 2010	E1000285	-
-	-	-	-
-	-	-	-



4X # 10-24 UNC - 2B ∇ .50
 EQUALLY SPACED ON ϕ 1.864 B.C.
 +.005 OVERSIZE TAP



ISO VIEW

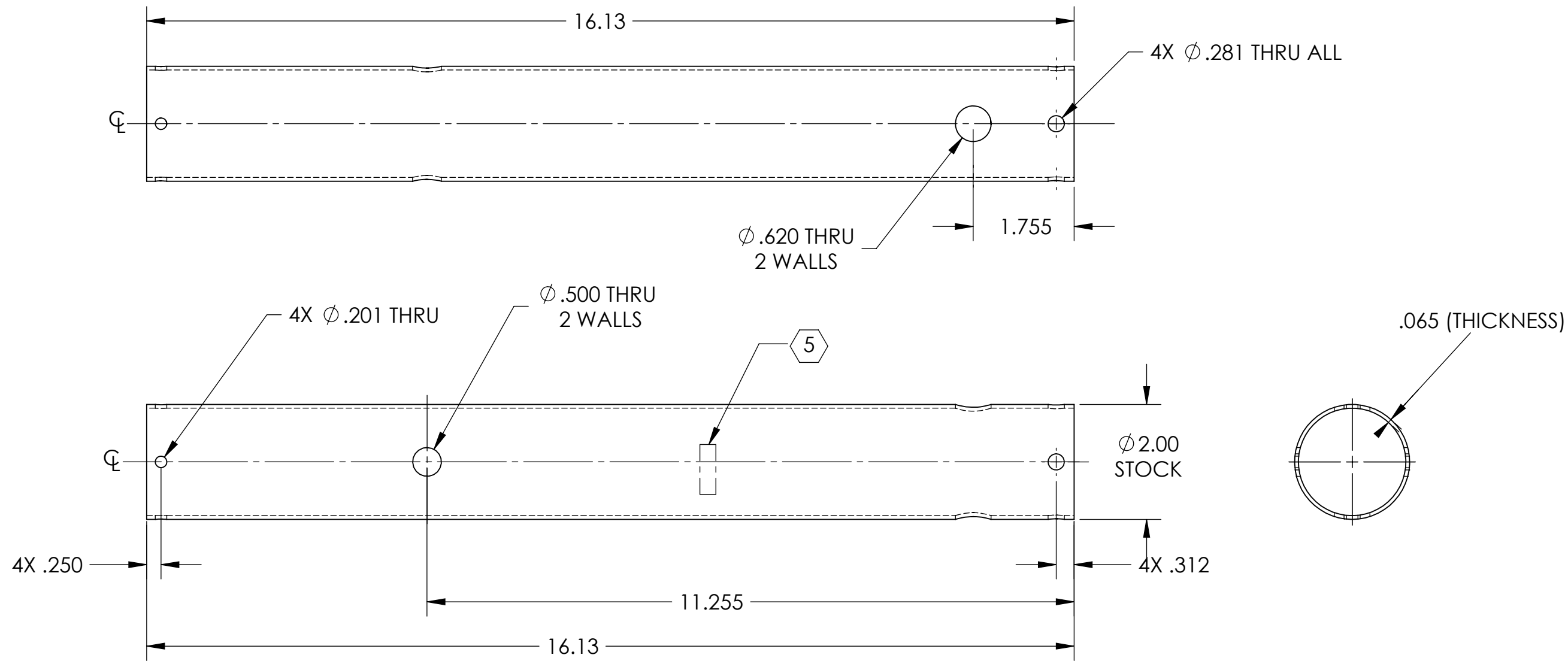
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		SLC TUBE UP CONNECTOR PLATE	
TOLERANCES: .XX \pm .01 .XXX \pm .005				SUB-SYSTEM AOS		DESIGNER N.Nguyen 01 Jul 2010	
ANGULAR \pm 1.0°				NEXT ASSY D1002582		DRAFTER TQ. NGUYEN 19 JUL 2010	
MATERIAL 6061-T6 Al				FINISH 63 μ inch		CHECKER M. SMITH 19 JUL 2010	
						APPROVAL D. COYNE 10 SEP 2010	
						SCALE: 1:1 PROJECTION: SHEET 1 OF 1	
						SIZE DWG. NO. B D1002610 REV. v1	

NOTES CONTINUED:

5. SCRIBE, ENGRAVE, 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. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

- 6. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
- 7. ELECTROPOLISHING PER E0900364, SECTION 5.1, TO REMOVE AL SURFACE OXIDES AND POTENTIALLY EMBEDDED CONTAMINANTS

REV.	DATE	DCN #	DRAWING TREE #
v1	19 JUL 2010	E1000285	



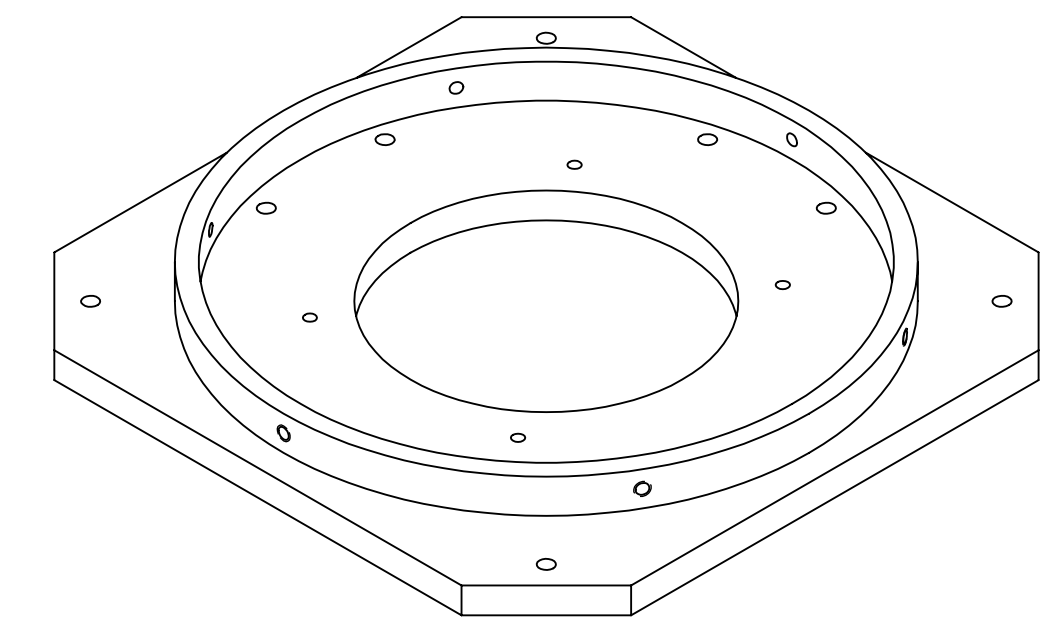
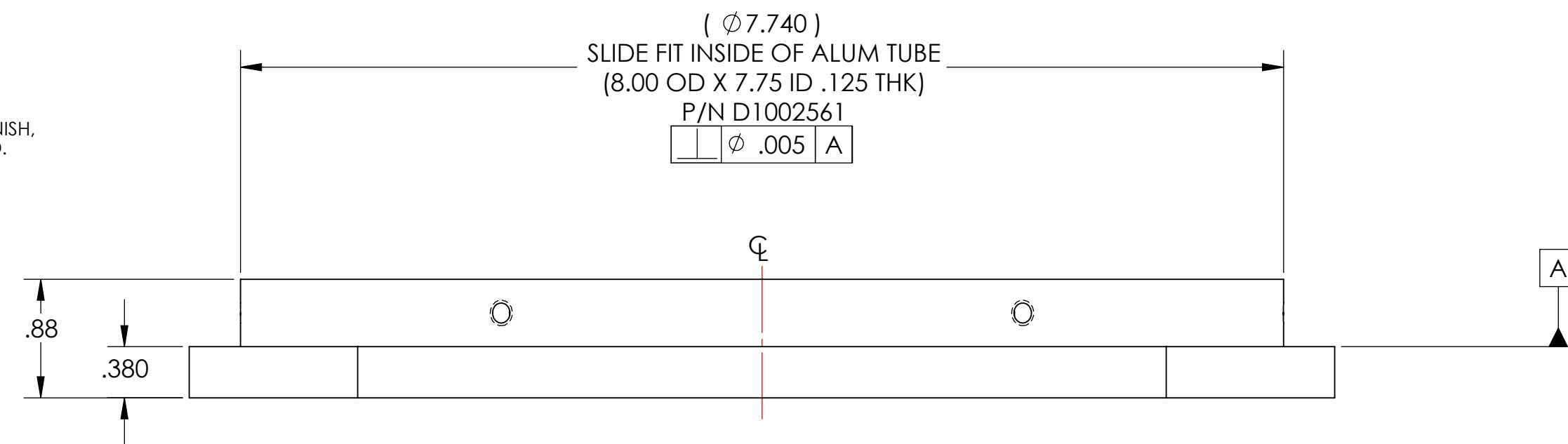
D1002612_AdlIGO_AOS_SLC_UpperTube, PART PDM REV: X-004, DRAWING PDM REV: X-005

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .03 .XXX ± .005 ANGULAR ± 1.0°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SLC UPPER TUBE	
MATERIAL		FINISH		NEXT ASSY		DESIGNER N.Nguyen 01 Jul 2010 DRAFTER TQ. NGUYEN 19 JUL 2010 CHECKER M. SMITH 01 NOV 2010 APPROVAL D. COYNE 10 NOV 2010	
6061-T6 Al		63 μinch		D1002582		SIZE DWG. NO. B D1002612 REV. v1	
				SCALE: 1:2		PROJECTION: SHEET 1 OF 1	

