

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

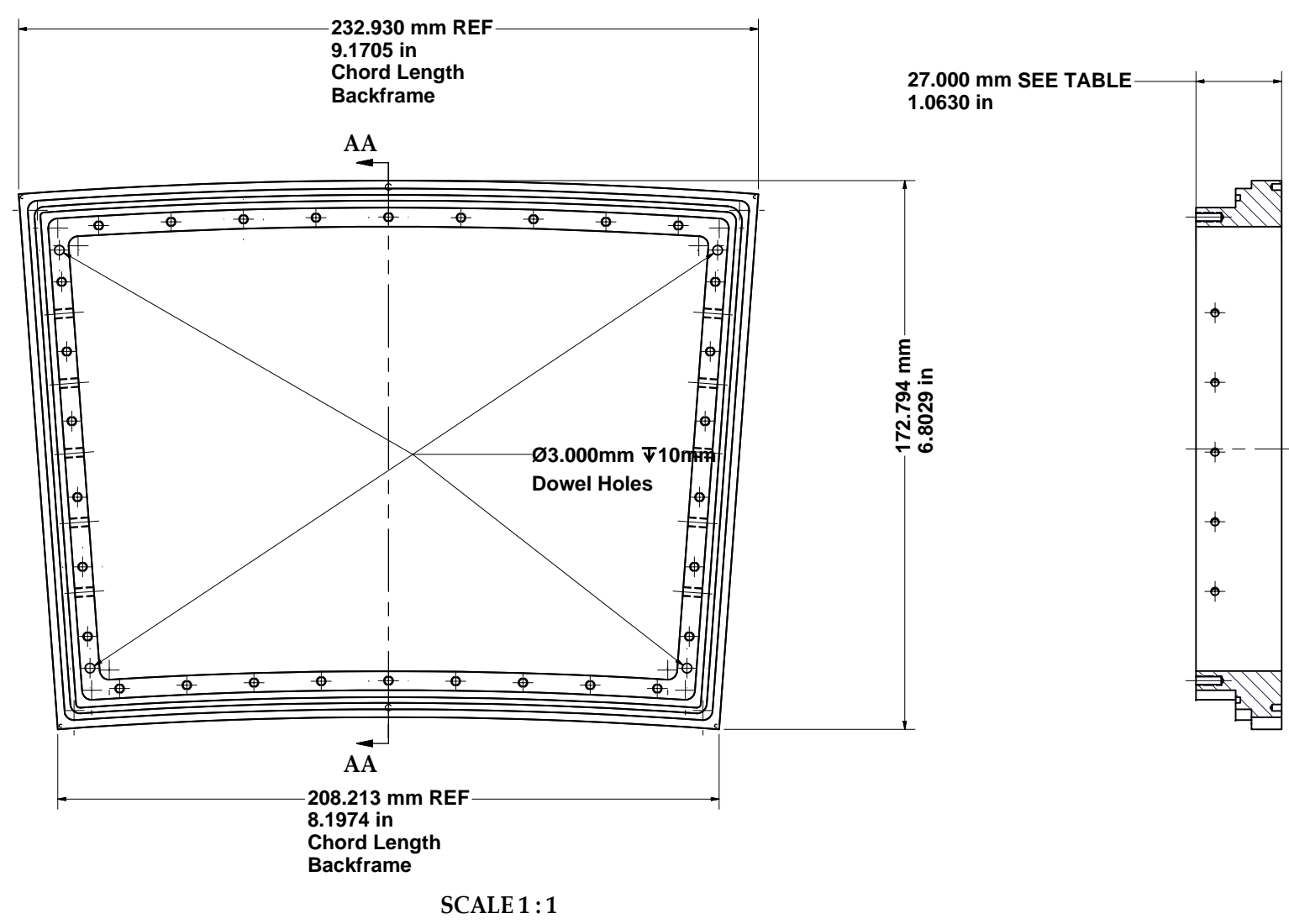
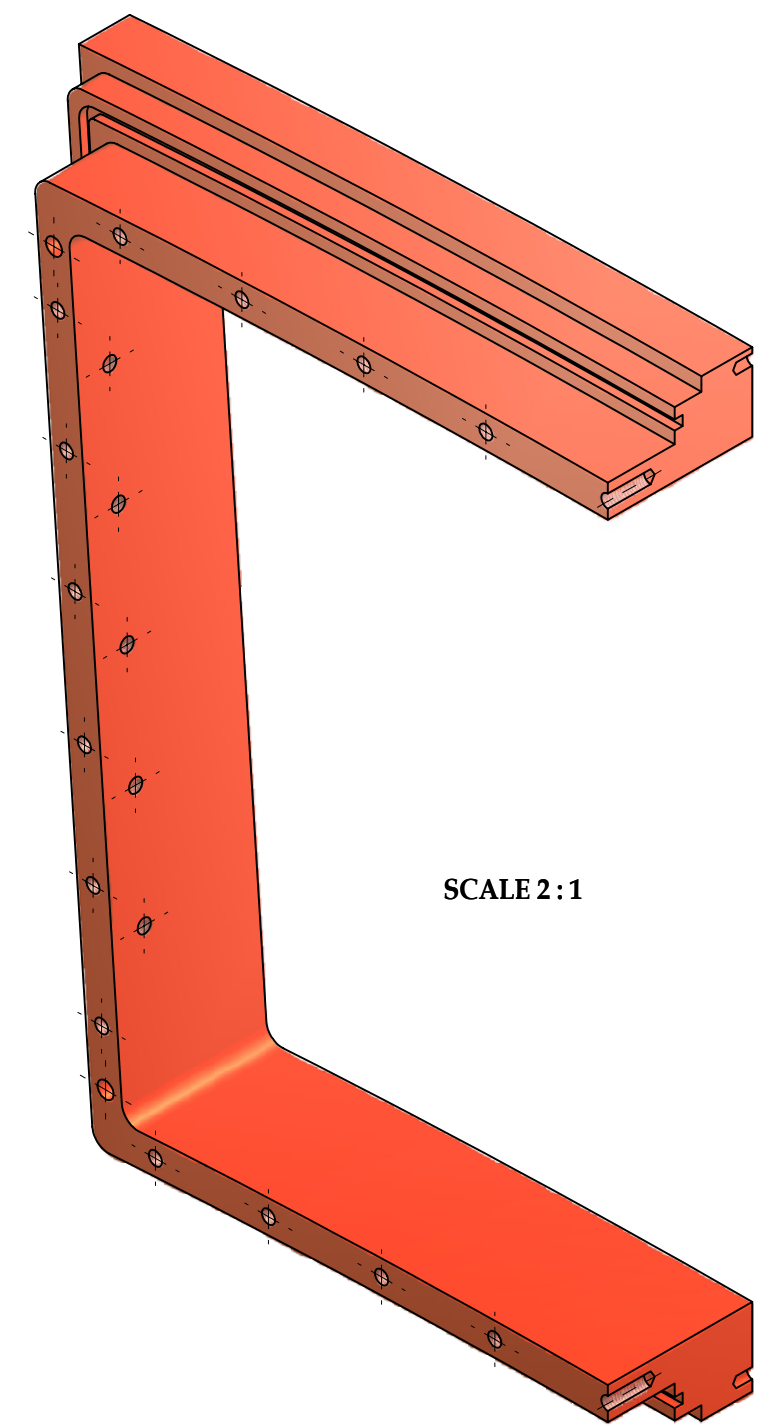


Table		
TYPE	NO.# REQ'd	DIM.
3GEMG	?	27.000 mm
Micromegas	?	41.800 mm
Pixel GEM	?	40.500 mm
3GEM No Gate	?	37.000 mm

SECTION AA-AA
SCALE 1:1



SCALE 2:1

Matl: Alum. 6061 T651

Part requires multi-step process.

- 1) Machine all surfaces and holes (unless noted) leaving 0.030inch extra material. (At least 0.020inch of material is to be removed from all surfaces.)
- 2) Deliver part to Cornell for stress relief process (Liquid Nitrogen cold shock).
- 3) Machine all surfaces and holes (unless noted) leaving 0.010inch extra material. (At least 0.010inch of material is to be removed from all surfaces.)
- 4) Deliver part to Cornell for stress relief process (Liquid Nitrogen cold shock).
- 5) Machine all surfaces and holes to final specifications.

