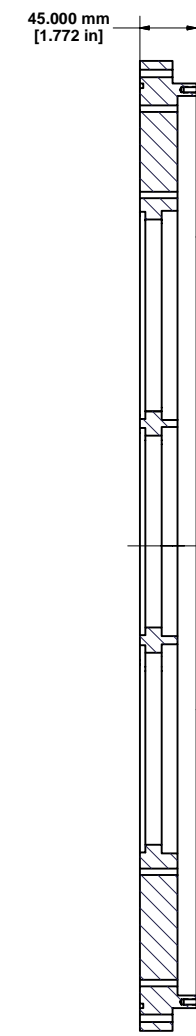
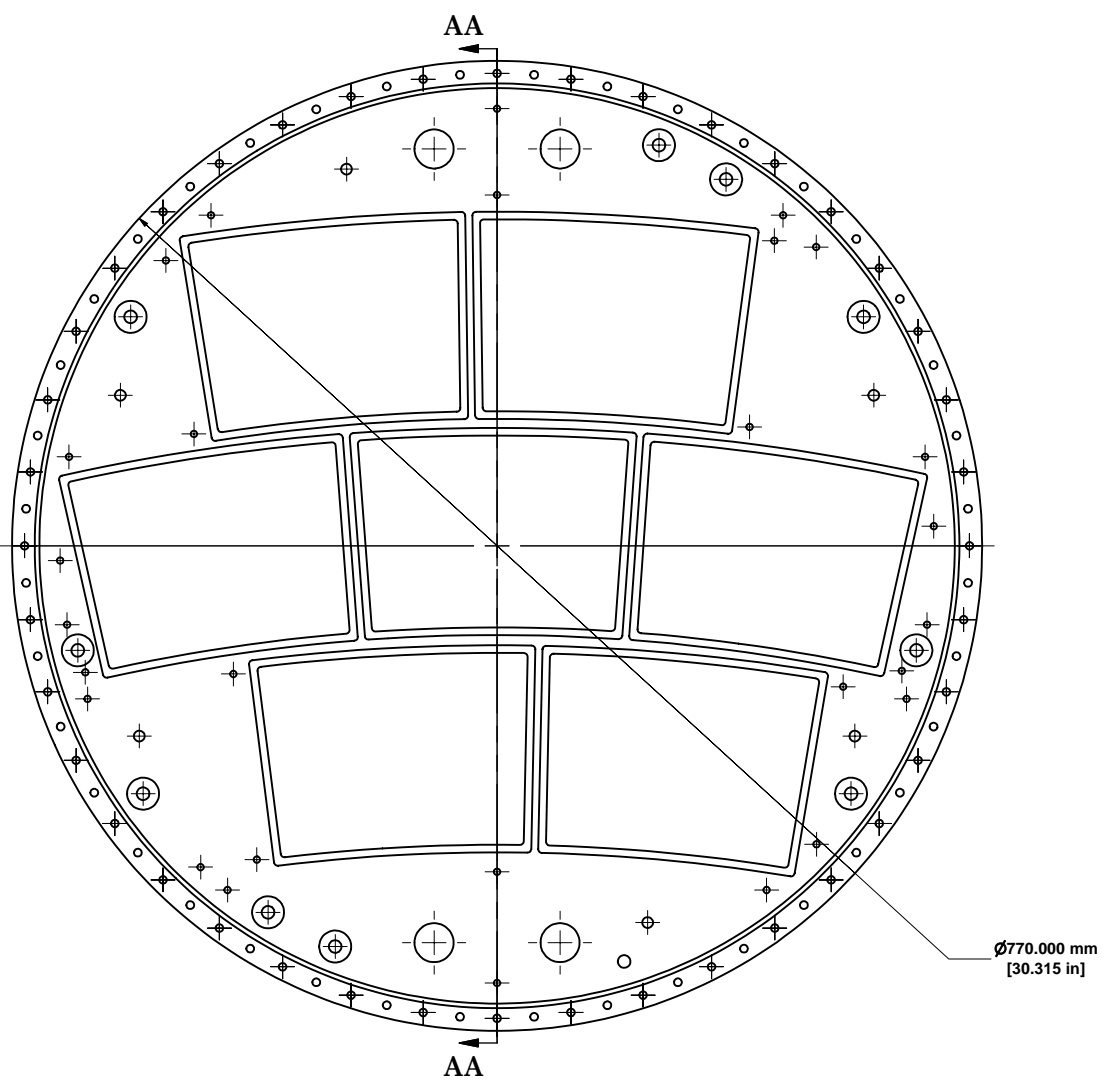