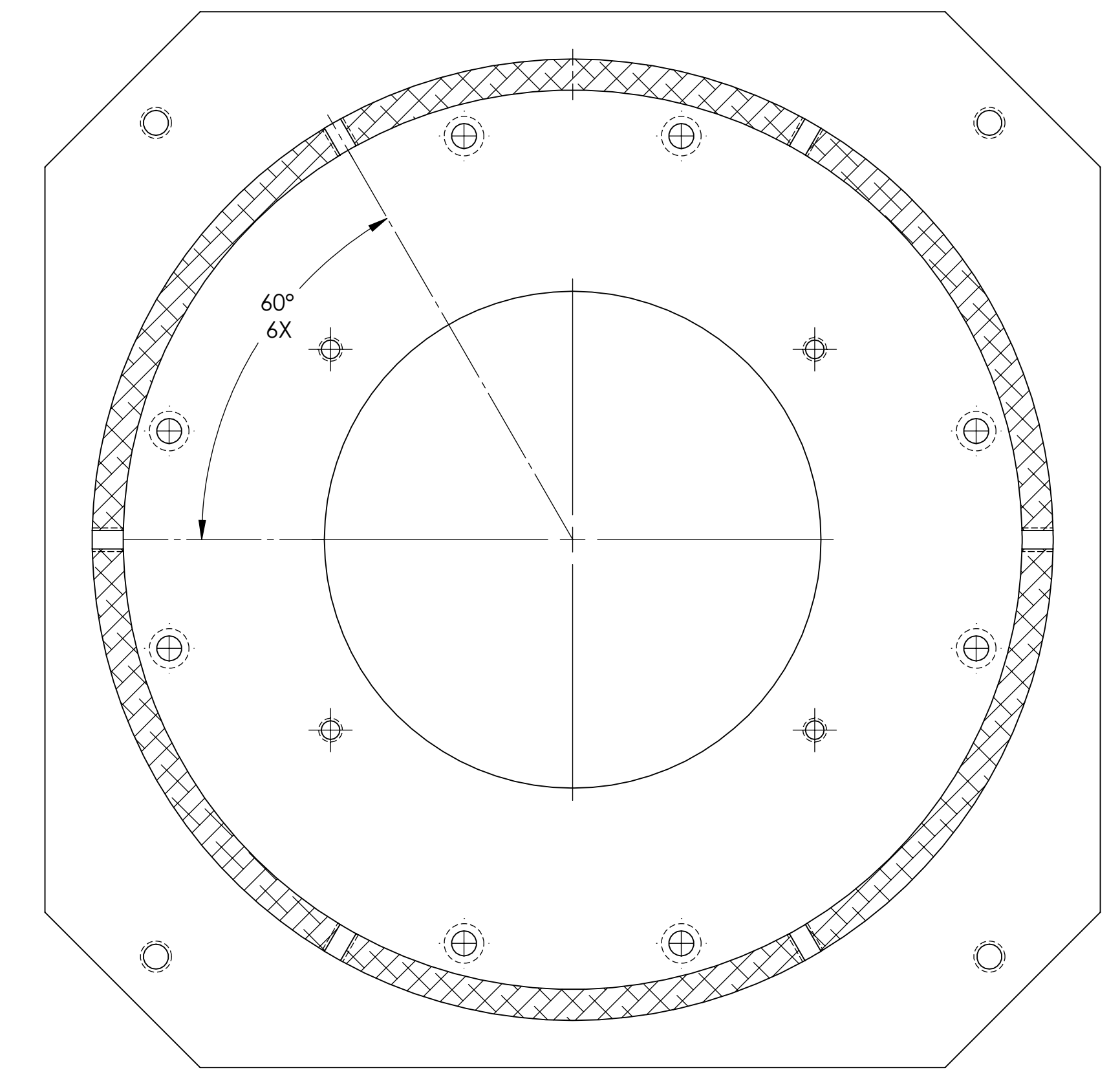
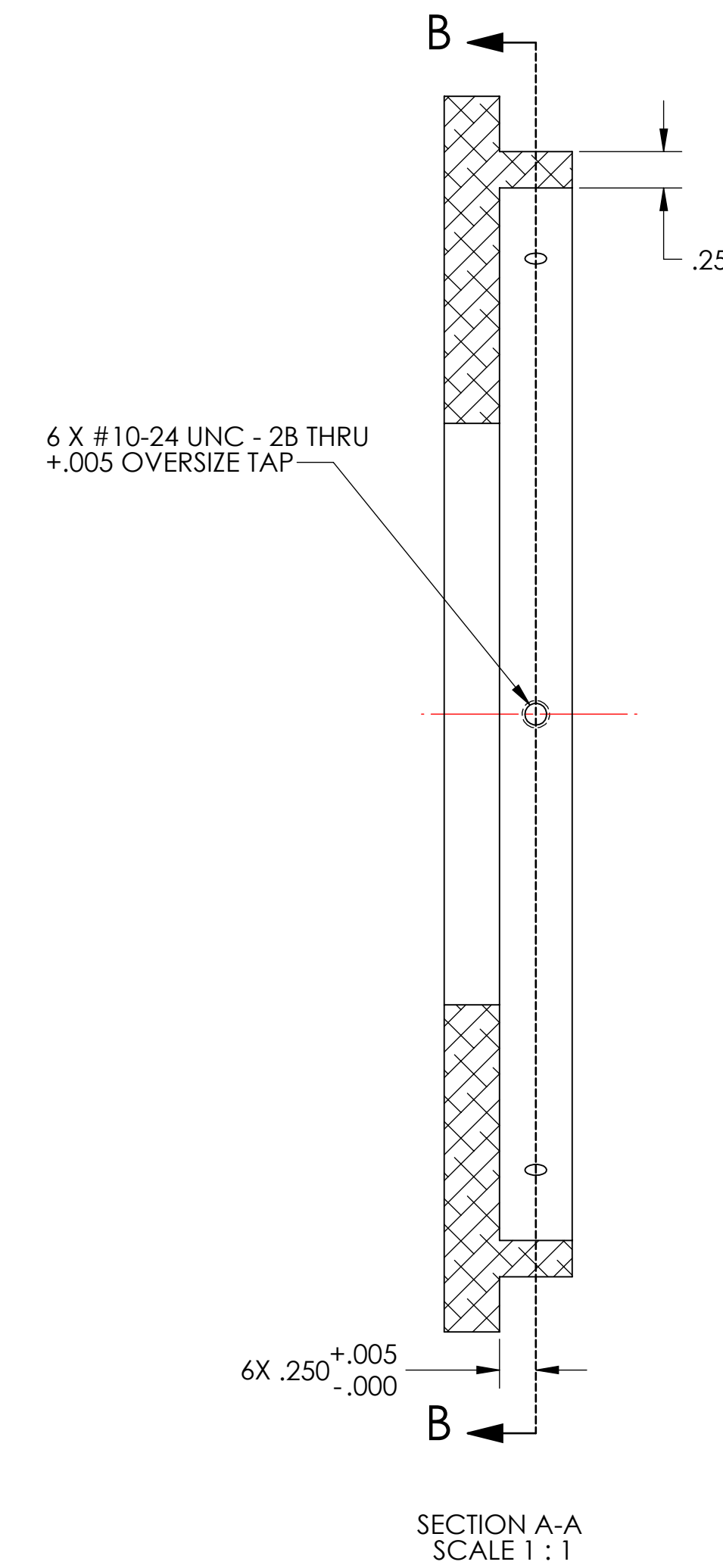
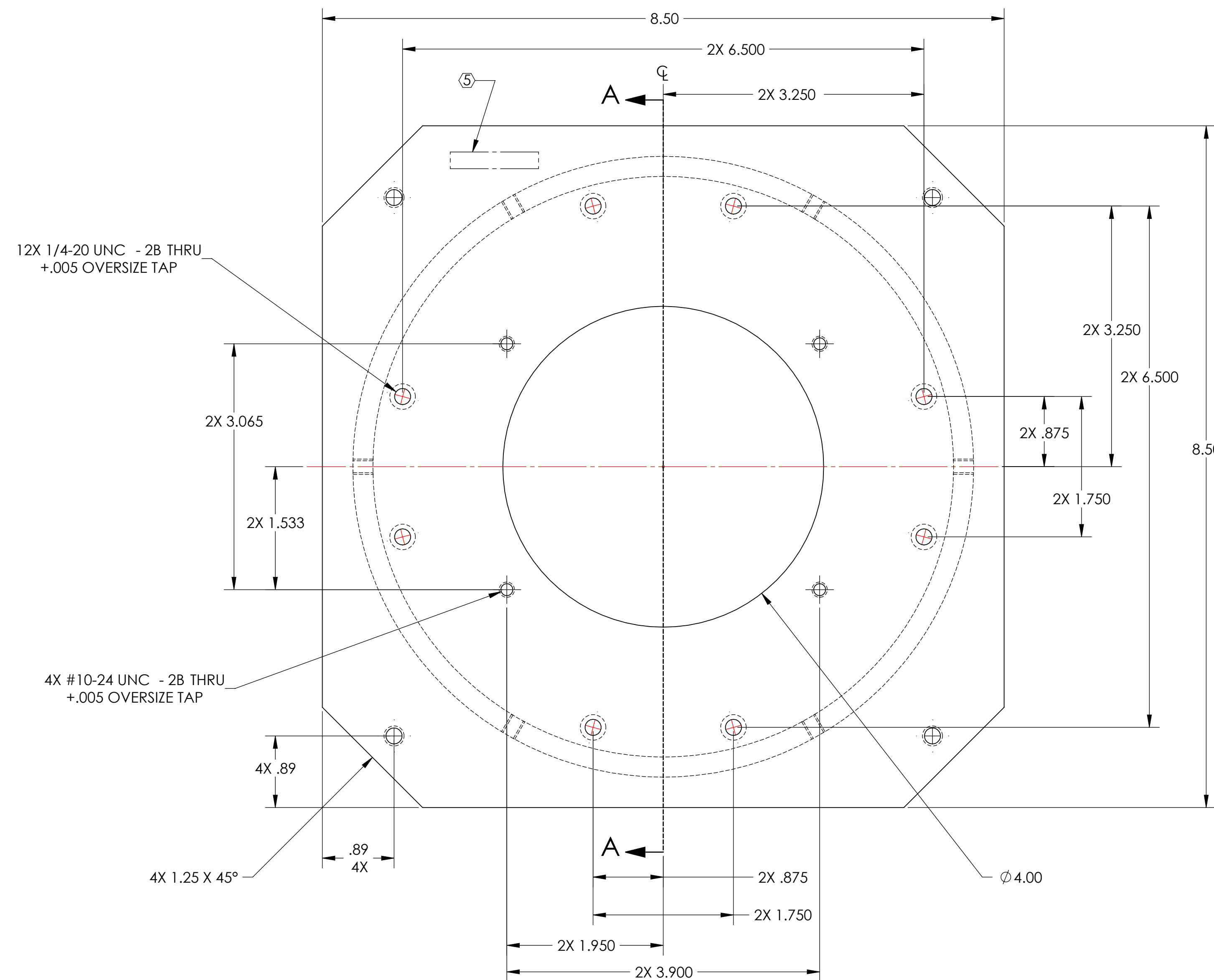
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR TYPE IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY.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