Technical questions, including clarifications and proposals for exceptions, are to be directed to
Dan Peterson
 Senior Physicist, Laboratory for Elementary-Particle Physics, Cornell University
 607-255-8784
 dpp@lepp.cornell.edu

FOR MACHINING LUBRICANT USE ONLY
 ALKALINE DETERGENT LUBRICANT CIMSTAR 40
 OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

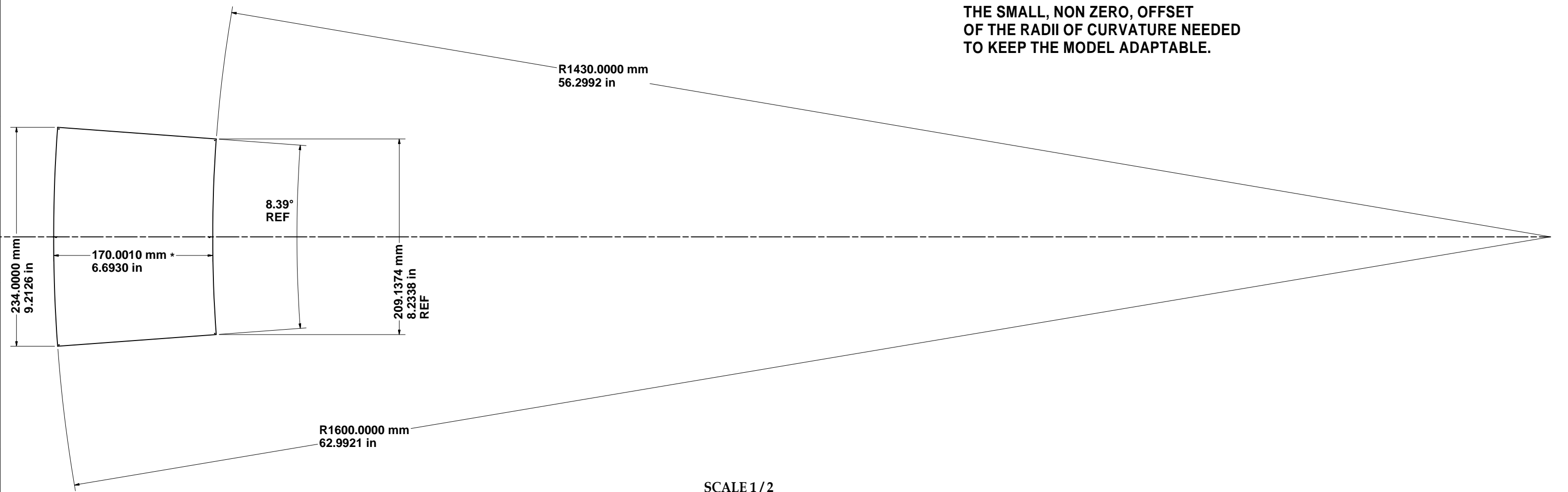
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				

PRINT DISTR. D CR-1 SH. NO. 1 OF 12 REV.	PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ±.010 .000 ±.005 FRACTIONS ±1/64 ANGLES ±0.5° ALL SURFACES ✓	CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853
CHECKED BY: Peterson APPROVED BY: Peterson	DRAWN BY: MDS DRAWN FOR: Peterson	DATE: 10/19/2007 SCALE: noted	6080-104 SH. NO. 1 OF 12

LCTPC Large Prototype Backframe

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

*** NOTE: THIS DIMENSION INCLUDES THE SMALL, NON ZERO, OFFSET OF THE RADII OF CURVATURE NEEDED TO KEEP THE MODEL ADAPTABLE.**



SCALE 1/2

NOTE: This is the Bounding Box.
It is an abstract geometrical shape, within which the module and all mountings for the module are defined.

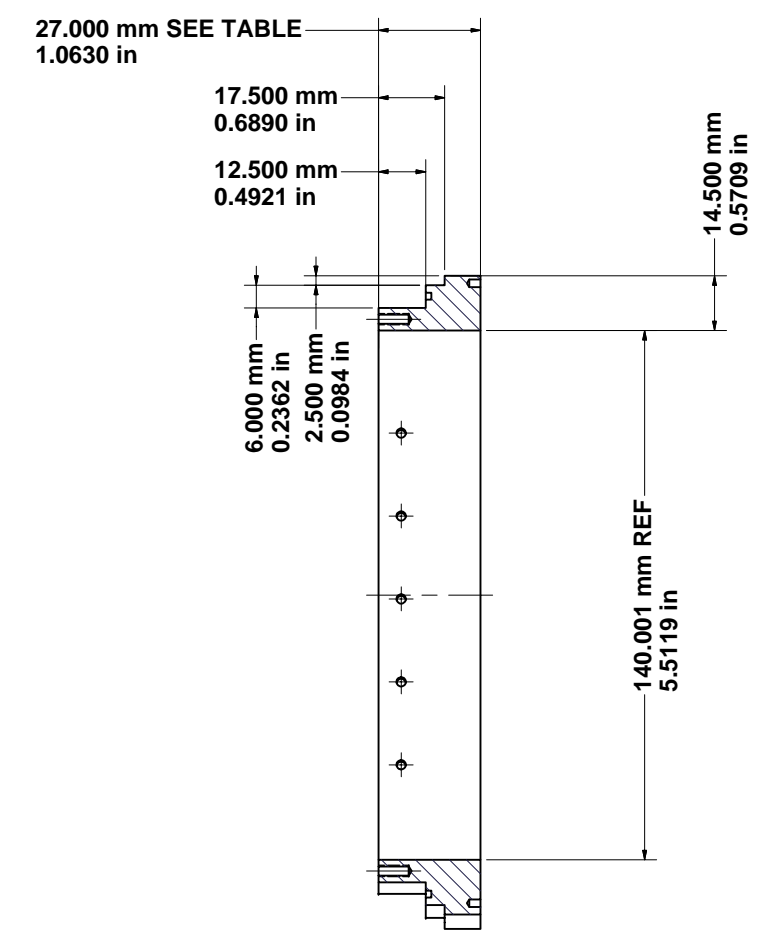
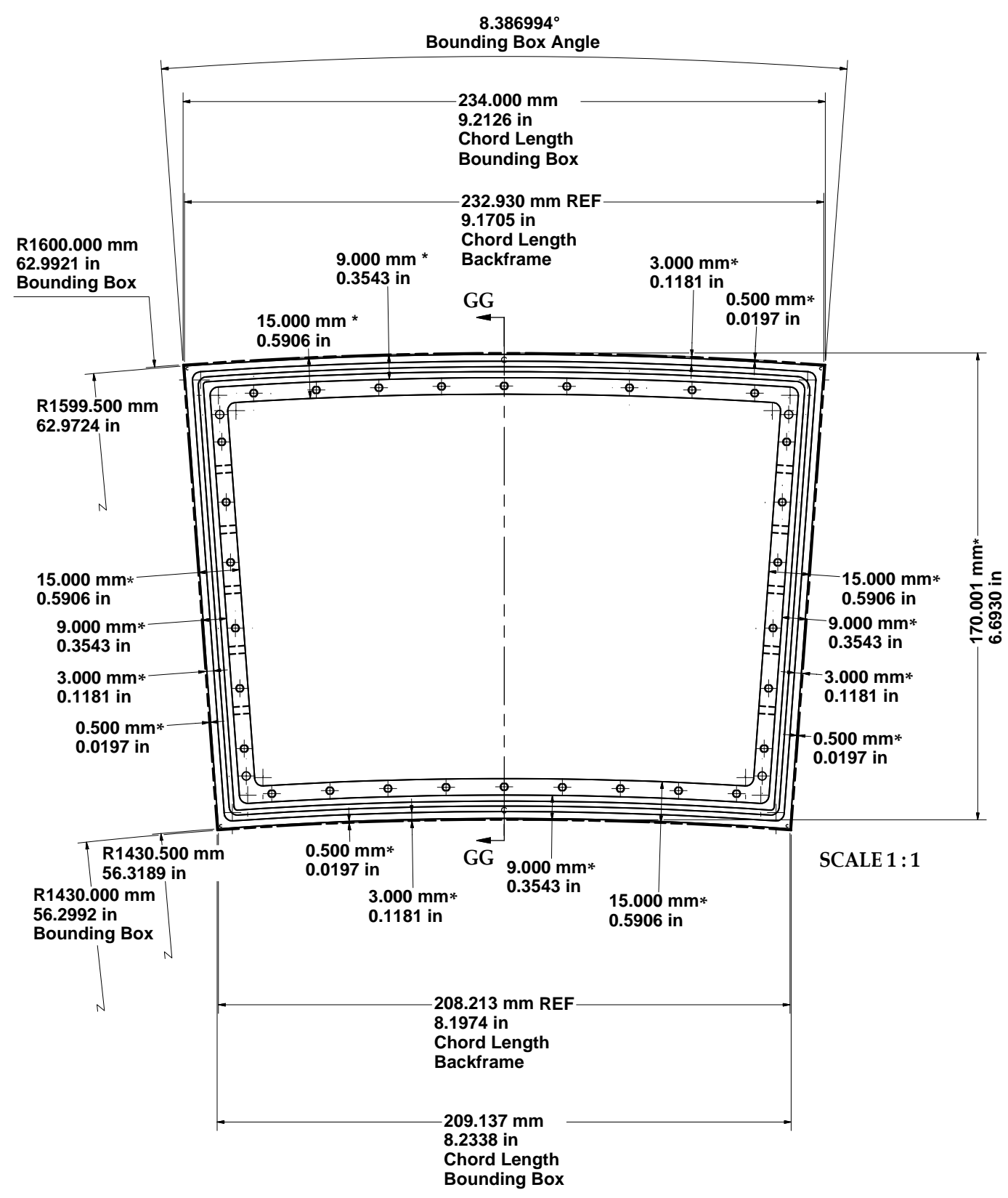
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.	
			QUANTITY					
PRINT DISTR.	6080-104	PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw						
CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓	 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853					
REV.	6080-104 SH. NO. 2 OF 12	LCTPC Large Prototype Backframe						
		CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: NOTED	D	6080-104 SH. NO. 2 OF 12
		APPROVED BY: Peterson						