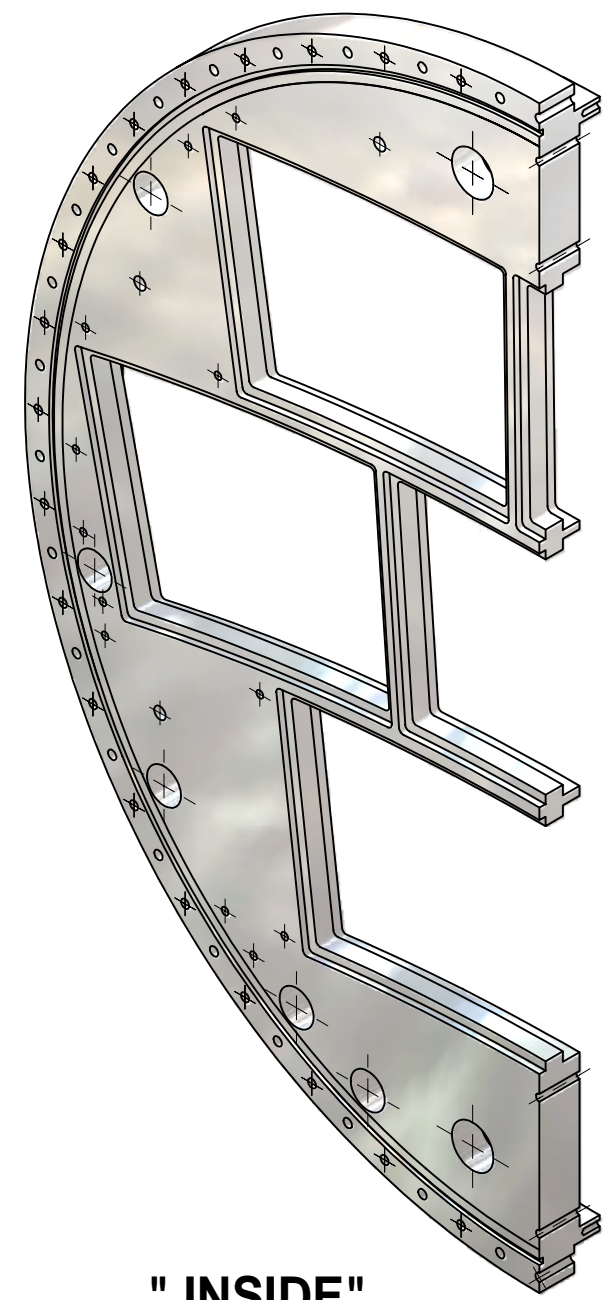


REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Opened up bounding box counterbore on "inside" to provide 0.2 mm clearance to part 6080-104.	7/10/08	DPP



SECTION AA-AA
SCALE 1/3



" INSIDE"

"OUTSIDE"

Matl: Alum. 6061 T651 "INSIDE"

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

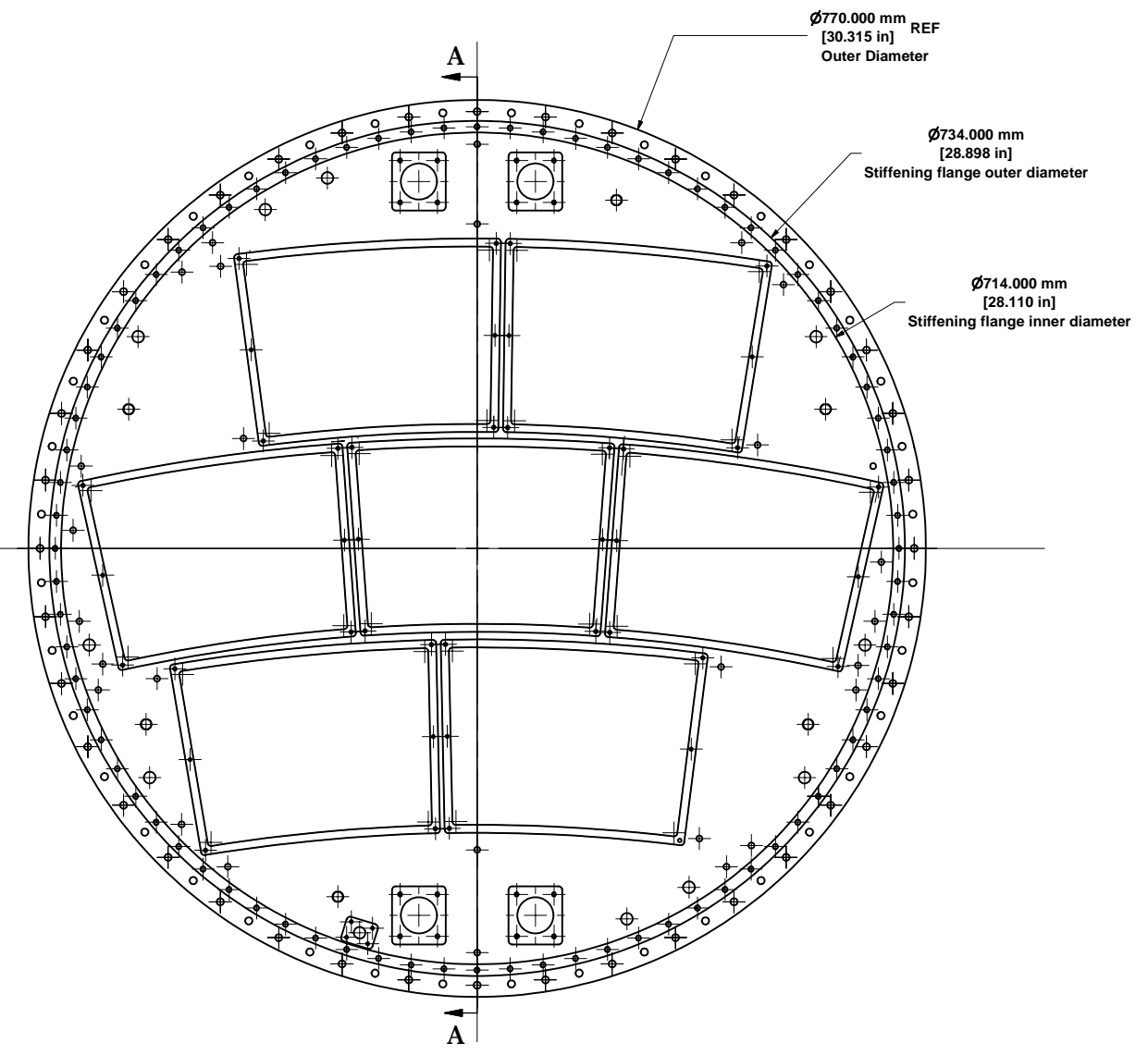
FOR MACHINING LUBRICANT USE ONLY
 ALKALINE DETERGENT LUBRICANT CIMSTAR 40
 OR EQUIVALENT APPROVED BY CORNELL LEPP

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):			

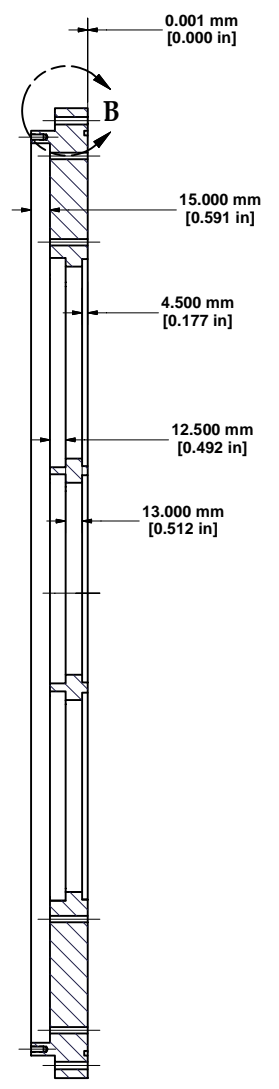
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
D	6080-102	LCTPC Large Prototype Endplate					

PRINT DATE: 7/10/2008	CAD FILE NAME: 6080-102 Endplate.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	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102	REV. A
APPROVED BY: Peterson						SH. NO. 1 OF 16	