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	03 JUN 2010	E1000285	



NO SCALE
 FOR REFERENCE ONLY



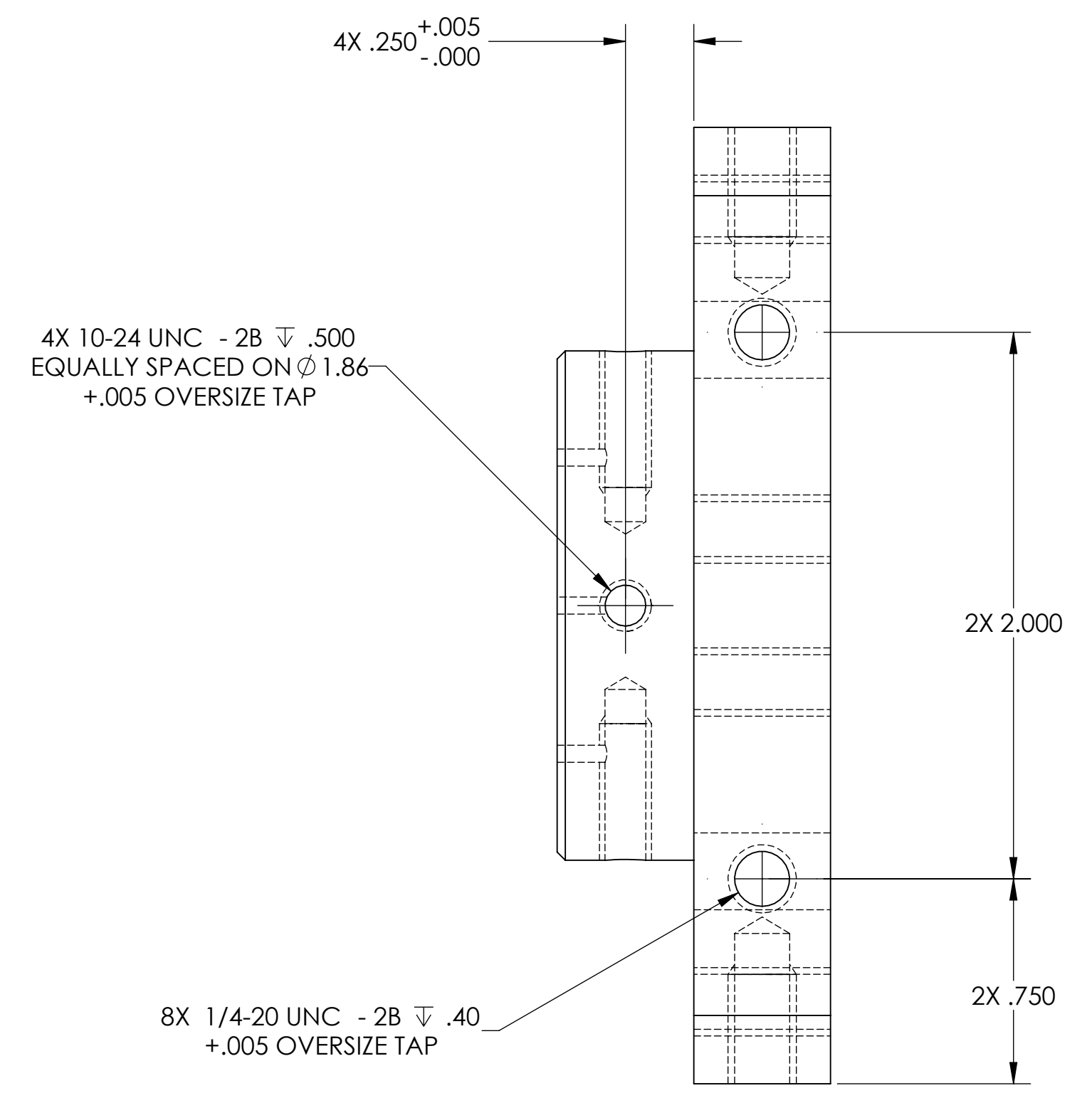
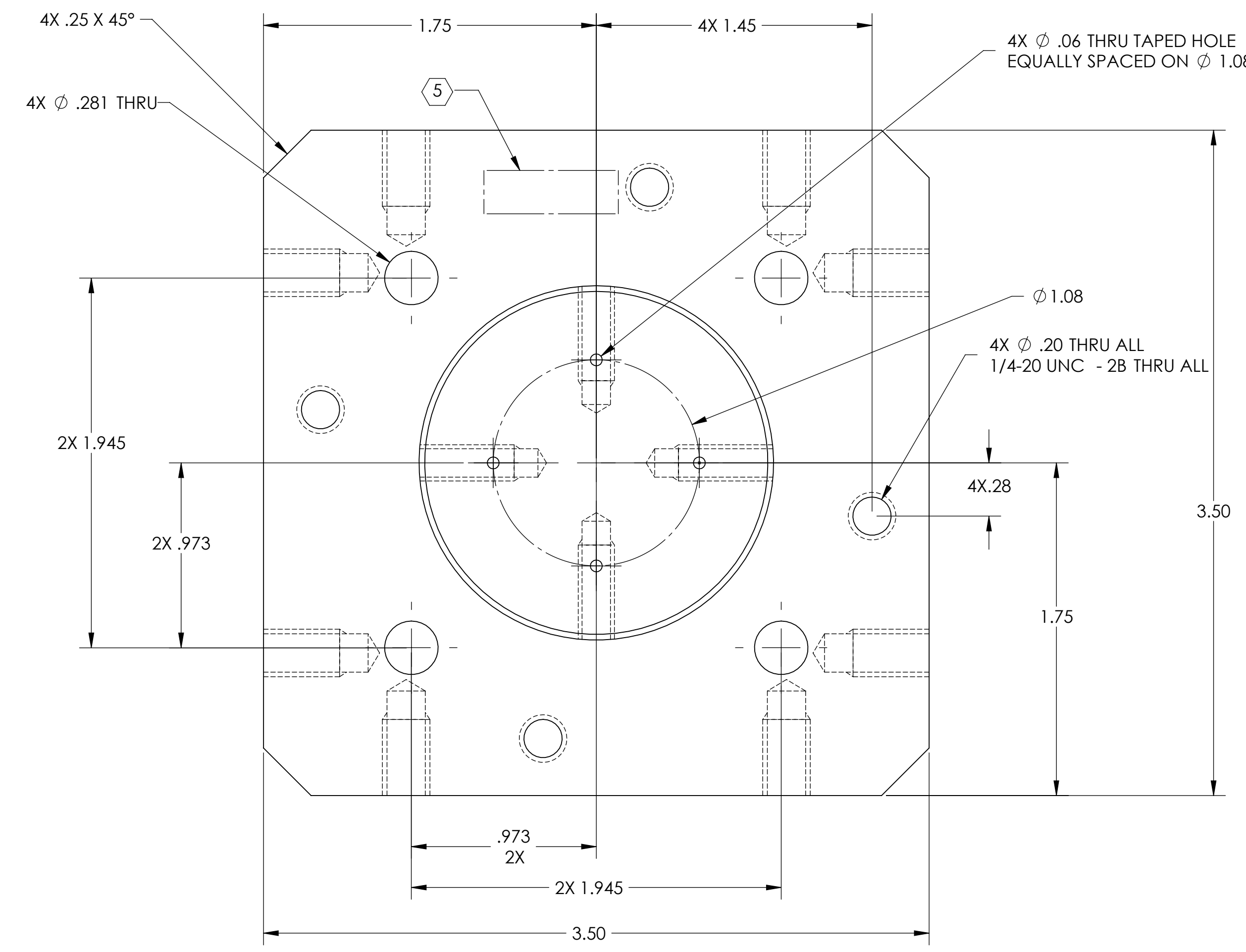
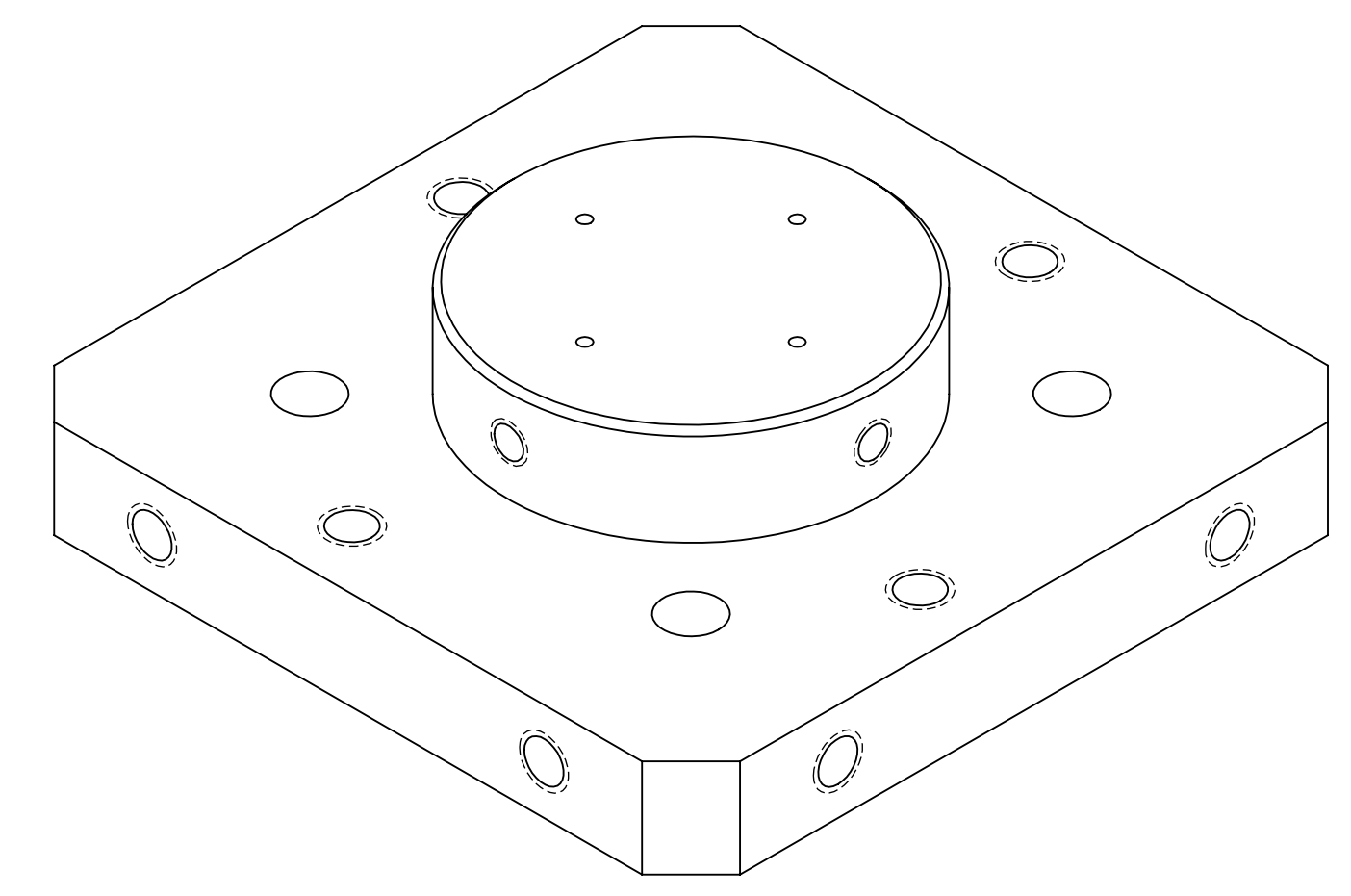
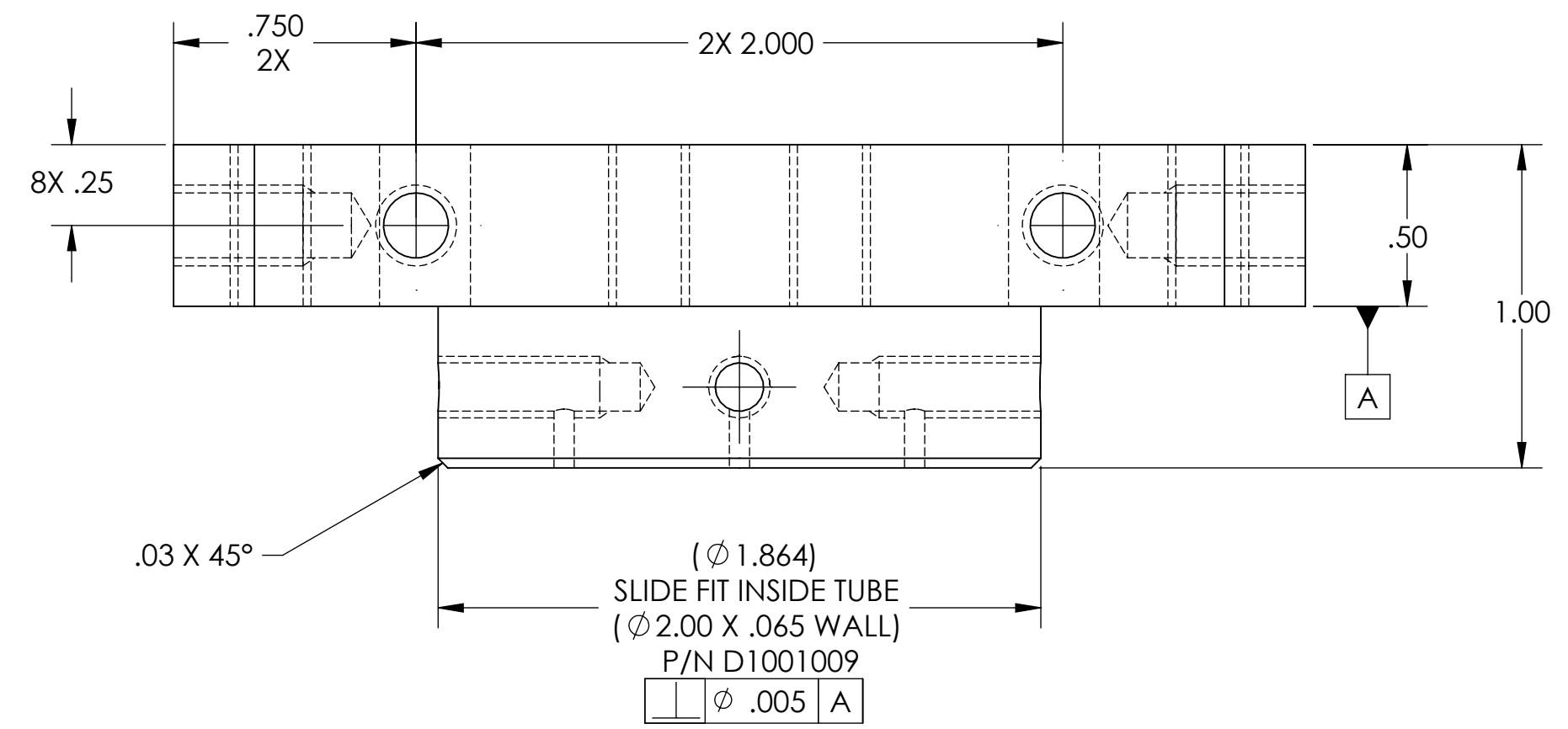
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 1.0°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SLC DAMPING TUBE LOWER PLATE	
MATERIAL		FINISH		NEXT ASSY		DESIGNER	
6061-T6 Al		63 μinch		D1002563		N. Nguyen 01 Jun 2010	
						SIZE DWG. NO.	
						D D1002617	
						REV.	
						v1	
						APPROVAL	
						D. COYNE 10 NOV 2010	
						SCALE: 1:1	
						PROJECTION:	
						SHEET 1 OF 1	

D:\002617_Audi\GO_AQS_SLC Damping Tube Lower Plate_PART PDM REV: X-007_DRAWING PDM REV: X-006

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, 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. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = .314 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
 9. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO. REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	10 OCT 2010	E1000285	