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

Table		
TYPE	NO# REQ	DIM
3GEMG	?	27.000 mm
Micromegs	?	41.800 mm
Pixel GEM	?	40.500 mm
3GEM No Gate	?	37.000 mm



SCALE 1:1

SECTION GG-GG
SCALE 1:1

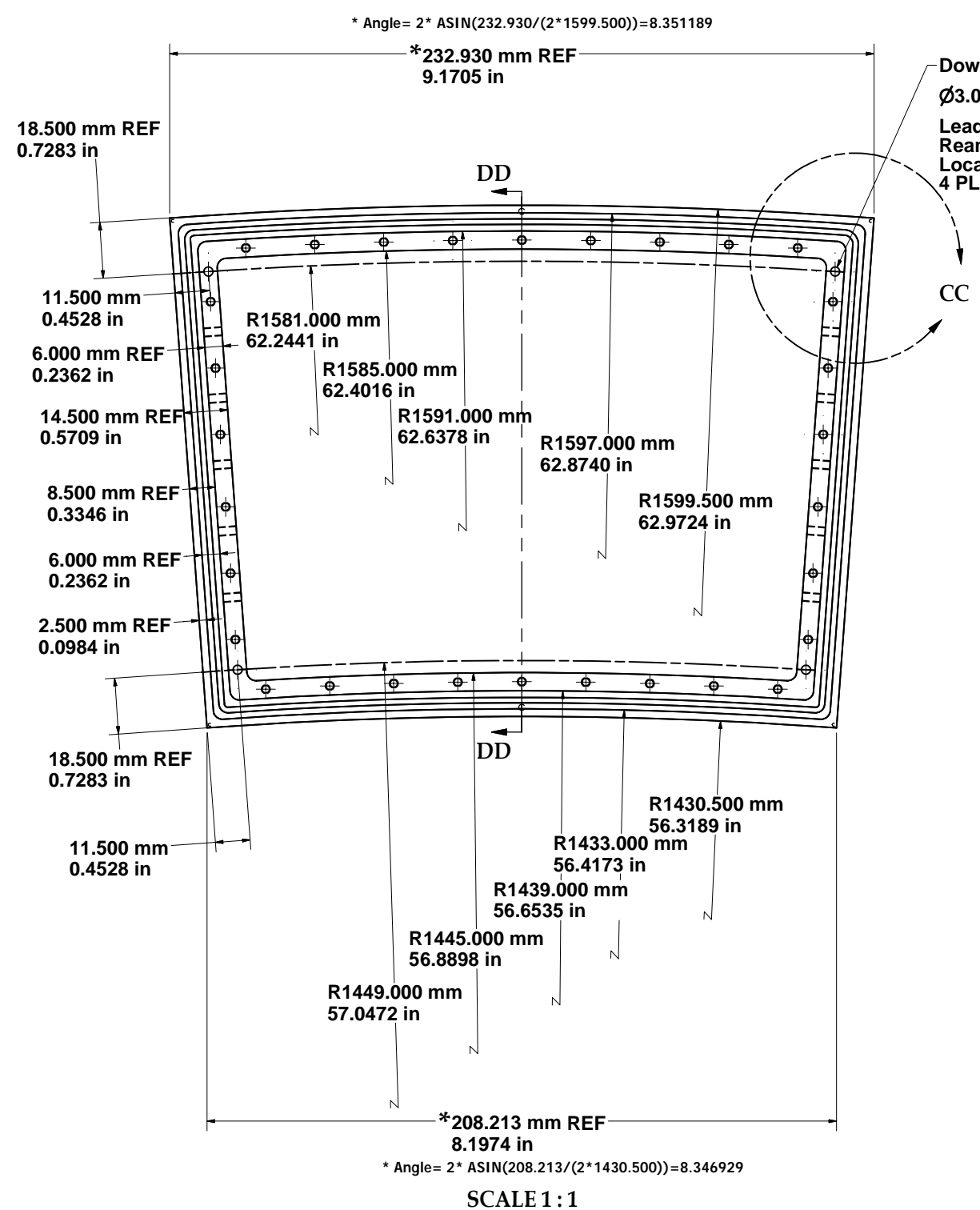
*** These dimensions are from the Bounding Box
This sheet is for Dan Peterson's use only!**

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

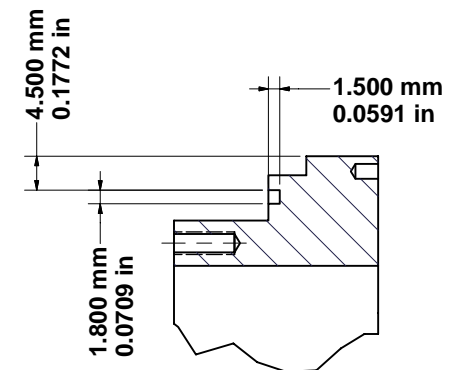
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DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
PRINT DISTR.	6080-104	PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw					
CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ±.010 .000 ±.005 FRACTIONS ±1/64 ANGLES ±0.5° ALL SURFACES ✓					
				CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853			
		LCTPC Large Prototype Backframe					
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: Noted	D	6080-104	REV.
APPROVED BY: Peterson						SH. NO. 3 OF 12	

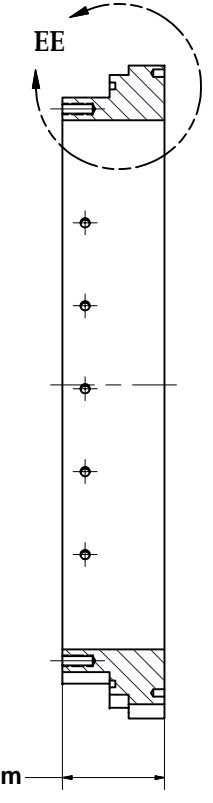
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
E		Defind tol. for dowel holes	1/4/2008	DPP



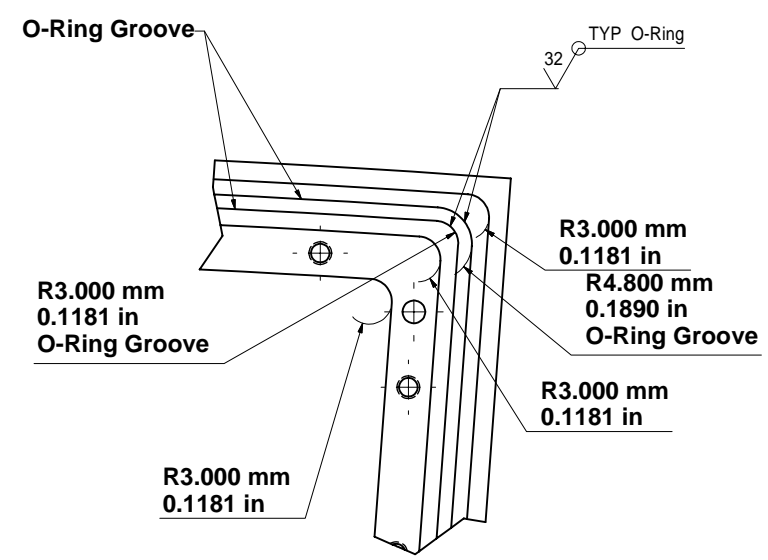
Dowel Hole
 $\varnothing 3.000^{+0.010}_{-0.000}$ mm $\nabla 10$ mm
 Lead hole $\nabla 15$ mm
 Reamed ∇ specified depth
 Location Tolerance: 0.025mm/0.001 inch True Position
 4 PLCs



DETAIL EE
SCALE 2:1



SECTION DD-DD
SCALE 1:1



DETAIL CC
SCALE 2:1
Radii

Dowel holes have location tolerance 0.001 inch true position.
 Surface features have tolerance +/-0.002 inch within a frame defined by the dowel holes.

Certification measurements for these dowel holes are shown on sheet 9.

Certification measurements for surface features are shown on sheets 10, 11, & 12.