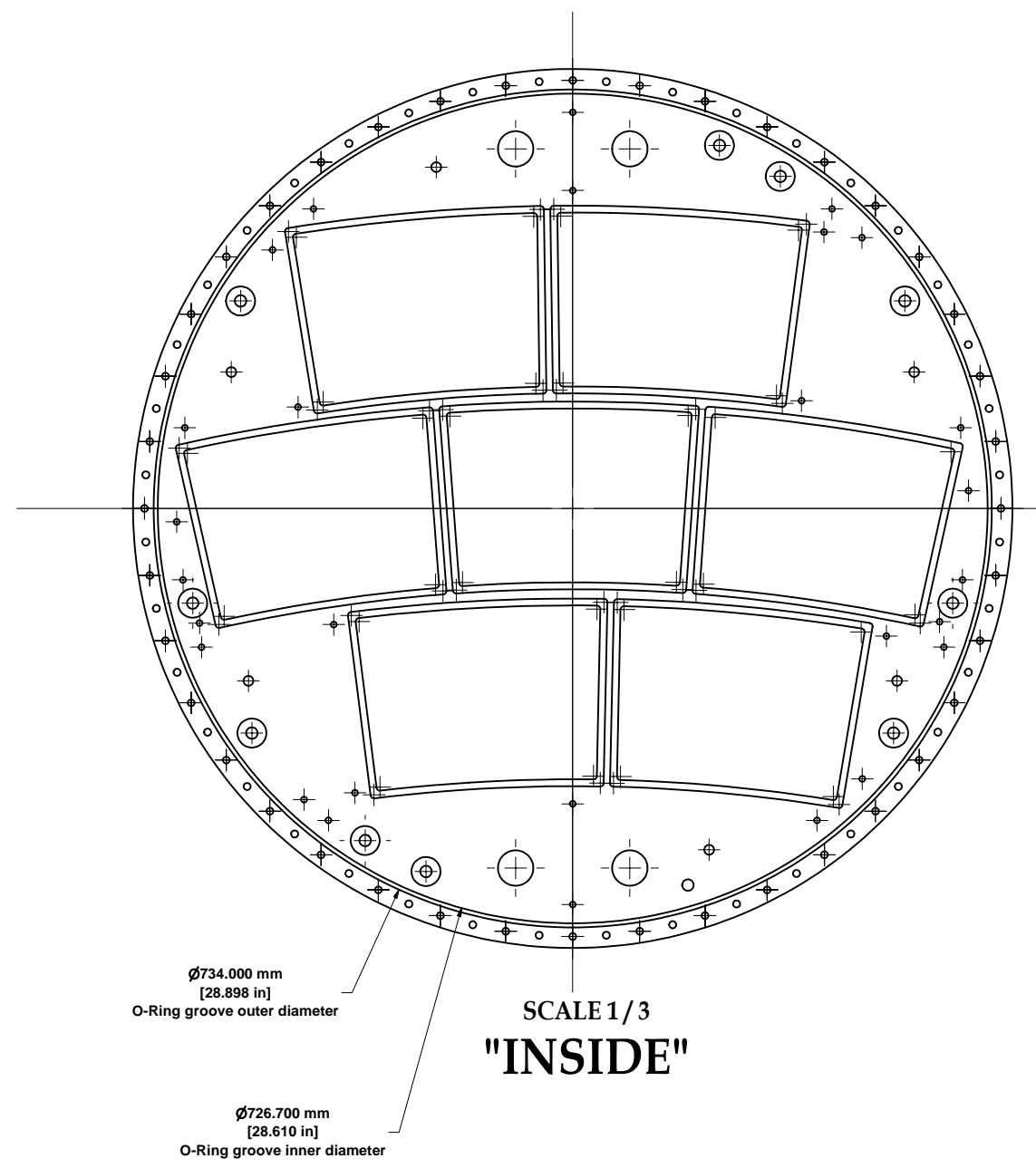
REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



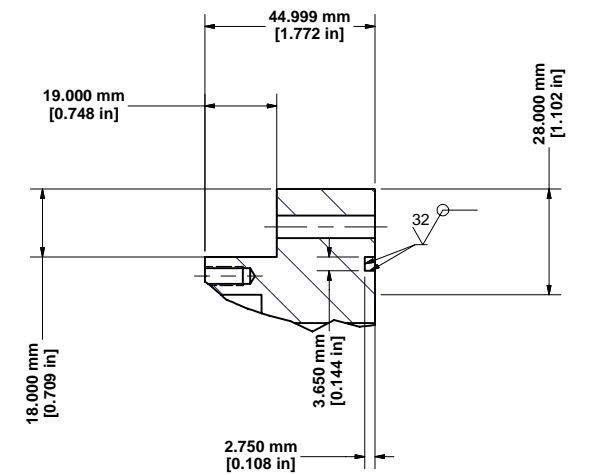
SCALE 1/3
"OUTSIDE"



SECTION A-A
SCALE 1/3
"Profile"