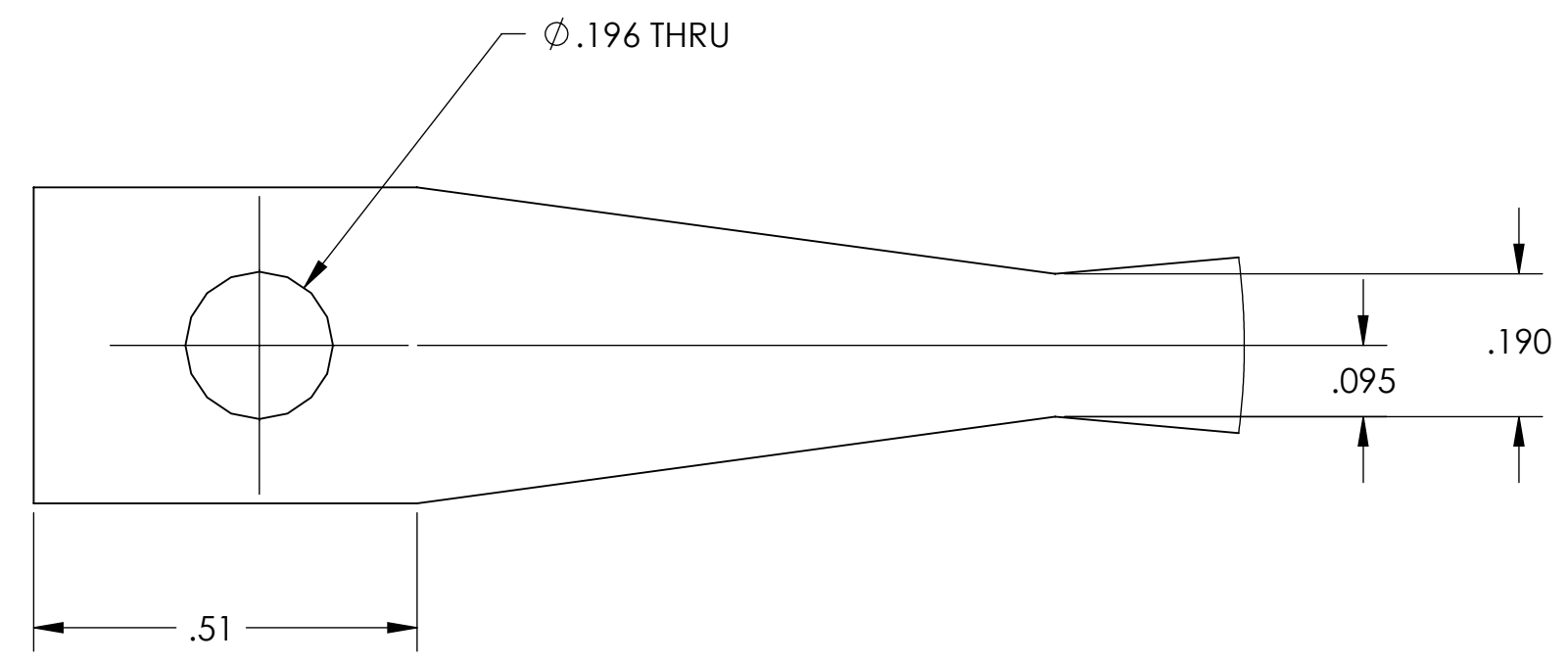
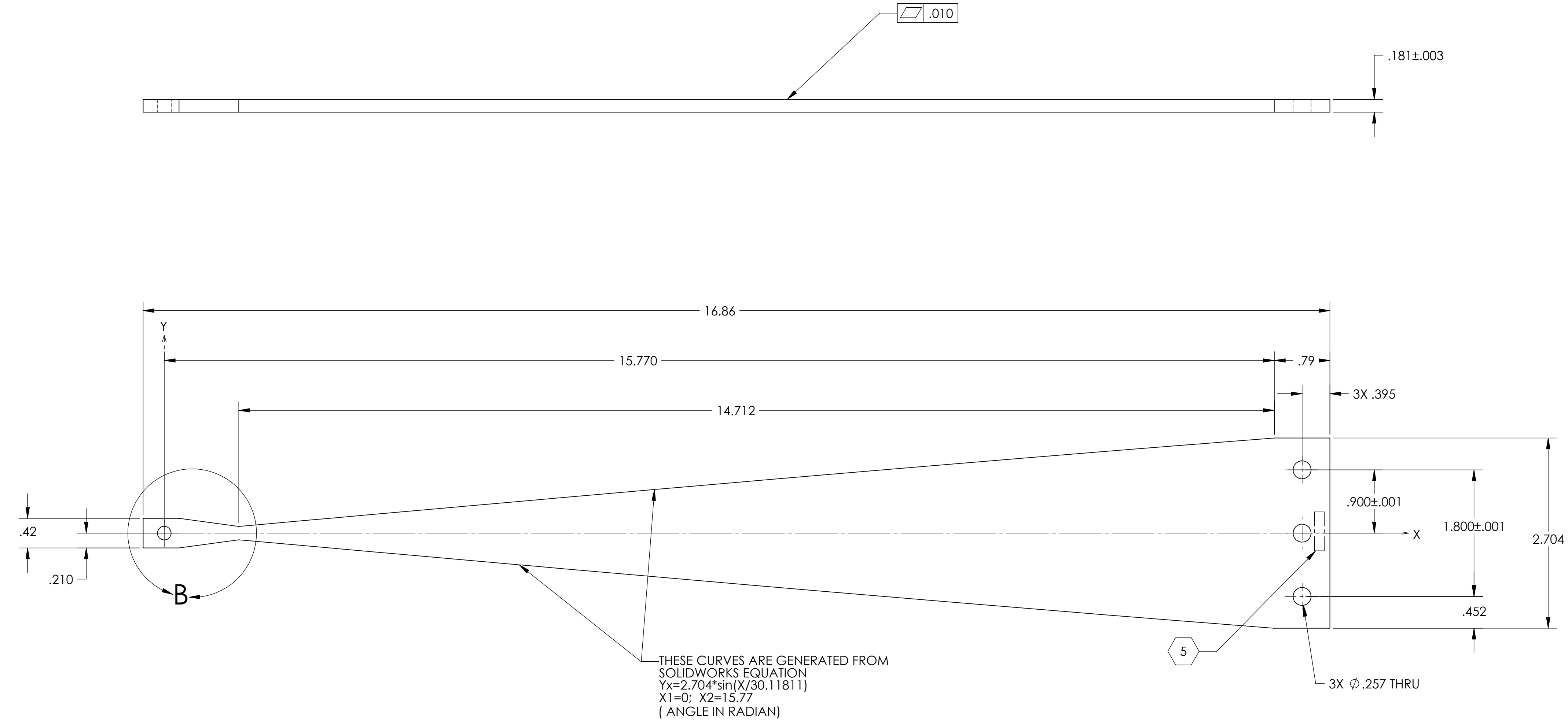


NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES		ADVANCED LIGO AOS		SLC TUBE LOWER CONNECTOR PLATE	
TOLERANCES: .XX ± .01 .XXX ± .005		NEXT ASSY D1001007		DESIGNER N.Nguyen 01 Jun 2010	SIZE DWG. NO.
ANGULAR ± 1.0°		MATERIAL 6061-T6 Al FINISH 63 μinch		DRAFTER T.G. NGUYEN 19 JUL 2010	D D1002618
				CHECKER M. SMITH 01 NOV 2010	REV. v1
				APPROVAL D. COYNE 10 NOV 2010	SCALE: 1:1 PROJECTION: SHEET 1 OF 1

D:\002618_Adi\GO_AOS_SLC Tube Lower Connector Plate - PART PDM REV: X-003 - DRAWING PDM REV: X-008

- NOTES CONTINUED:**
- 5. SCRIBE, ENGRAVE, 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. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 - 6. PART TO BE HEAT TREATED AND PLATED IN ACCORDANCE WITH LIGO SPECIFICATION E0900023-V10.
 - 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 - 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

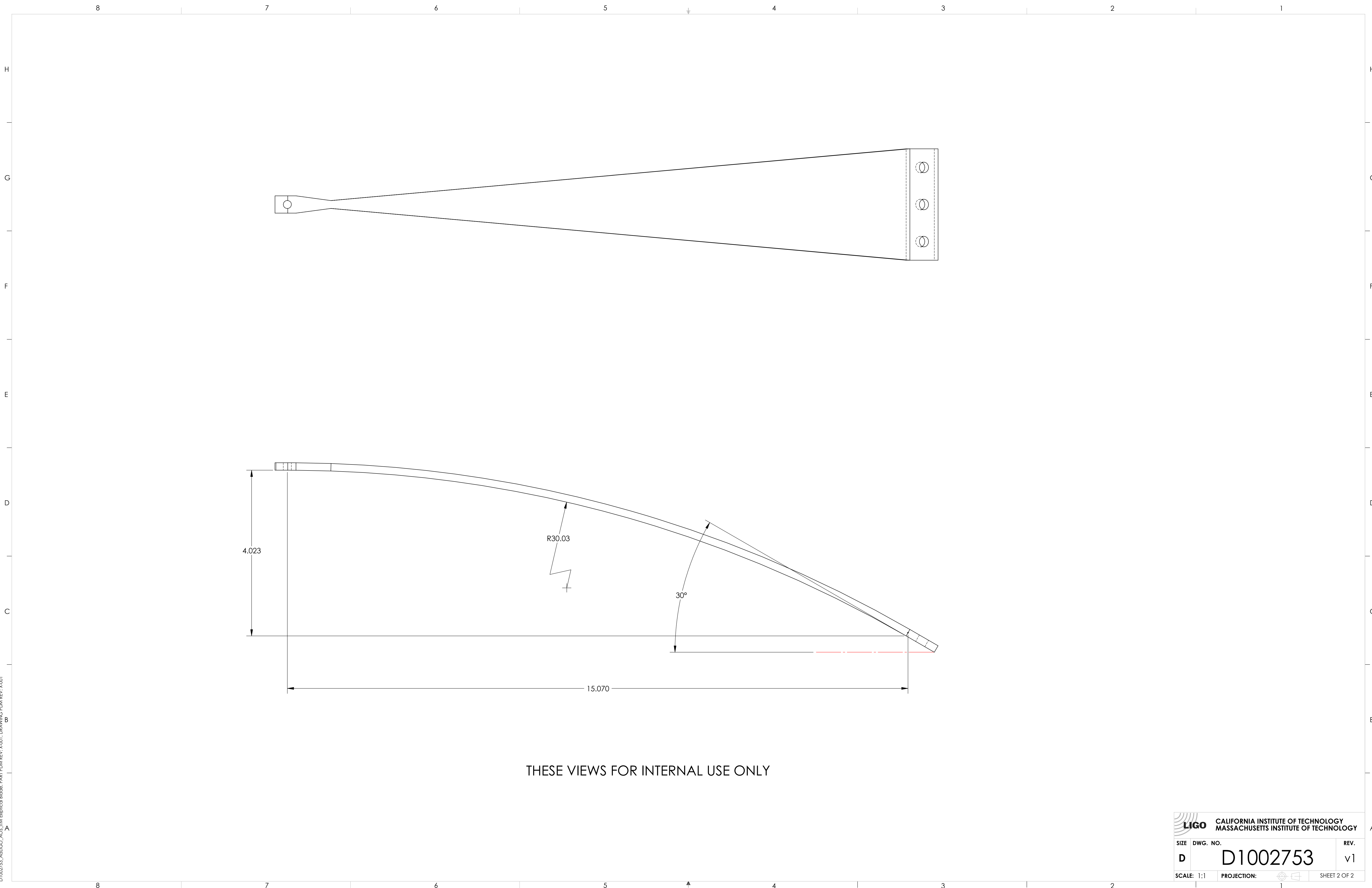
REV.	DATE	DCN #	DRAWING TREE #
v1	18 NOV 2010	E1000736	



**DETAIL B
SCALE 4 : 1**

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 1.0°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		ITM Elliptical Blade	
MATERIAL MARAGING STEEL C250		FINISH 63 μinch		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D100xxxx				DESIGNER N.Nguyen		DATE 01 Jun 2010	
				DRAFTER M.RUIZ		DATE 23 NOV 2010	
				CHECKER		SIZE D	
				APPROVAL		DWG. NO. D1002753	
				SCALE: 1:1		PROJECTION:	
				SHEET 1 OF 2		REV. v1	

D1002753_AudiLIGO_AOS_1TM_Elliptical Blade_PART PDM_REV: X-001_DRAWING PDM_REV: X-001



THESE VIEWS FOR INTERNAL USE ONLY

 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
D	D1002753	v1
SCALE: 1:1	PROJECTION:	SHEET 2 OF 2

D1002753_AudiGO_ACS_TIM_Elliptical Blade_PART_PDM_REV_X-001_DRAWING_PDM_REV_X-001

NOTES CONTINUED:

5. SCRIBE, ENGRAVE, 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. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

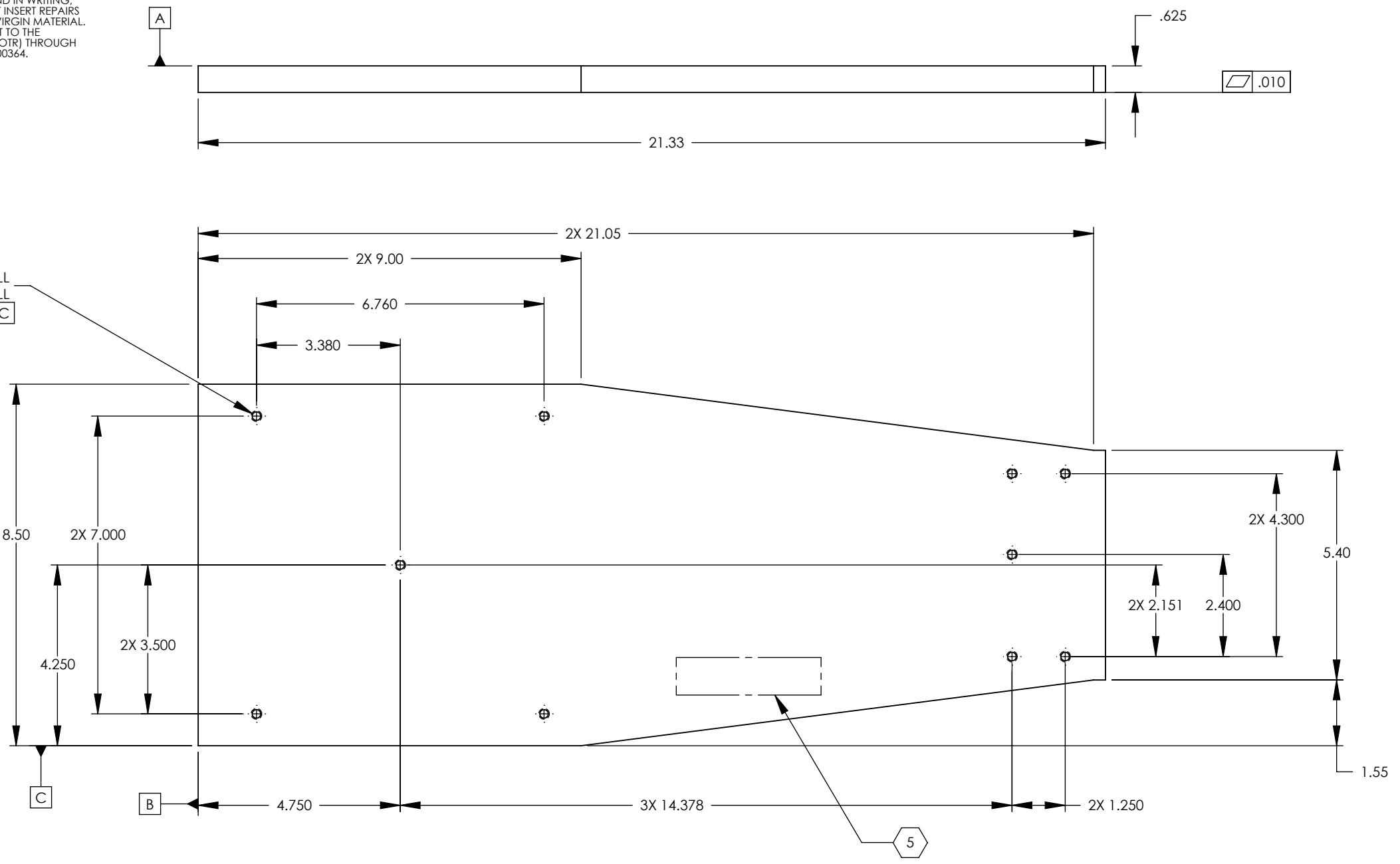
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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

8. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.

9. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	18 NOV 2010	E1000736	-
-	-	-	-
-	-	-	-



D1002756_AdlIGO_AOS_ITM Elliptical Interface Mounting Plate, PART PDM REV: X-001, DRAWING PDM REV: X-002

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .01 .XXX ± .010 ANGULAR ± .5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		ITM ELLIPTICAL INTERFACE MOUNTING PLATE	
MATERIAL		FINISH		SYSTEM		SUB-SYSTEM	
304 SSSL		63 μinch		ADVANCED LIGO		AOS	
NEXT ASSY				DESIGNER		DATE	
D1003238				M.RUIZ		03 DEC 2010	
APPROVAL				DRAFTER		DATE	
				M.RUIZ		12 NOV 2010	
SCALE: 1:3				PROJECTION:		SHEET 1 OF 1	
				SIZE DWG. NO.		REV.	
				B		D1002756 v1	

8

7

6

5

4

3

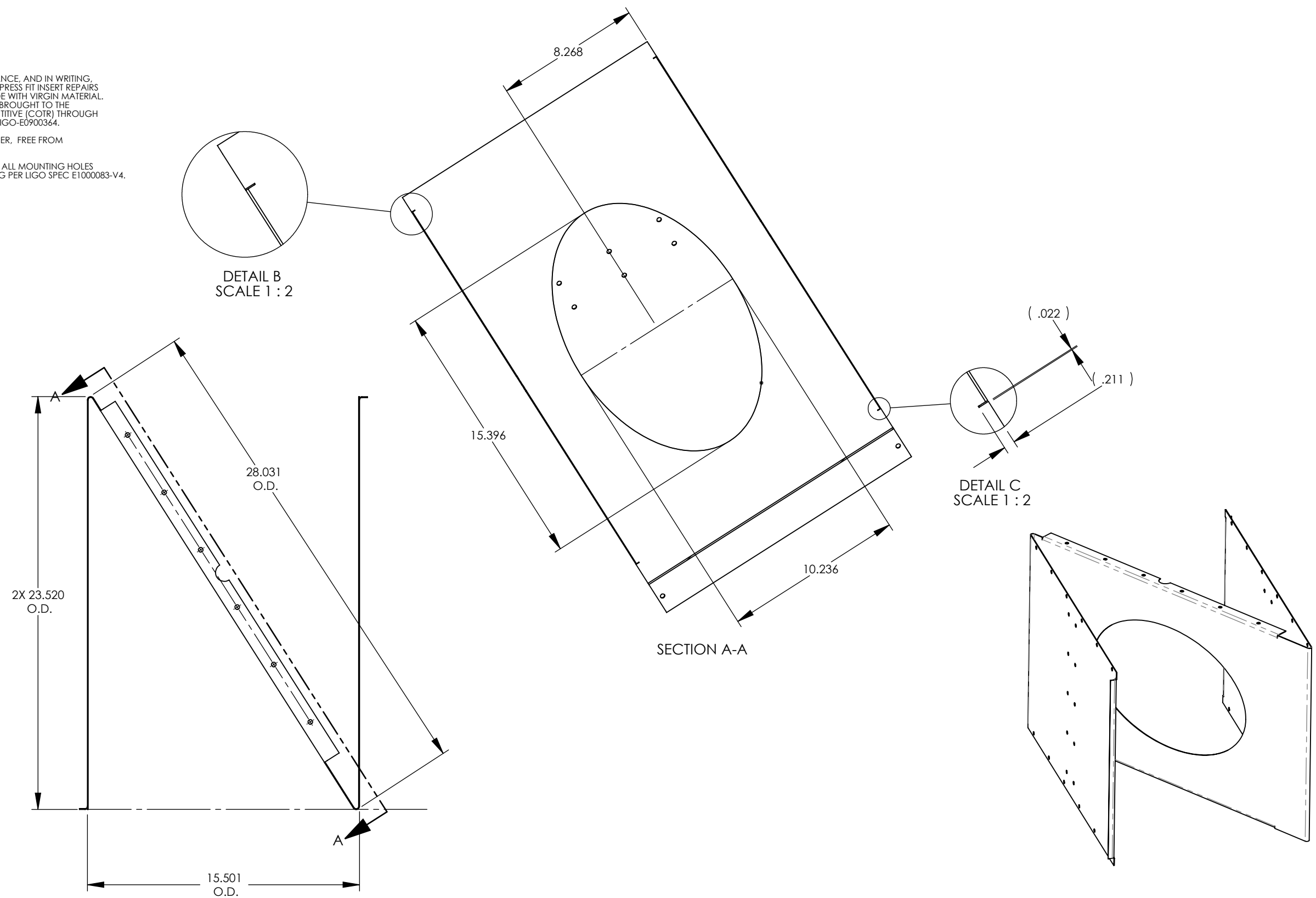
2

1

NOTES CONTINUED:

- 5. MACHINE PART NUMBER, REVISION, SERIAL NUMBER, .020 DEEP WITH MINIMUM CHARACTER HEIGHT .156 APPROXIMATELY WHERE SHOWN. SERIAL NUMBER WILL START AT 001 AND PROCEED CONSECUTIVELY. EXAMPLE: D100XXXX-V1 S/N 001
- 6. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
- 7. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS OR PLUGS) UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.
- 8. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.
- 9. SURFACE FINISH TO BE AS-PROCESSED FROM MILL/SUPPLIER, FREE FROM SCRATCHES & GOUGES.
- 10. PART WILL BE PORCELAIN COATED AFTER FABRICATION. ALL MOUNTING HOLES WILL BE MASKED ($\varnothing 0.63$) PRIOR TO PORCELAIN COATING PER LIGO SPEC E1000083-V4.

REV.	DATE	DCN #	DRAWING TREE #
v1	18 NOV 2010	E1000736	-
-	-	-	-
-	-	-	-



D1002764_AdlIGO_AOS_ITM Elliptical Baffle Skin, PART PDM REV: X-020, DRAWING PDM REV: X-022

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN	
TOLERANCES:	
.XX	± .01
.XXX	± .015
ANGULAR ± 1.0°	
1. INTERPRET DRAWING PER ASME Y14.5-1994.	
2. REMOVE ALL SHARP EDGES, R.02 MIN.	
3. DO NOT SCALE FROM DRAWING.	
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	FINISH
A424 TYPE I, 18GA, SSSL	SEE NOTE 7

 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME	
	ITM ELLIPTICAL BAFFLE SKIN	
SYSTEM	SUB-SYSTEM	DESIGNER
		M.RUIZ
		06 DEC 2010
		DRAFTER
		M.RUIZ
		02 NOV 2010
		CHECKER
		APPROVAL
NEXT ASSY	D1002750	

SIZE	DWG. NO.	REV.
B	D1002764	v1
SCALE: 1:6	PROJECTION:	SHEET 1 OF 3

8

7

6

5

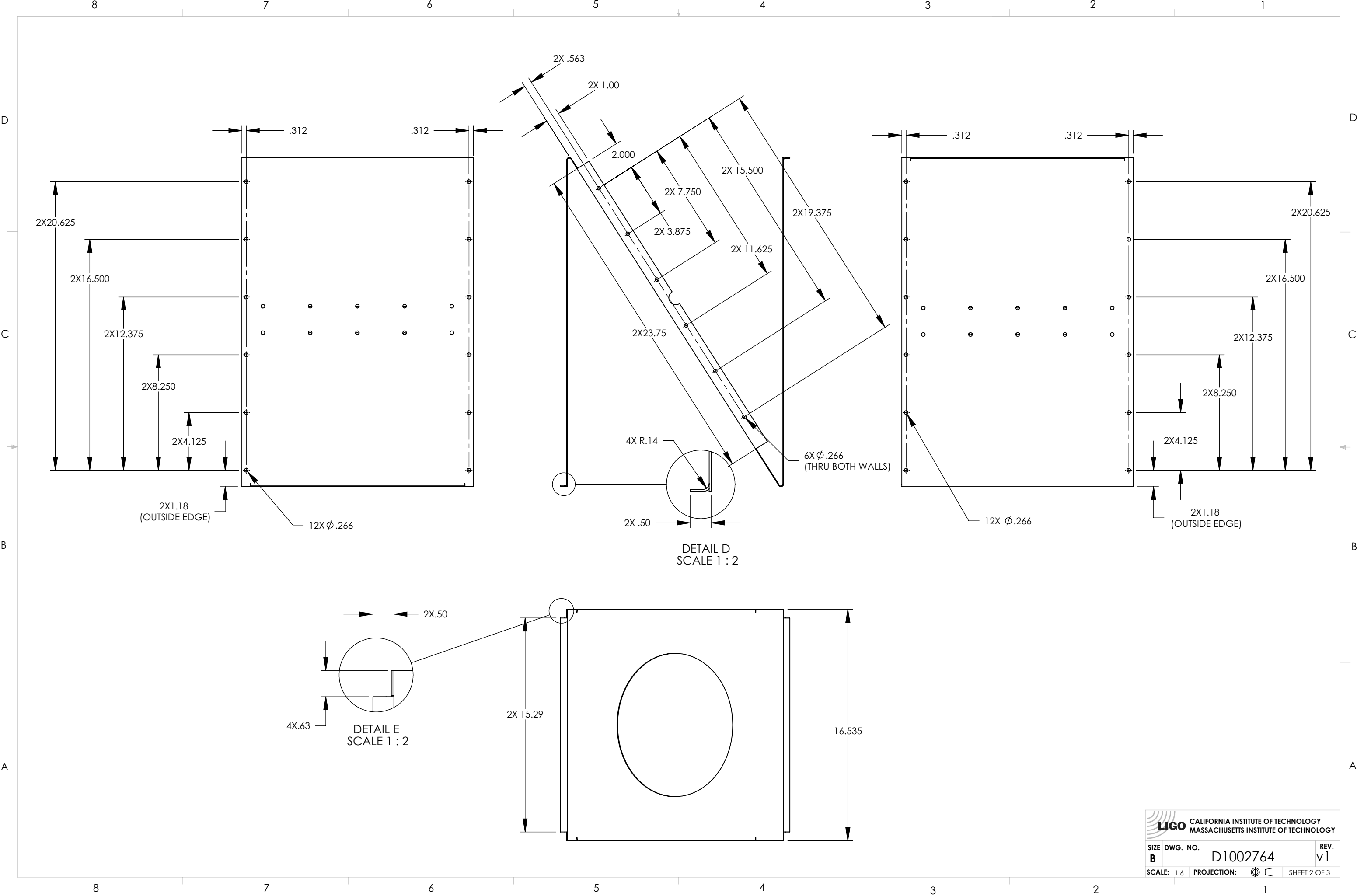
4

3

2

1

D1002764_AcLIGO_AOS_ITM Elliptical Baffle Skin, PART PDM REV: X-020, DRAWING PDM REV: X-022



LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

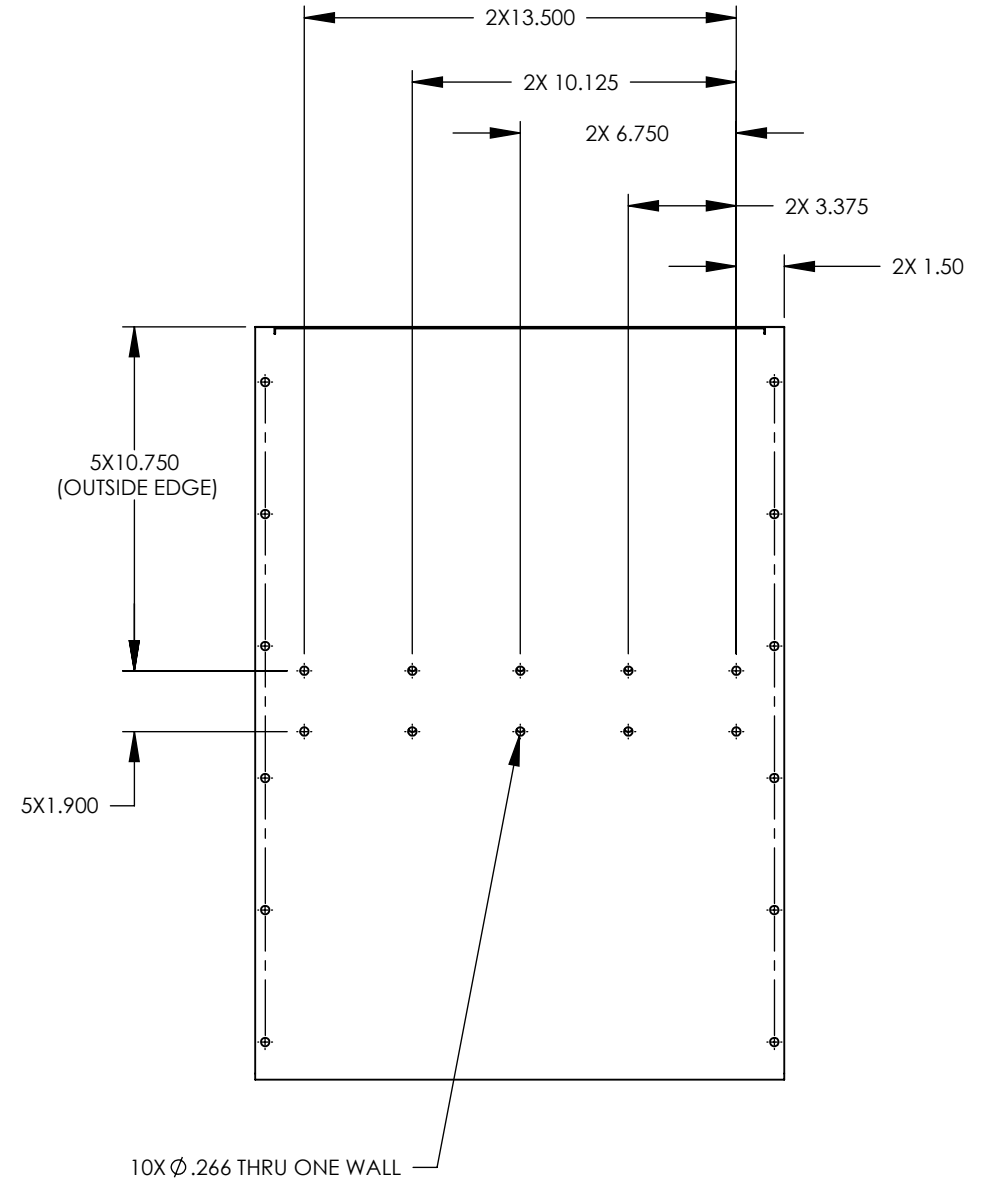
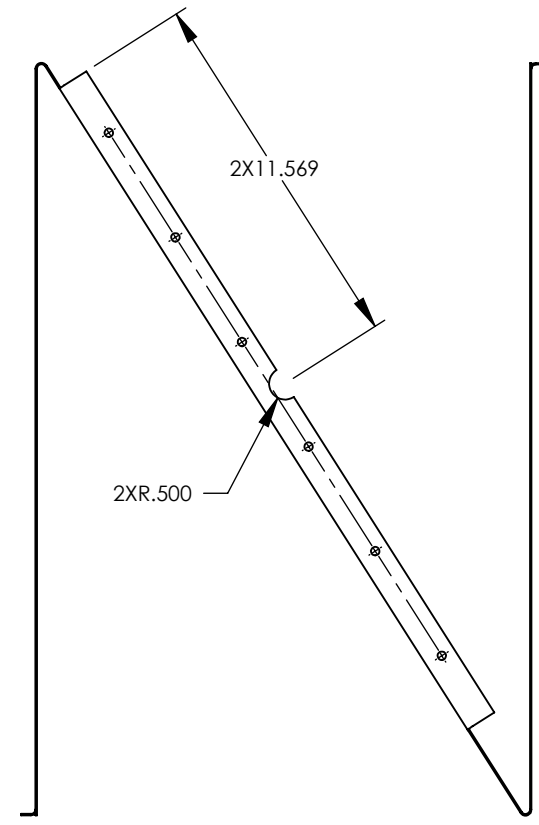
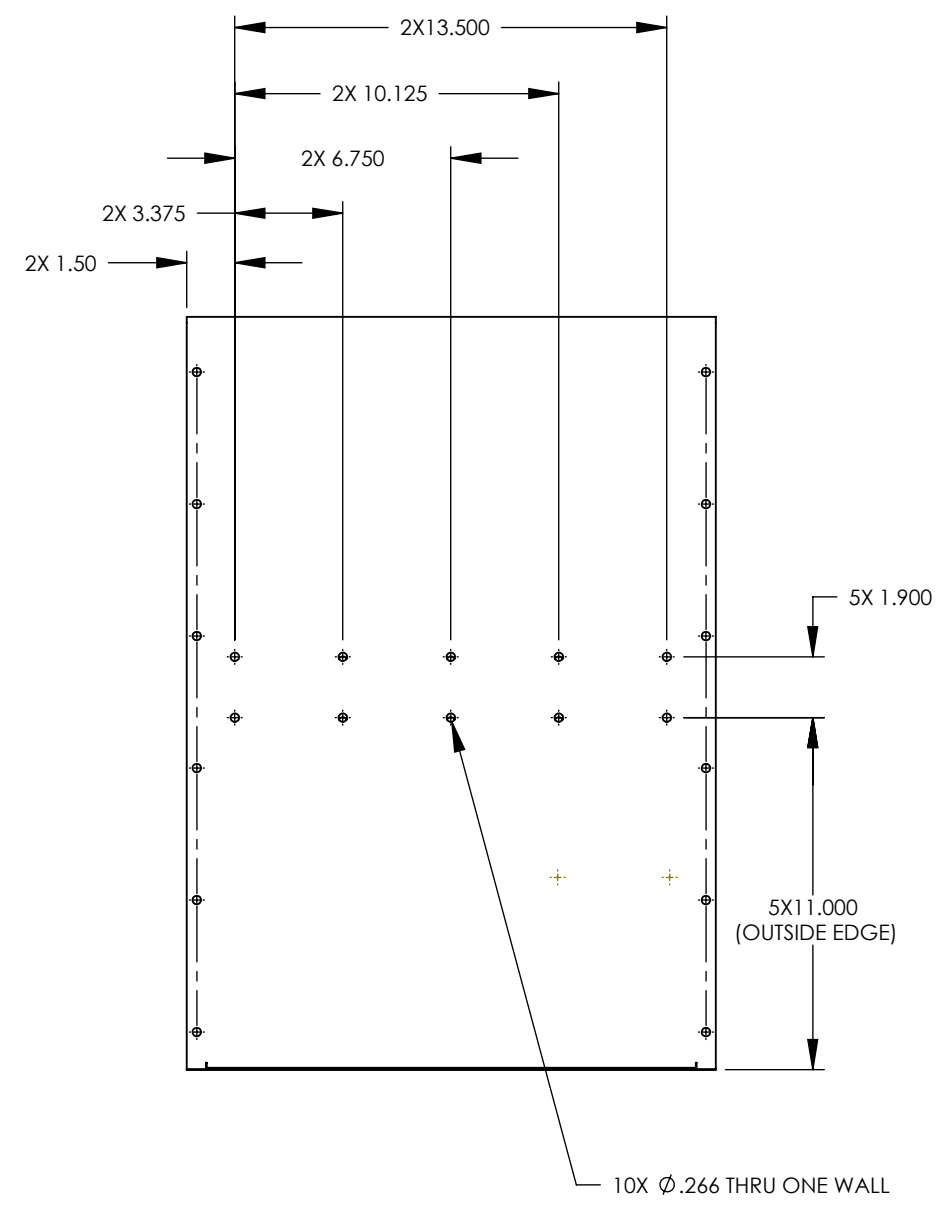
SIZE B	DWG. NO. D1002764	REV. v1
SCALE: 1:6		PROJECTION:
SHEET 2 OF 3		

D1002764_AcLIGO_AOS_ITM Elliptical Baffle Skin, PART PDM REV: X-020, DRAWING PDM REV: X-022

8 7 6 5 4 3 2 1

D
C
B
A

D
C
B
A



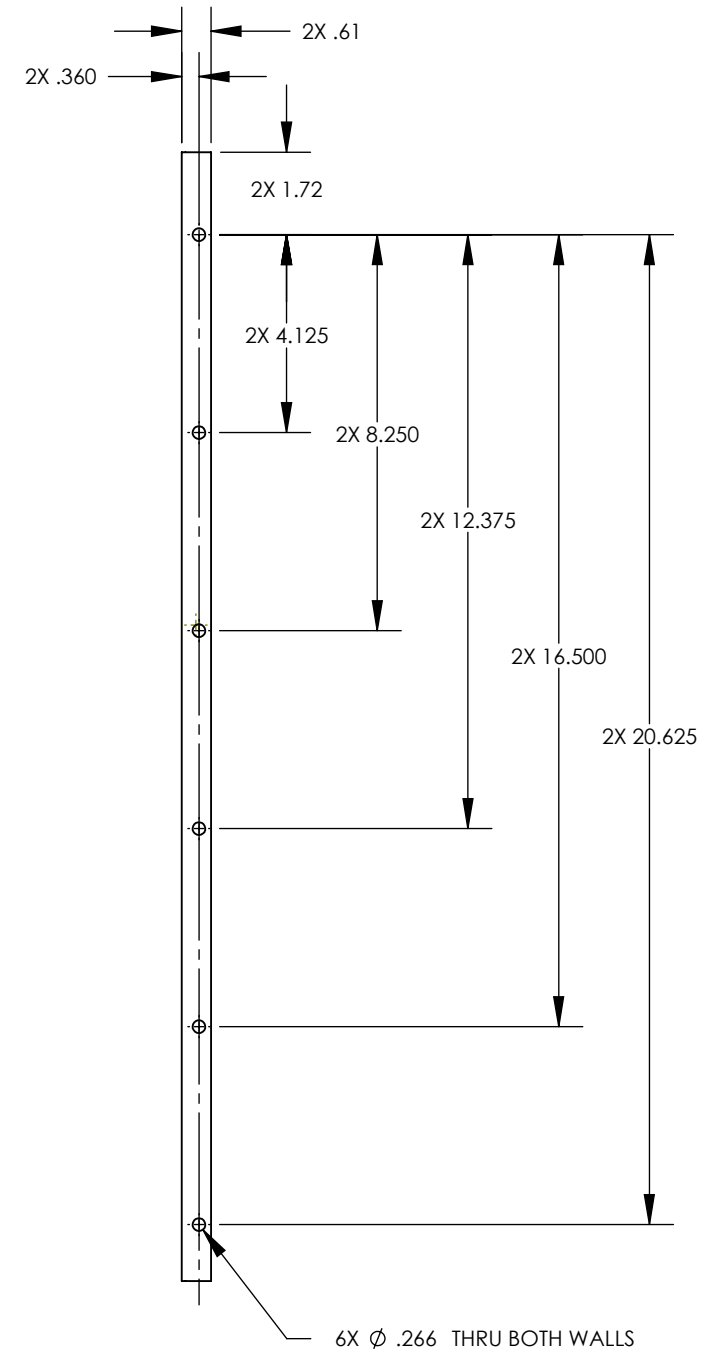
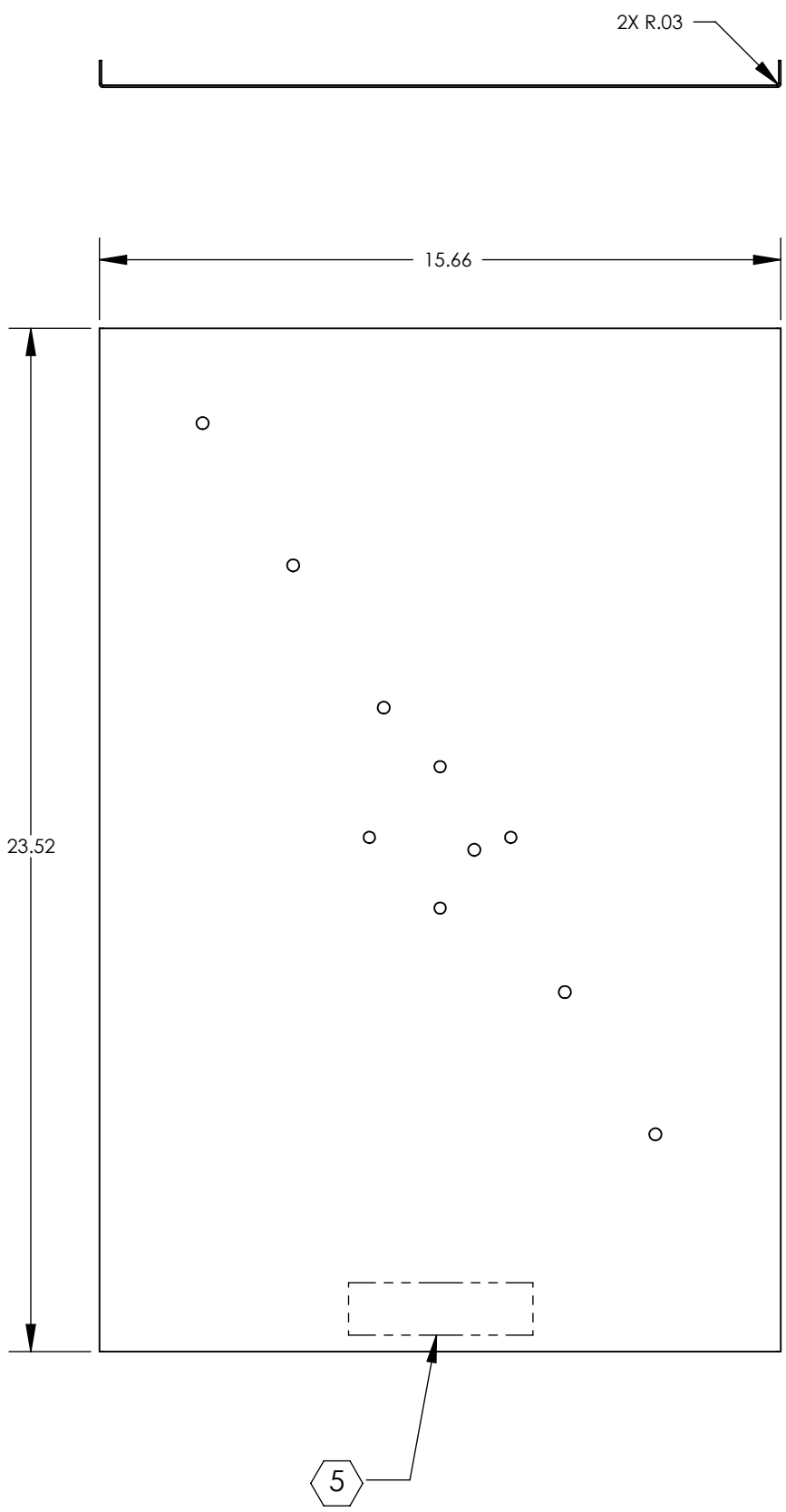
8 7 6 5 4 3 2 1

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE	DWG. NO.	REV.
B	D1002764	v1
SCALE: 1:6		PROJECTION:
		SHEET 3 OF 3

- NOTES CONTINUED:**
- 5. MACHINE PART NUMBER, REVISION, SERIAL NUMBER, .020 DEEP WITH MINIMUM CHARACTER HEIGHT .156 APPROXIMATELY WHERE SHOWN. SERIAL NUMBER WILL START AT 001 AND PROCEED CONSECUTIVELY. EXAMPLE: D100XXXX-V1
S/N 001
 - 6. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
 - 7. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS OR PLUGS) UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.
 - 8. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.
 - 9. SURFACE FINISH TO BE AS-PROCESSED FROM MILL/SUPPLIER. FREE FROM SCRATCHES & GOUGES.
 - 10. PART WILL BE PORCELAIN COATED AFTER FABRICATION. ALL MOUNTING HOLES WILL BE MASKED ($\varnothing 0.63$) PRIOR TO PORCELAIN COATING PER LIGO SPEC E1000083-V4.