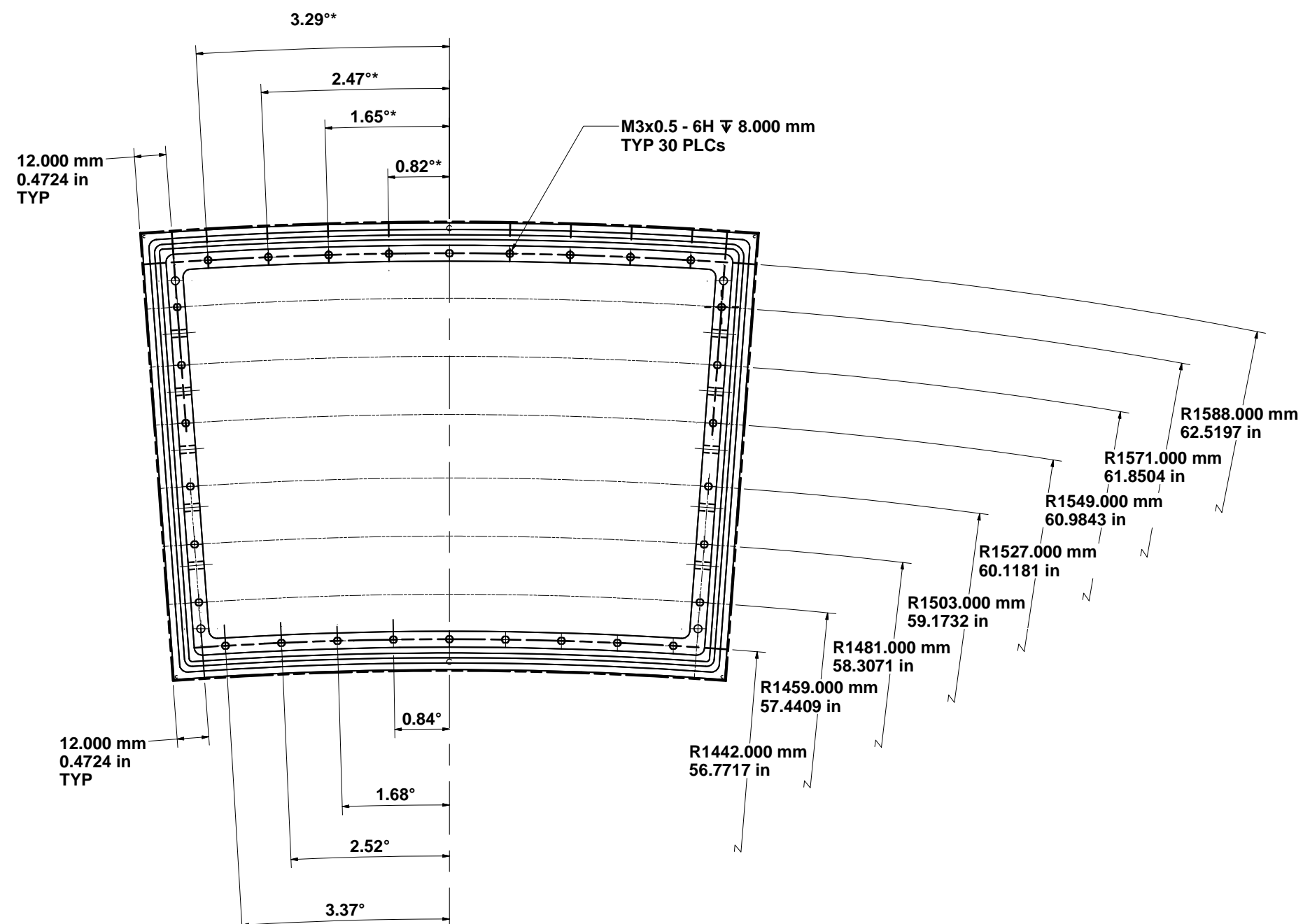
This sheet shows dowel hole and surface specifications.

FOR MACHINING LUBRICANT USE ONLY
 ALKALINE DETERGENT LUBRICANT CIMSTAR 40
 OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

REV	PRINT DISTR.	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
					QUANTITY				
D									
PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw									
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ±.010 .000 ±.005 FRACTIONS ±1/64 ANGLES ±0.5° ALL SURFACES ∇					CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853				
LCTPC Large Prototype Backframe									
6080-104	CR-1								
E									
		CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: Noted	D	6080-104 SH. NO. 4 OF 12	REV. E

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



* Mirror Angles on Centerline

SCALE 1:1

Threaded holes have tolerance +/- 0.010 inch.

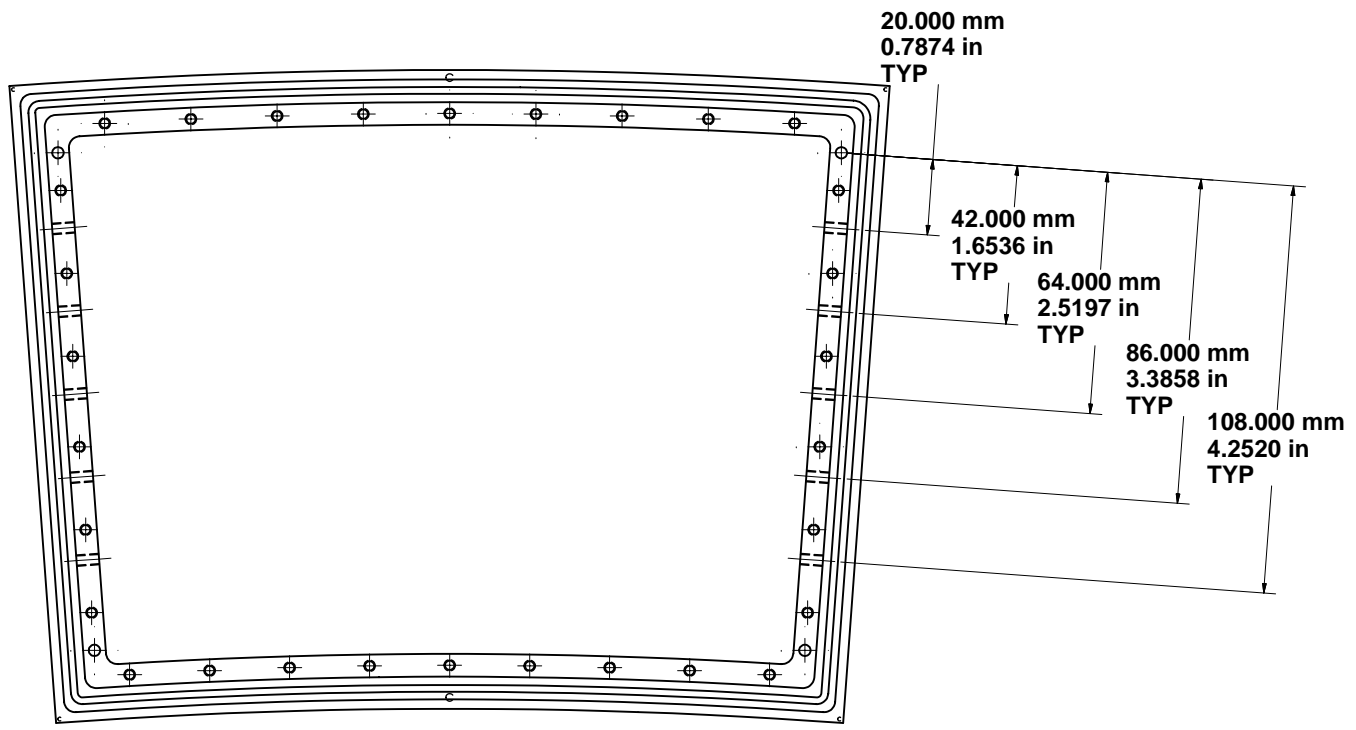
This sheet shows the threaded holes located in the x-y plane. These holes may be made in process step 5 without pre-drilling in previous steps.

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
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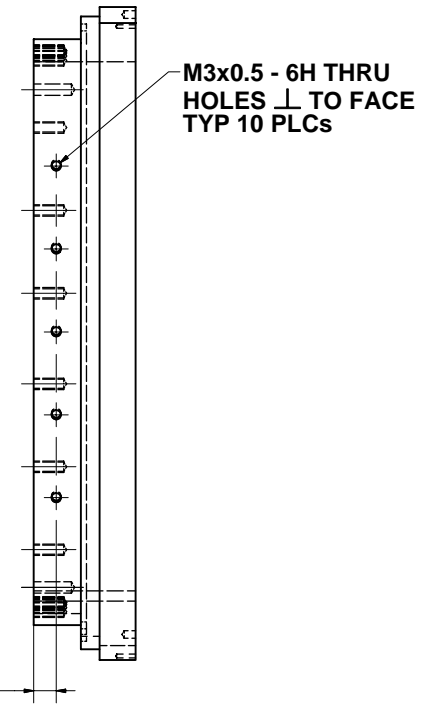
TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

D	PRINT DISTR.	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
	CR-1	6080-104	6080-104	PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw	QUANTITY				
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES				CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853					
LCTPC Large Prototype Backframe		CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: Noted	D	6080-104	REV.
		APPROVED BY: Peterson						SH. NO. 5 OF 12	

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added 10 3mm Threaded Holes Added Sht 6	11/9/07	TOC



SCALE 1:1



SCALE 1:1

Threaded holes have tolerance +/- 0.010 inch.