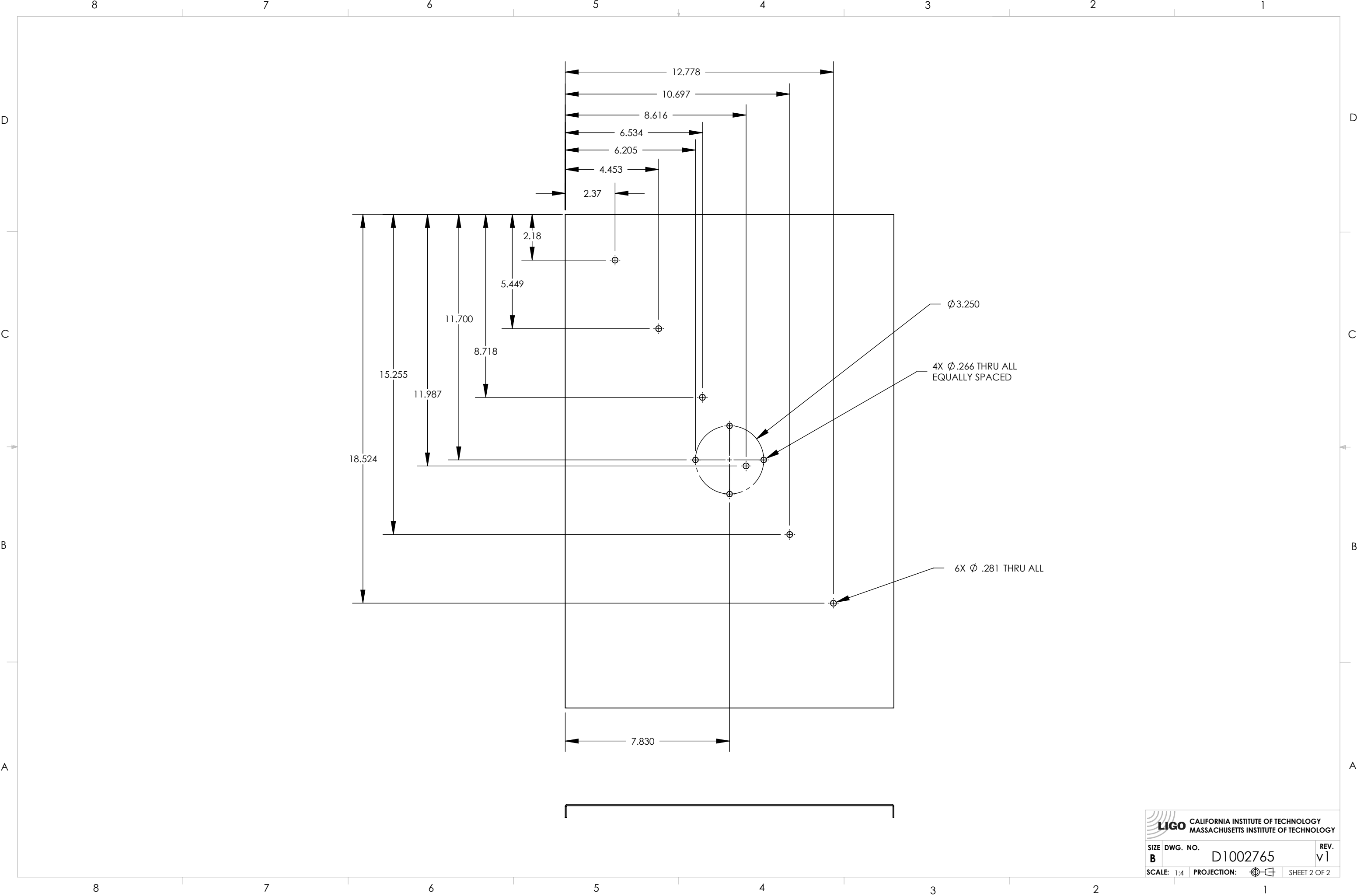
REV.	DATE	DCN #	DRAWING TREE #
v1	18 NOV 2010	E1000736	-
-	-	-	-
-	-	-	-




D1002765_AdlIGO_AOS_ITM Elliptical Baffle Upper Cap Skin, PART PDM REV: X-020, DRAWING PDM REV: X-019

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN		1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		ADVANCED LIGO		ITM Elliptical Baffle Upper Cap Skin	
TOLERANCES: .XX ± .01 .XXX ± .015		MATERIAL A424 TYPE I, 18GA, SSSL		SUB-SYSTEM AOS		DESIGNER DRAFTER CHECKER APPROVAL	
ANGULAR ± .5°		FINISH SEE NOTE 7		NEXT ASSY D1002750		SIZE DWG. NO. B D1002765	
						REV. v1	
						SCALE: 1:4 PROJECTION: SHEET 1 OF 2	

D1002765_AdLIGO_AOS_ITM Elliptical Baffle Upper Cap Skin, PART PDM REV: X-020, DRAWING PDM REV: X-019

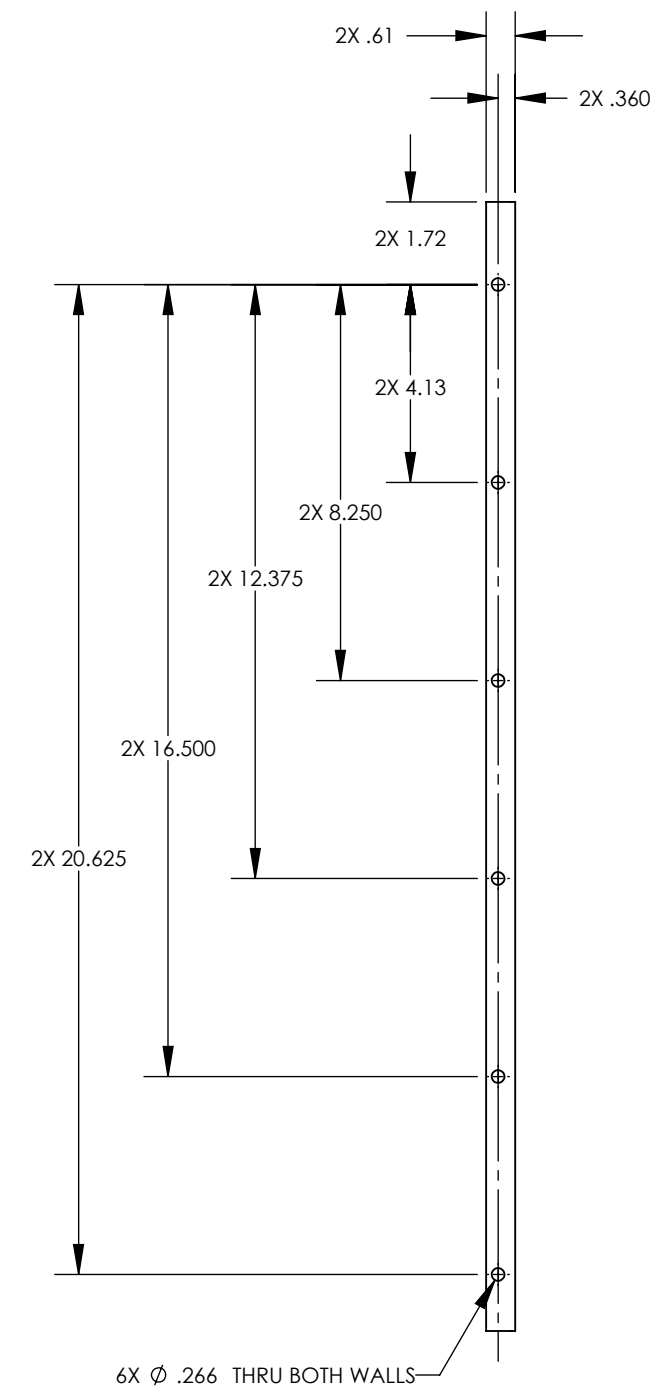
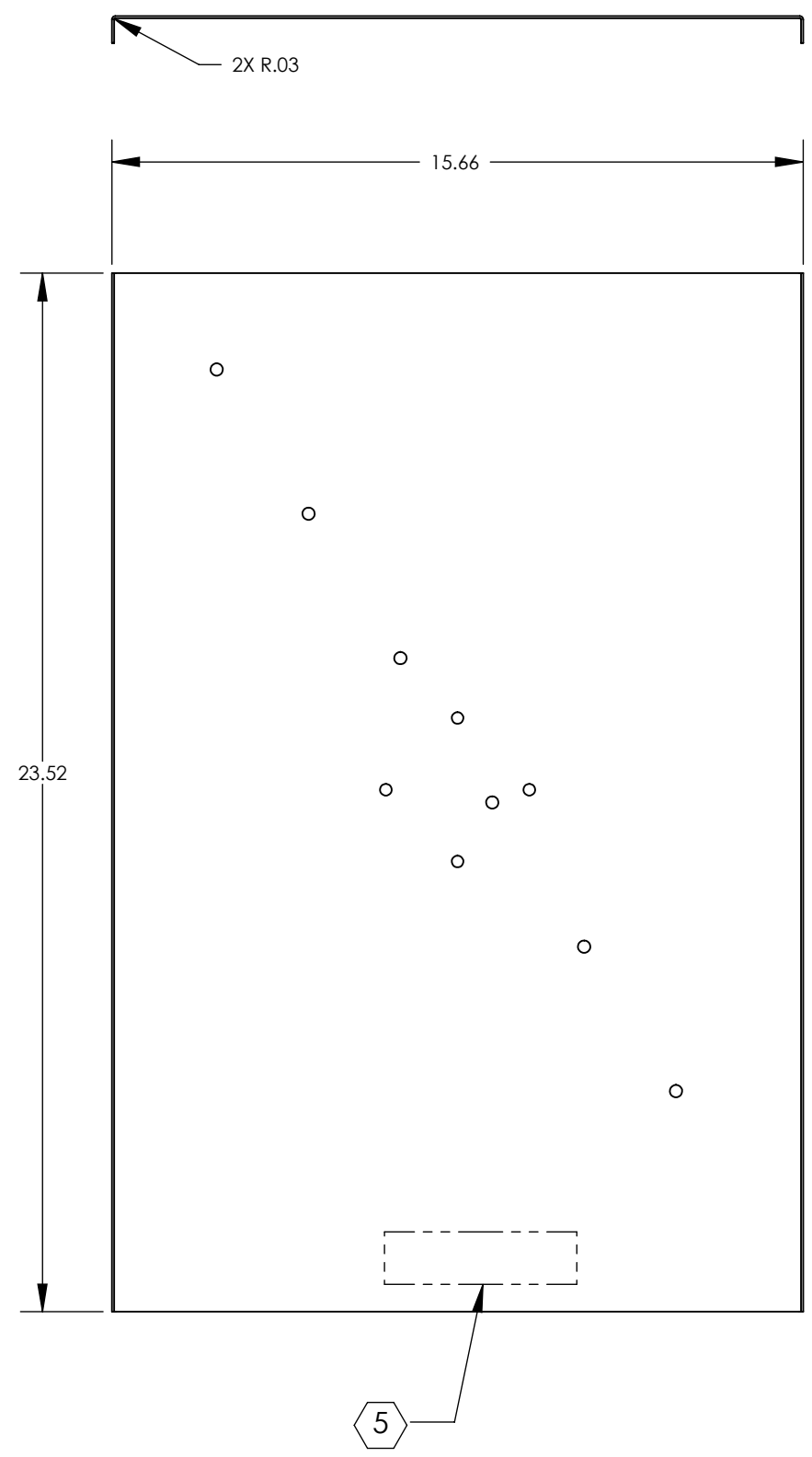


 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
B	D1002765	v1
SCALE: 1:4	PROJECTION:	SHEET 2 OF 2