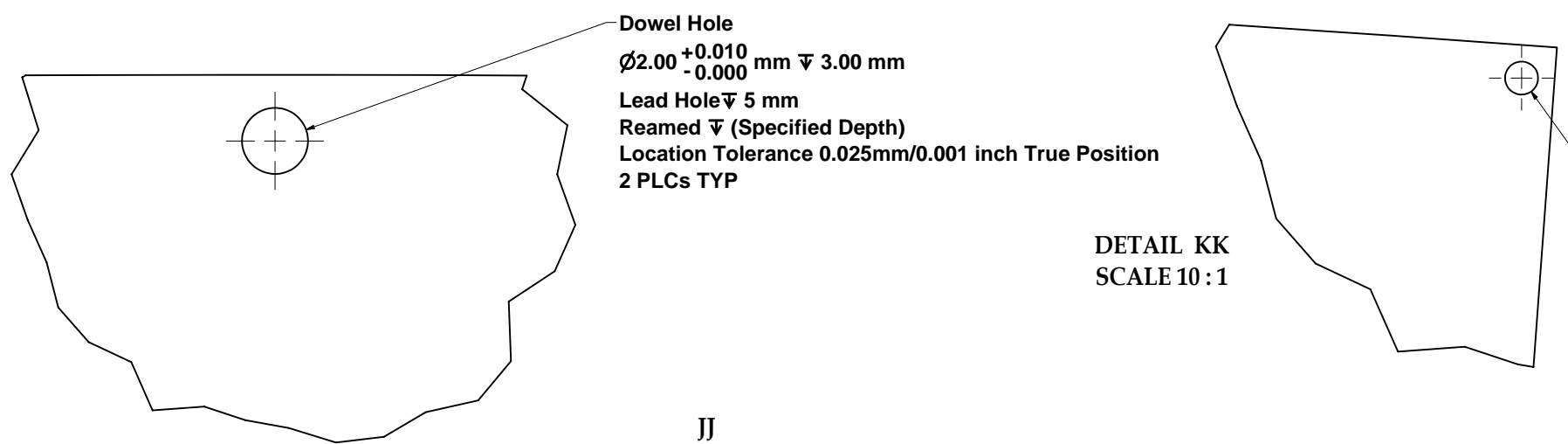
This sheet shows the threaded holes located in the sides.
 These holes may be made in process step 5 without pre-drilling in previous steps.

FOR MACHINING LUBRICANT USE ONLY
 ALKALINE DETERGENT LUBRICANT CIMSTAR 40
 OR EQUIVALENT APPROVED BY CORNELL LEPP

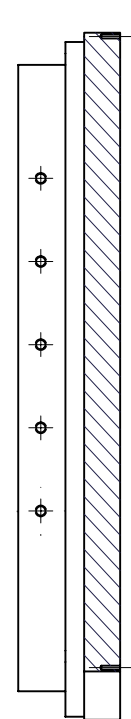
TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
PRINT DISTR.		PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw					
CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ±.010 .000 ±.005 FRACTIONS ±1/64 ANGLES ±0.5° ALL SURFACES					
				CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853			
		LCTPC Large Prototype Backframe					
REV. A	6080-104 SH. NO. 6 OF 12	CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: Noted	REV. A

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
C		Added 4 Dowel holes +New Sht7	11/28/07	TIO
E		Defind tol.for dowel holes	1/4/2008	DPP
F	C-5/D-5	Added 2 2mm Dowel Holes on the vertical center axis	4/18/08	TIO

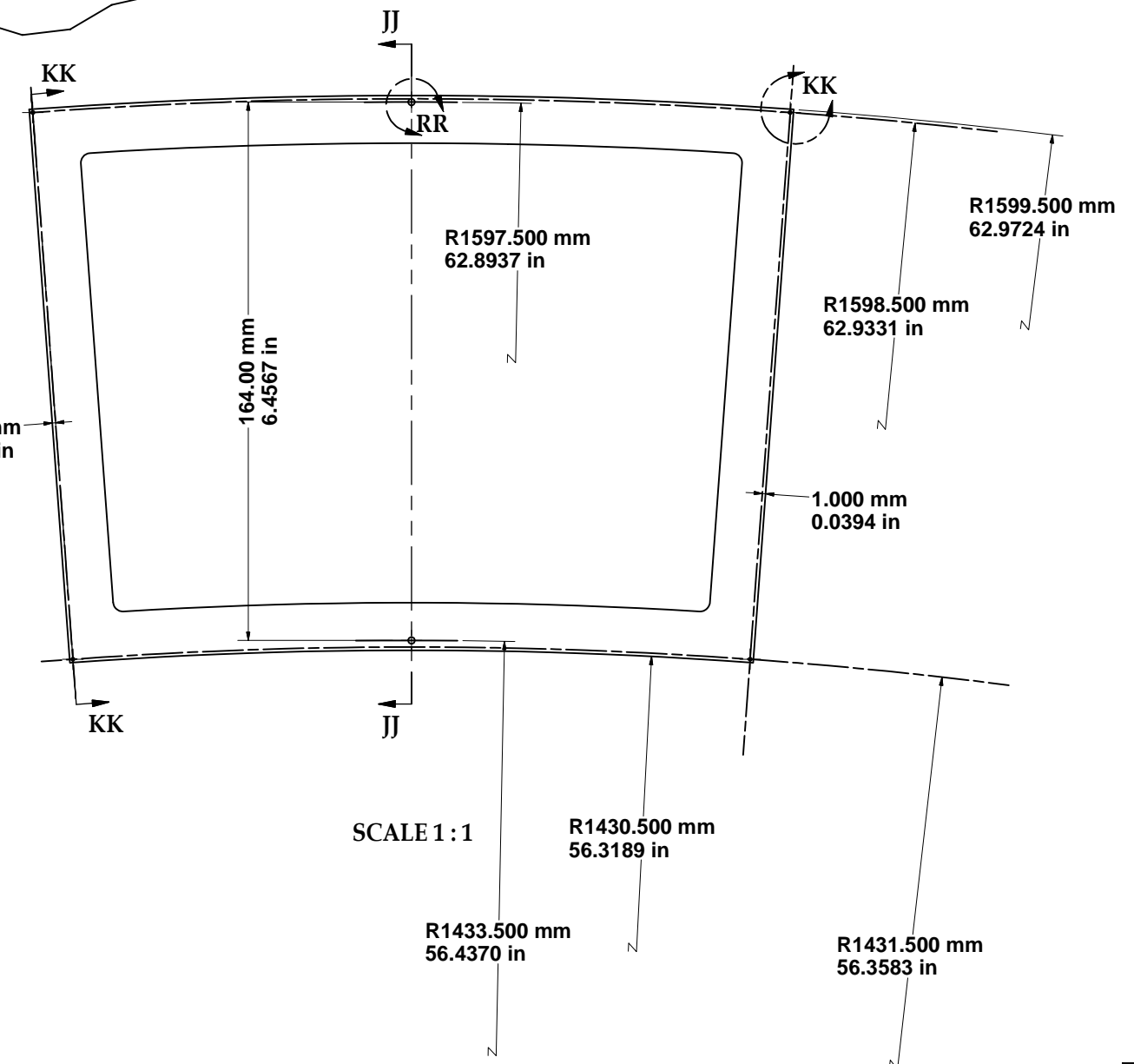


DETAIL KK
SCALE 10 : 1

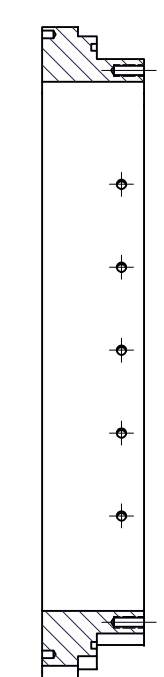


SECTION KK-KK
SCALE 1 : 1

DETAIL RR
SCALE 10 : 1



SCALE 1 : 1



SECTION JJ-JJ
SCALE 1 : 1

Dowel holes have location tolerance 0.001 inch true position.

Certification measurements for these dowels are shown on sheet 12.

This sheet shows the dowel holes for locating the pad boards.
These holes may be made in process step 5 without pre-drilling in previous steps.

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
PRINT DISTR. PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw							
CR-1 UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓			CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853				
LCTPC Large Prototype Backframe							
CHECKED BY: Peterson APPROVED BY: Peterson		DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: Noted	6080-104 SH. NO. 7 OF 12	REV. F

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

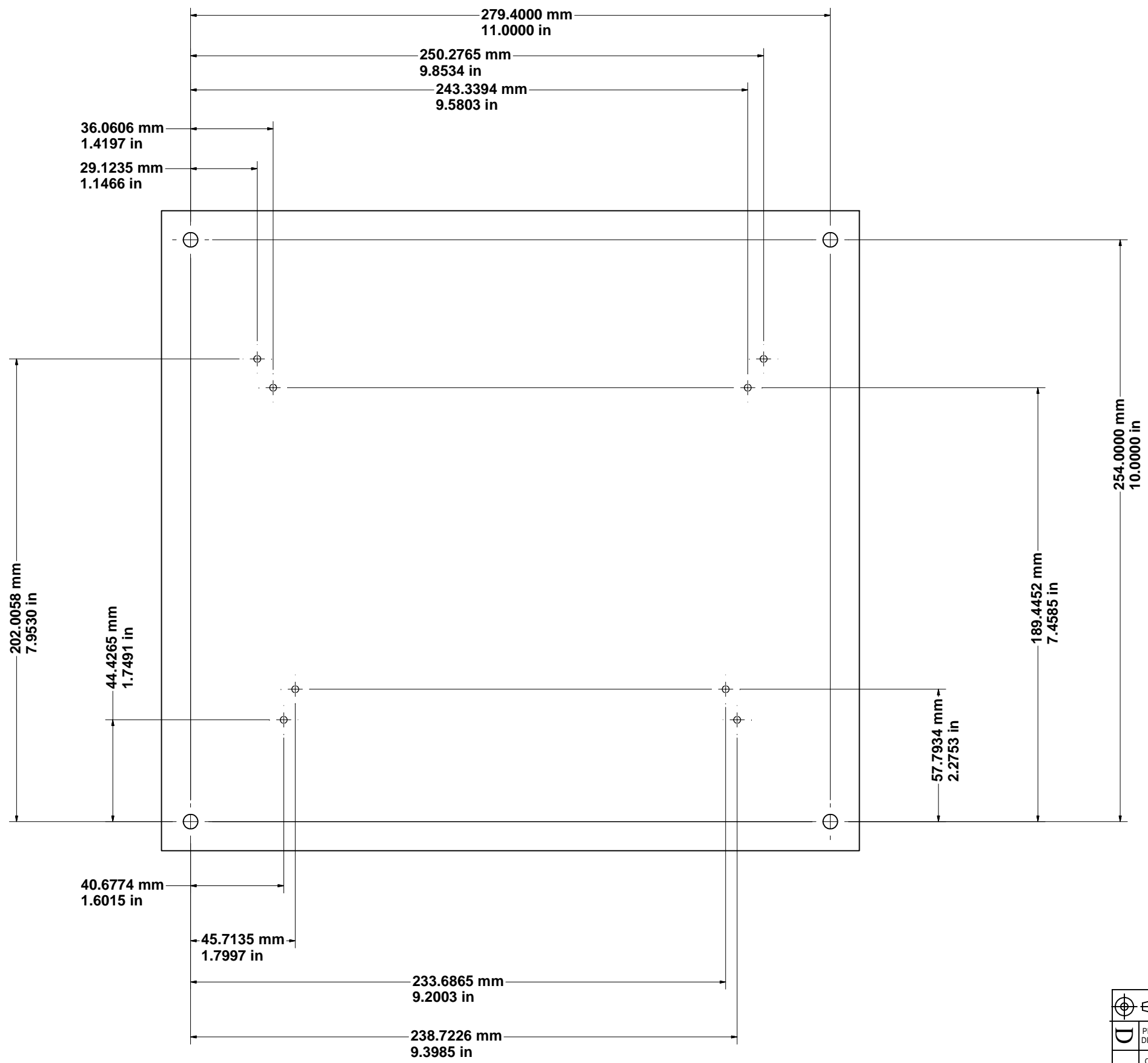


TABLE OF HOLE MEASUREMENTS
 (Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	MEASURE X	MEASURE Y
1	0.0000	0.0000
2	11.0000	0.0000
3	0.0000	10.0000
4	11.0000	10.0000
5	1.6015	1.7491
6	9.3985	1.7491
7	1.1466	7.9530
8	9.8534	7.9530
9	1.7997	2.2753
10	9.2003	2.2753
11	1.4197	7.4585
12	9.5803	7.4585

TABLE OF SURFACE MEASUREMENTS
 (Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	SET X	SET Y
1	0.4000	0.4000
2	10.6000	0.4000
3	0.4000	9.6000
4	10.6000	9.6000
5	1.9997	2.4753
6	9.0003	2.4753
7	1.6197	7.2585
8	9.3803	7.2585

Part # 6080-123 Assembly Jig
 certification measurements

SCALE 1:1

 PRINT DISTR.	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
	PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw			QUANTITY				
6080-104 SH. NO. 8 OF 12	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES <input checked="" type="checkbox"/>		 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853				
	3GEMG Backframe & Assembly Jig							
	CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: D	6080-104		REV.
	APPROVED BY: Peterson					SH. NO. 8 OF 12		

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
B		Added Sheet 7 certification measurements	11/15/07	TIO
D		Sht. 7 is now sht 8	11/28/07	TIO

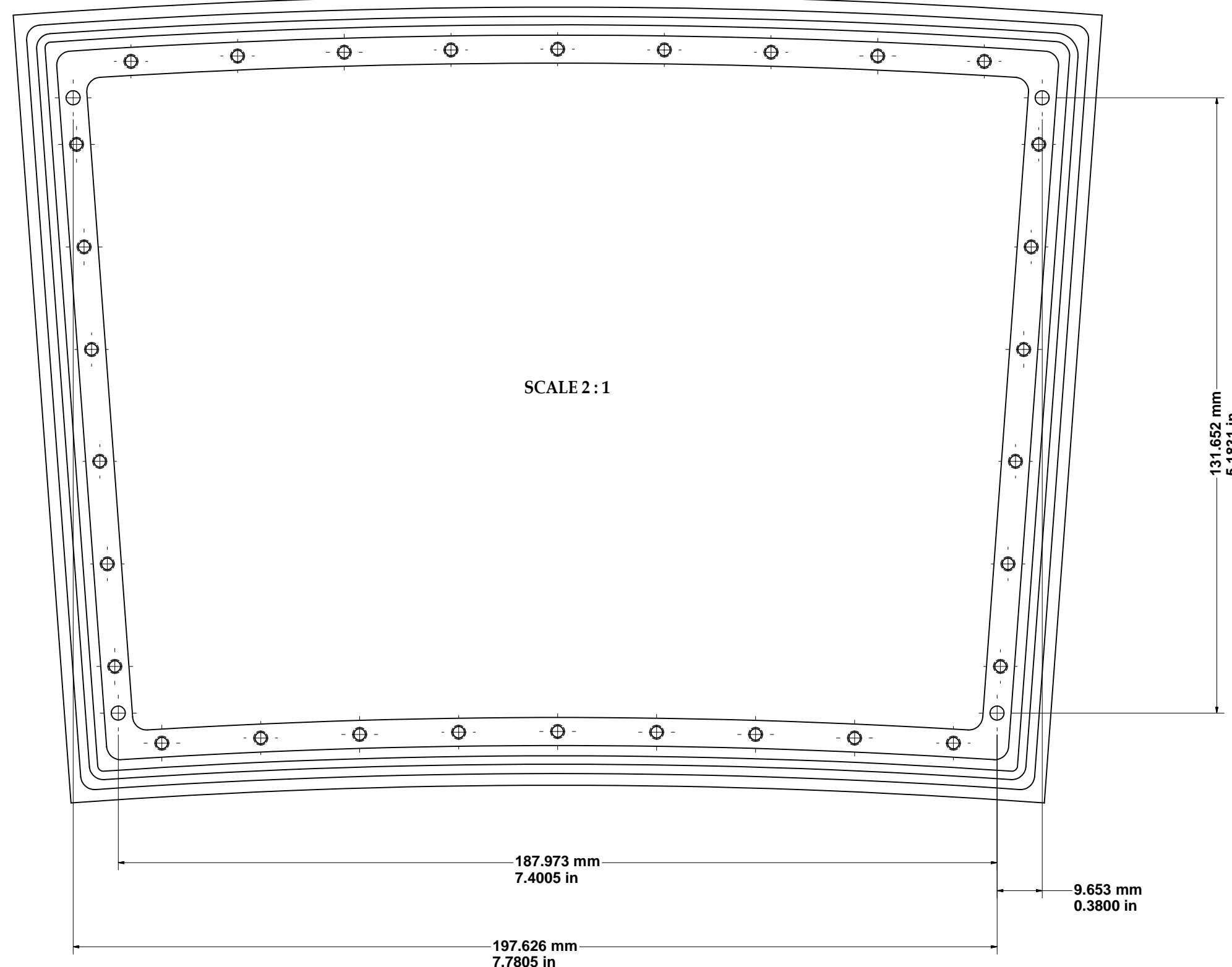


TABLE OF HOLE MEASUREMENTS
(Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	MEASURE X	MEASURE Y
1	0.0000	0.0000
2	-7.4005	0.0000
3	0.3800	5.1831
4	-7.7805	5.1831

TABLE OF SURFACE MEASUREMENTS
(Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	SET X	SET Y
1	0.0200	0.2000
2	-7.4205	0.2000
3	0.3600	4.9831
4	-7.7605	4.9831

This sheet shows certification measurements for the dowel holes and heights.