D1002766_AdlIGO_AOS_ITM Elliptical Baffle Lower Cap Skin, PART PDM REV: X-014, DRAWING-PDM REV: X-015

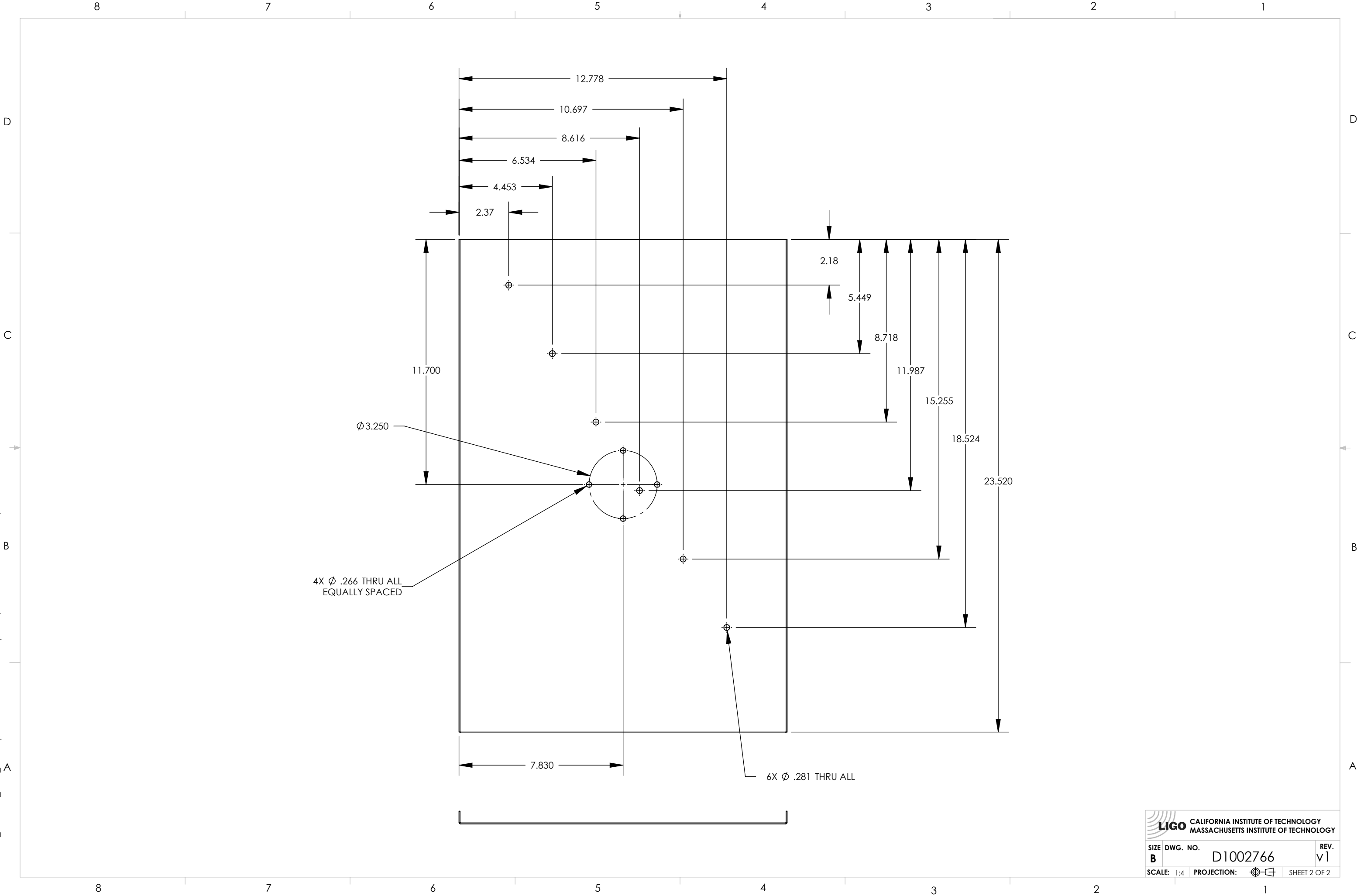
- NOTES CONTINUED:**
- 5. MACHINE PART NUMBER, REVISION, SERIAL NUMBER, .020 DEEP WITH MINIMUM CHARACTER HEIGHT .156 APPROXIMATELY WHERE SHOWN. SERIAL NUMBER WILL START AT 001 AND PROCEED CONSECUTIVELY. EXAMPLE: D100XXXX-V1
S/N 001
 - 6. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
 - 7. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS OR PLUGS) UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.
 - 8. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.
 - 9. SURFACE FINISH TO BE AS-PROCESSED FROM MILL/SUPPLIER, FREE FROM SCRATCHES & GOUGES.
 - 10. PART WILL BE PORCELAIN COATED AFTER FABRICATION. ALL MOUNTING HOLES WILL BE MASKED ($\varnothing 0.63$) PRIOR TO PORCELAIN COATING PER LIGO SPEC E1000083-V4.

REV.	DATE	DCN #	DRAWING TREE #
v1	18 NOV 2010	E1000736	-
-	-	-	-
-	-	-	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX $\pm .02$.XXX $\pm .010$ ANGULAR $\pm .5^\circ$				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		ITM Elliptical Baffle Lower Cap Skin	
MATERIAL A424 TYPE I, 18GA, SSSL		FINISH See Note 7		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D1002750				DESIGNER M.RUIZ		DATE 06 Dec 2010	
				DRAFTER M.RUIZ		DATE 09 NOV 2010	
				CHECKER (blank)		SIZE DWG. NO. B D1002766	
				APPROVAL (blank)		REV. v1	
				SCALE: 1:4		PROJECTION:	
				SHEET 1 OF 2			

D1002766_AdLIGO_AOS_ITM Elliptical Baffle Lower Cap Skin, PART PDM REV: X-014, DRAWING PDM REV: X-015



LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE	DWG. NO.	REV.
B	D1002766	v1
SCALE: 1:4	PROJECTION:	SHEET 2 OF 2

8

7

6

5

4

3

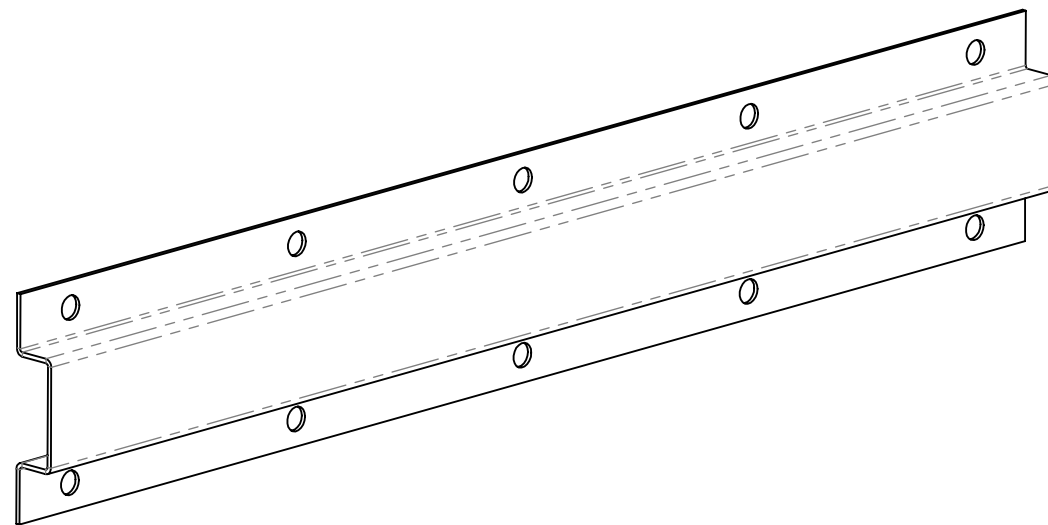
2

1

NOTES CONTINUED:

- 5. MACHINE PART NUMBER, REVISION, SERIAL NUMBER, .020 DEEP WITH MINIMUM CHARACTER HEIGHT .156 APPROXIMATELY WHERE SHOWN. SERIAL NUMBER WILL START AT 001 AND PROCEED CONSECUTIVELY. EXAMPLE: D100XXXX-V1 S/N 001
- 6. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
- 7. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS OR PLUGS) UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.
- 8. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.
- 9. SURFACE FINISH TO BE AS-PROCESSED FROM MILL/SUPPLIER, FREE FROM SCRATCHES & GOUGES.
- 10. PART WILL BE PORCELAIN COATED AFTER FABRICATION. ALL MOUNTING HOLES WILL BE MASKED ($\phi 0.63$) PRIOR TO PORCELAIN COATING PER LIGO SPEC E1000083-V4.

REV.	DATE	DCN #	DRAWING TREE #
v1	18 NOV 2010	E1000736	-
-	-	-	-
-	-	-	-



D

D

C

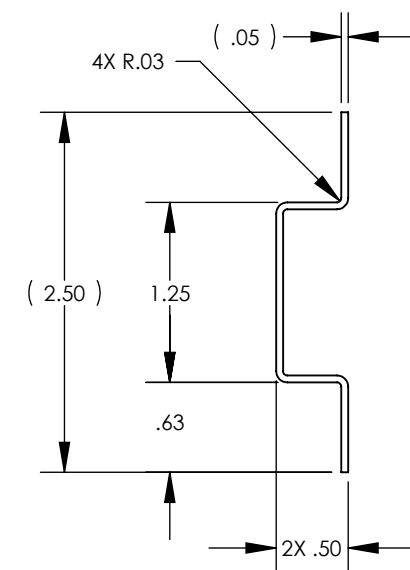
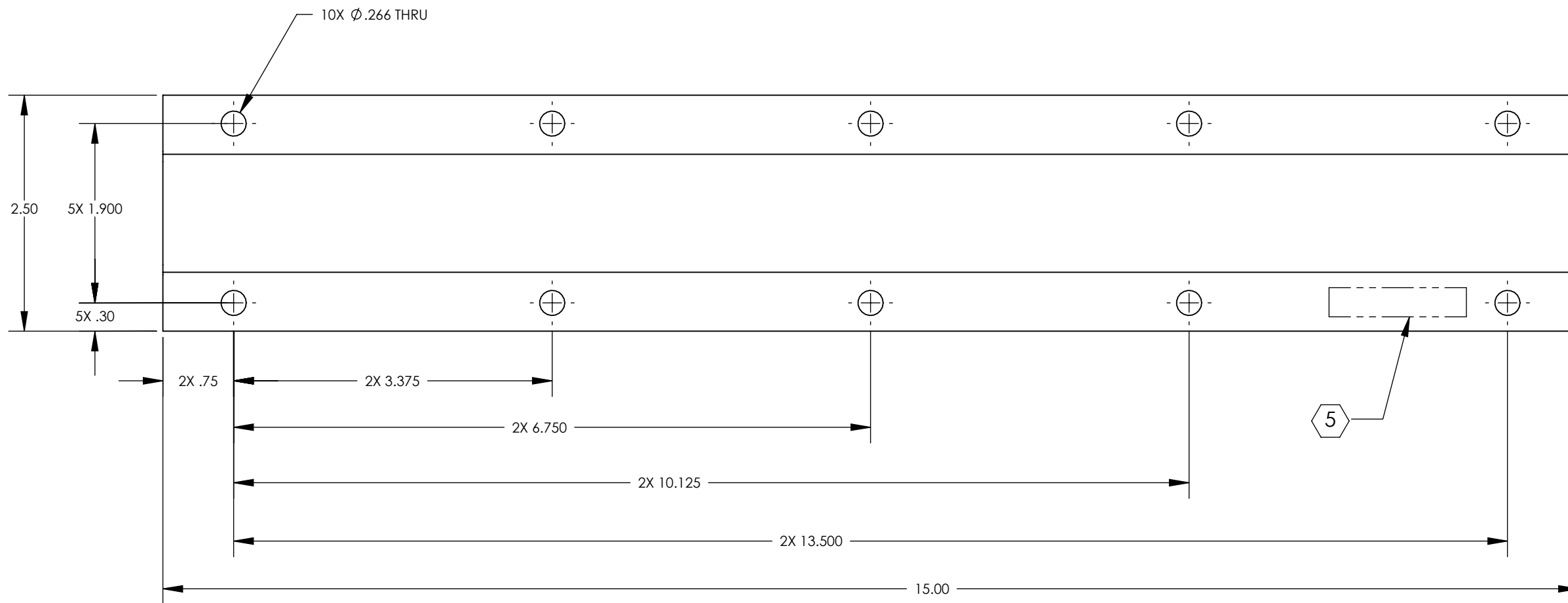
C

B

B

A

A



D1002928_AdlIGO_AOS_ITM Elliptical Baffle Hatsection, PART PDM REV: X-007, DRAWING PDM REV: X-008

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		ITM Elliptical Baffle Hatsection	
TOLERANCES: .XX $\pm .01$.XXX $\pm .015$				SUB-SYSTEM AOS		DESIGNER M.RUIZ 06 NOV 2010	
ANGULAR $\pm .5^\circ$				NEXT ASSY D1002750		DRAFTER M.RUIZ 10 NOV 2010	
MATERIAL A424 TYPE I, 18GA, SSSL				FINISH SEE NOTE 7		CHECKER	
						APPROVAL	
						SIZE DWG. NO. B D1002928	
						REV. v1	
						SCALE: 3:4 PROJECTION: SHEET 1 OF 1	

8

7

6

5

4

3

2

1