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
PRINT DISTR.		PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw					
CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓					
				CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853			
		LCTPC Large Prototype Backframe					
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: Noted	D	6080-104	REV. D
APPROVED BY: Peterson						SH. NO. 9 OF 12	

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

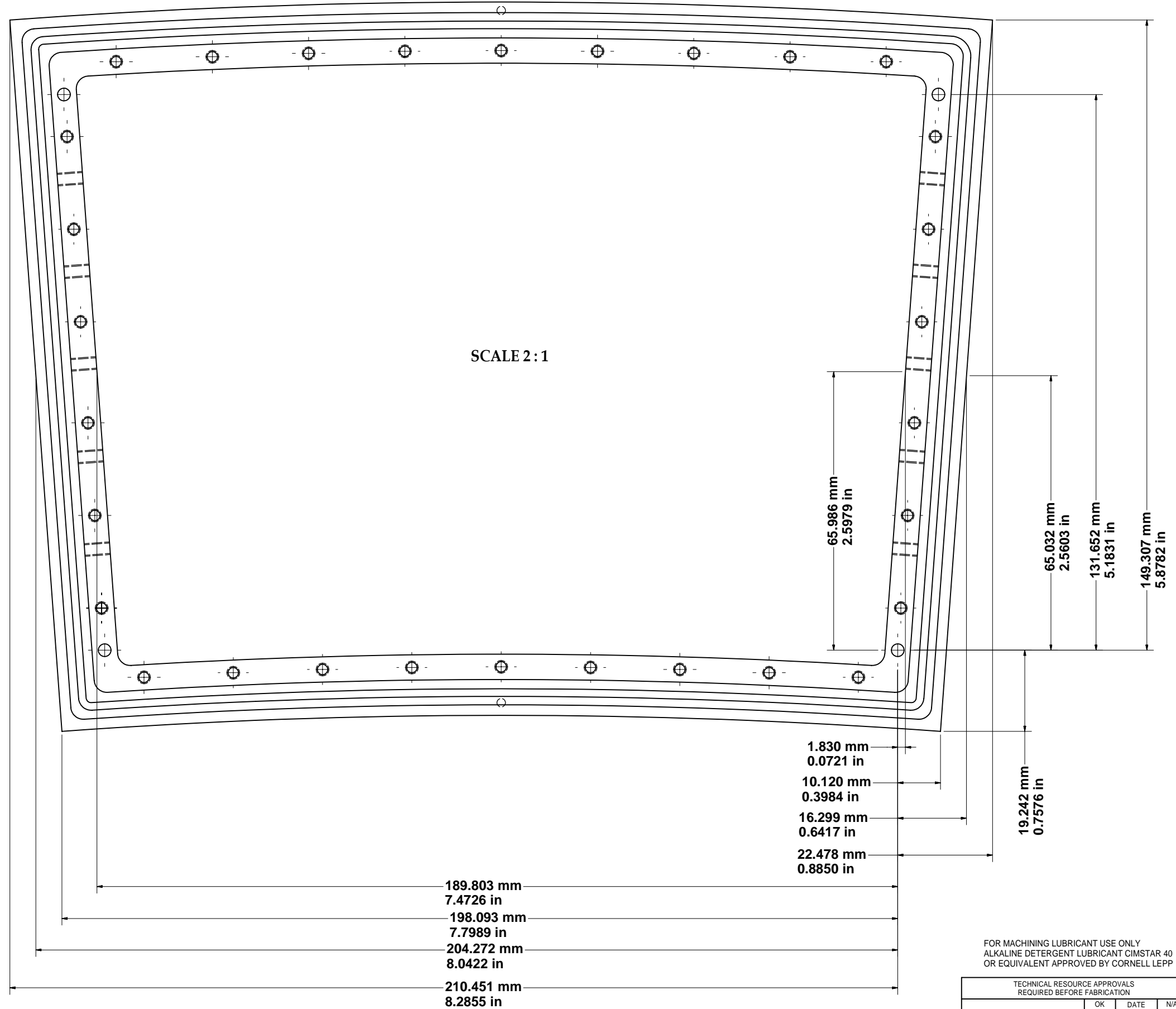


TABLE OF SURFACE MEASUREMENTS
 (Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	SET Y	MEASURE X
1	2.5979	0.0721
2	0.0000	0.4540
3	2.5603	0.6417
4	5.1831	0.8340
5	2.5979	-7.4726
6	0.0000	-7.8545
7	2.5603	-8.0422
8	5.1831	-8.2345

- 1.830 mm
0.0721 in
- 10.120 mm
0.3984 in
- 16.299 mm
0.6417 in
- 22.478 mm
0.8850 in
- 19.242 mm
0.7576 in

- 189.803 mm
7.4726 in
- 198.093 mm
7.7989 in
- 204.272 mm
8.0422 in
- 210.451 mm
8.2855 in

FOR MACHINING LUBRICANT USE ONLY
 ALKALINE DETERGENT LUBRICANT CIMSTAR 40
 OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.	
PRINT DISTR.	6080-104	PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw						
CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓					CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853	
REV.	6080-104 SH. NO. 10 OF 12		LCTPC Large Prototype Backframe					
		CHECKED BY: Peterson APPROVED BY: Peterson	DRAWN BY MDS	DRAWN FOR Peterson	DATE 10/19/2007	SCALE Noted	D 6080-104 SH. NO. 10 OF 12	

This sheet shows certification measurements for surfaces, in the "x" dimension.

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

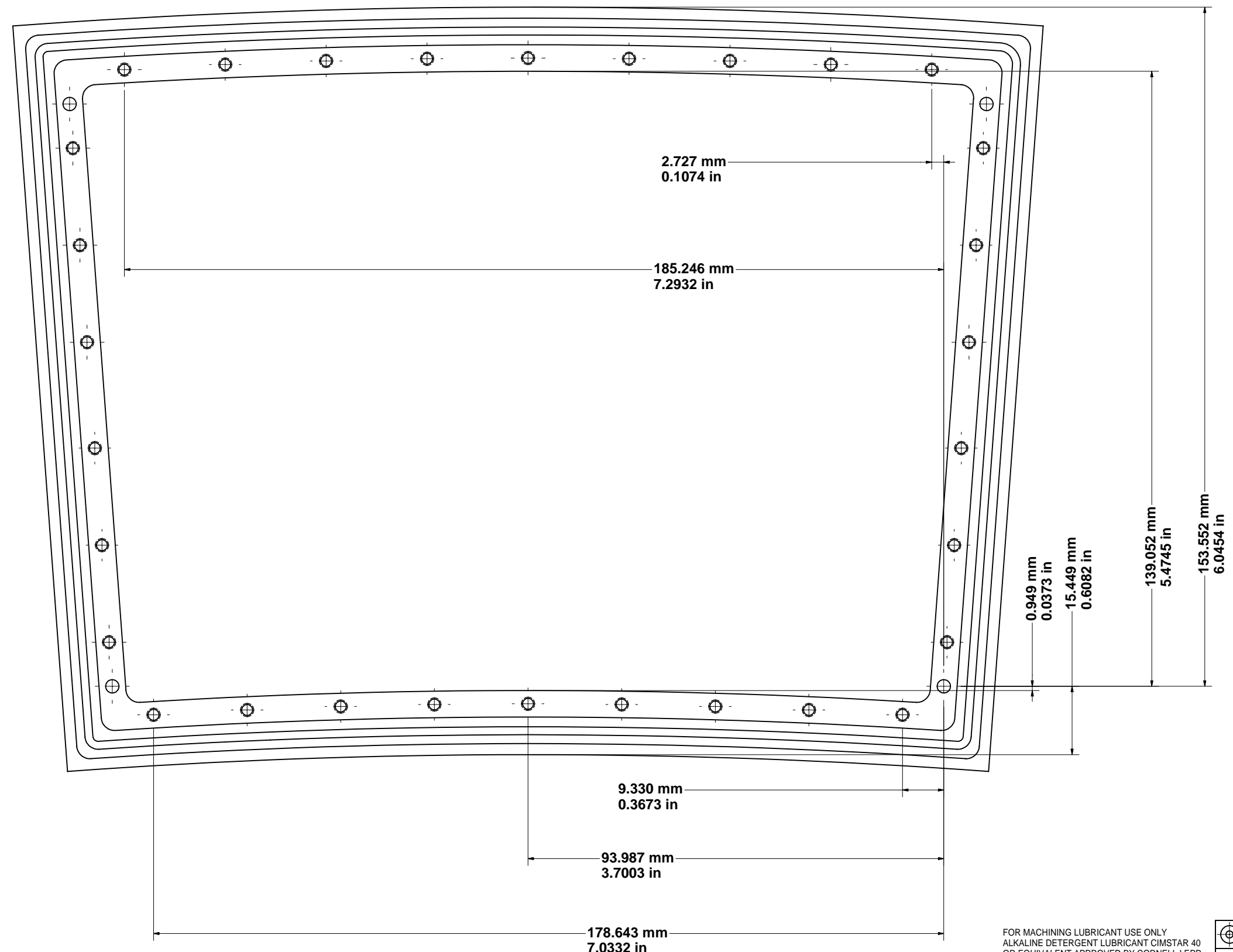


TABLE OF SURFACE MEASUREMENTS
 (Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	SET X	MEASURE Y	
1	-3.7003	-0.0373	
2	-3.7003	-0.6082	
3	-3.7003	5.4745	
4	-3.7003	6.0454	
5	-0.3673	-0.7069	
6	-7.0332	-0.7069	
7	-0.1074	5.9427	
8	-7.2932	5.9427	

SCALE 2:1

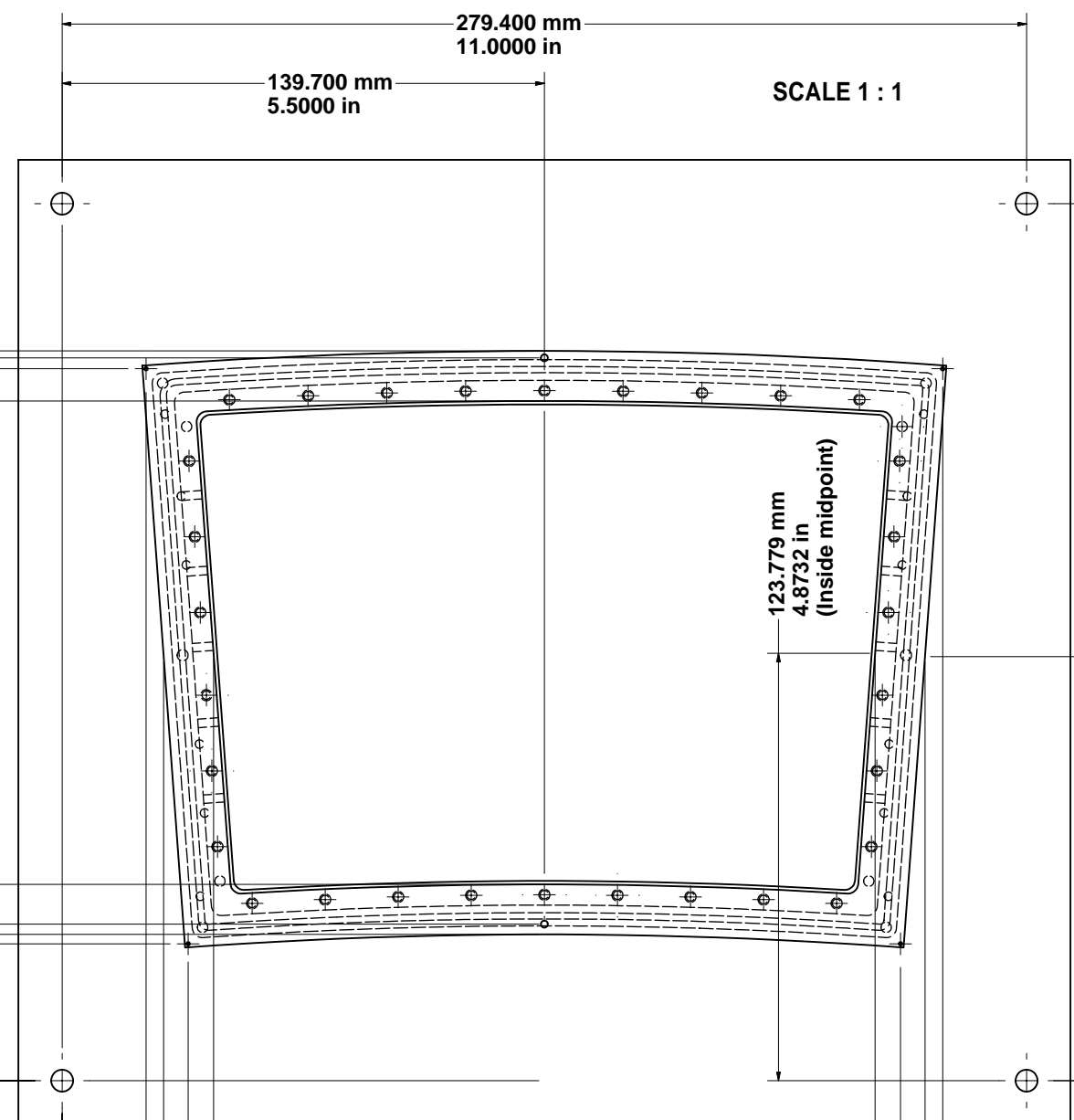
FOR MACHINING LUBRICANT USE ONLY
 ALKALINE DETERGENT LUBRICANT CIMSTAR 40
 OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
PRINT DISTR.		PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw					
CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ±.010 .000 ±.005 FRACTIONS ±1/64 ANGLES ±0.5° ALL SURFACES ✓					
				CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853			
		LCTPC Large Prototype Backframe					
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: D	6080-104	REV.	
APPROVED BY: Peterson					SH. NO. 11 OF 12		

This sheet shows certification measurements for surfaces, in the "y" dimension.

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
E		Added sheet 9 with 6080-123 Jig view	11/28/07	TIO
F	C-6/D-6	Added 2 2mm Dowel Holes on the vertical center axis	4/18/08	TIO



SCALE 1 : 1

TABLE OF HOLE MEASUREMENTS

(Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	MEASURE X	MEASURE Y
1	0.0000	0.0000
2	11.0000	0.0000
3	0.0000	10.0000
4	11.0000	10.0000
5	1.4377	1.5599
6	9.5623	1.5599
7	0.9569	8.1171
8	10.0431	8.1171
9	5.5000	1.7852
10	5.5000	8.2420

TABLE OF SURFACE MEASUREMENTS, "y" dimension

(Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	SET X	MEASURE Y
1	5.5000	1.6671
2	5.5000	2.2380
3	5.5000	7.7498
4	5.5000	8.3207

TABLE OF SURFACE MEASUREMENTS, "x" dimension

(Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	SET Y	MEASURE X
1	4.8357	1.1580
2	4.8732	1.7277
3	4.8732	9.2723
4	4.8357	9.8420

TABLE OF SURFACE MEASUREMENTS

(Values are in inches)
CAUTION: Values listed in the table are entered manually; They are not driven by the model.

NUMBER	SET X	SET Y
1	0.4000	0.4000
2	10.6000	0.4000
3	0.4000	9.6000
4	10.6000	9.6000
5	1.6377	1.7599
6	9.3623	1.7599
7	1.1569	7.9171
8	9.8431	7.9171

211.346 mm
8.3207 in
(Top outside at horizontal midpoint)

209.346 mm
8.2420 in
(Center-Top Dowel)

206.175 mm
8.1171 in
(top dowels, right & left)

196.846 mm
7.7498 in
(Top inside at horizontal midpoint)

56.845 mm
2.2380 in
(Bottom inside at horizontal midpoint)

42.345 mm
1.6671 in
(Bottom outside at horizontal midpoint)

39.621 mm
1.5599 in
(Bottom dowels, right & left)

45.345 mm
1.7852 in
(Center-Bottom Dowel)

24.306 mm
0.9569 in
(Top left dowel)

29.414 mm
1.1580 in
(Left outside at vertical midpoint)

36.518 mm
1.4377 in
(Bottom left dowel)

43.883 mm
1.7277 in
(Left inside at vertical midpoint)

235.517 mm
9.2723 in
(Right inside at vertical midpoint)

242.882 mm
9.5623 in
(Bottom right dowel)

249.986 mm
9.8420 in
(Right outside at vertical midpoint)

255.094 mm
10.0431 in
(Top right dowel)

This sheet shows certification measurements for the small dowel holes and surfaces with the part mounted in the 6080-123 assembly jig.

	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.		
	PRINT DISTR.	PLOT DATE: 4/18/2008 CAD FILE NAME: 6080-104 3GEMG backframe.idw								
6080-104 SH. NO. 12 OF 12	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853						
	REV.	3GEMG Backframe & Assembly Jig		CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 10/19/2007	SCALE: Noted	D	6080-104 SH. NO. 12 OF 12