SCALE 1/3
"INSIDE"



DETAIL B
SCALE 1:1

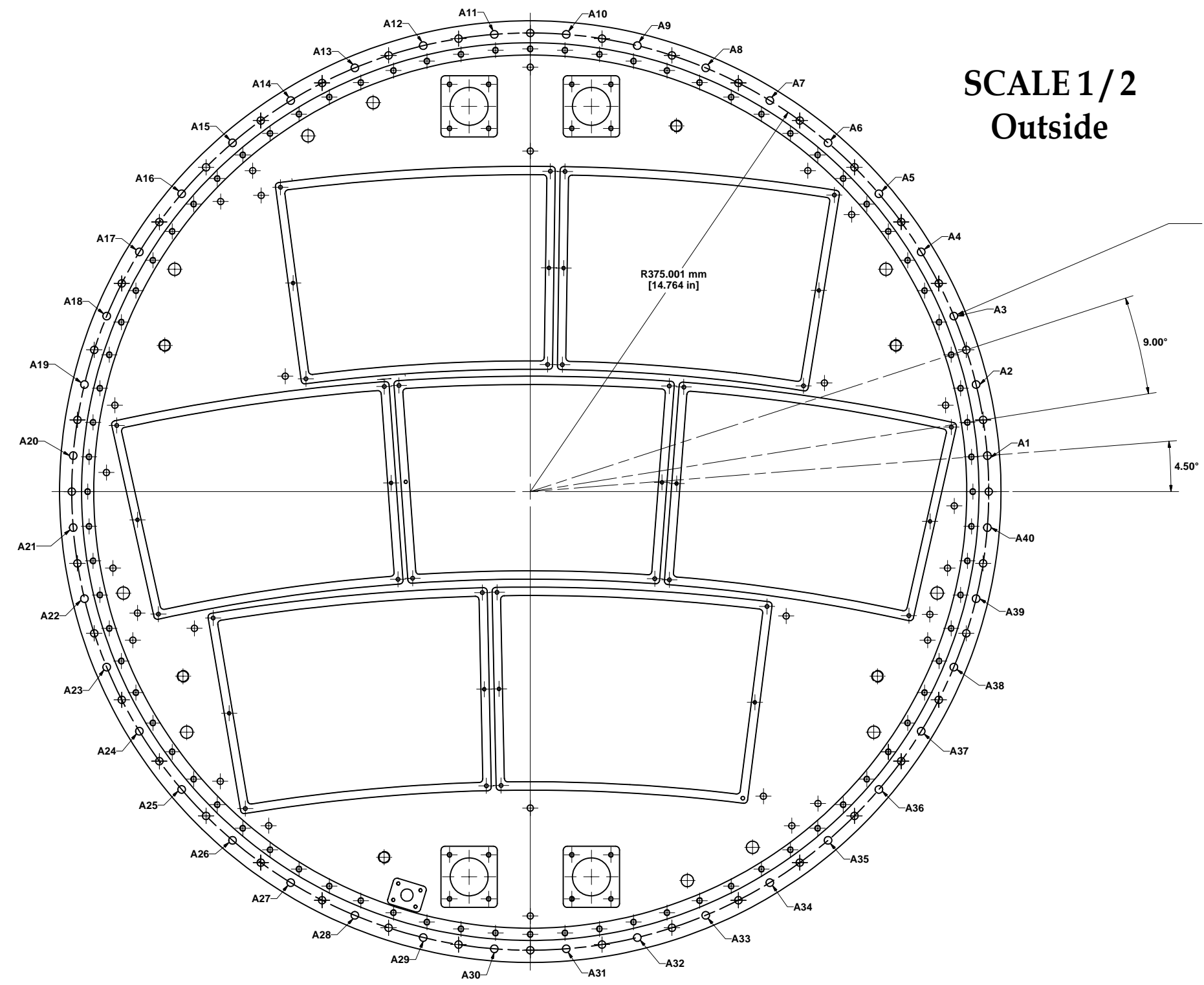
This sheet shows profile dimensions.
"Outside", "Inside", and "profile" views are shown.

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.	6080-102	PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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	
LCTPC Large Prototype Endplate							
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102	REV.
APPROVED BY: Peterson						SH. NO. 2 OF 16	

SYM.		ZONE		REVISIONS		DATE	APP.



Clearance holes 'A' have tolerance 0.010 inch true position within a frame defined by hole location B1, B11, B21, & B31 (See sheet 14).

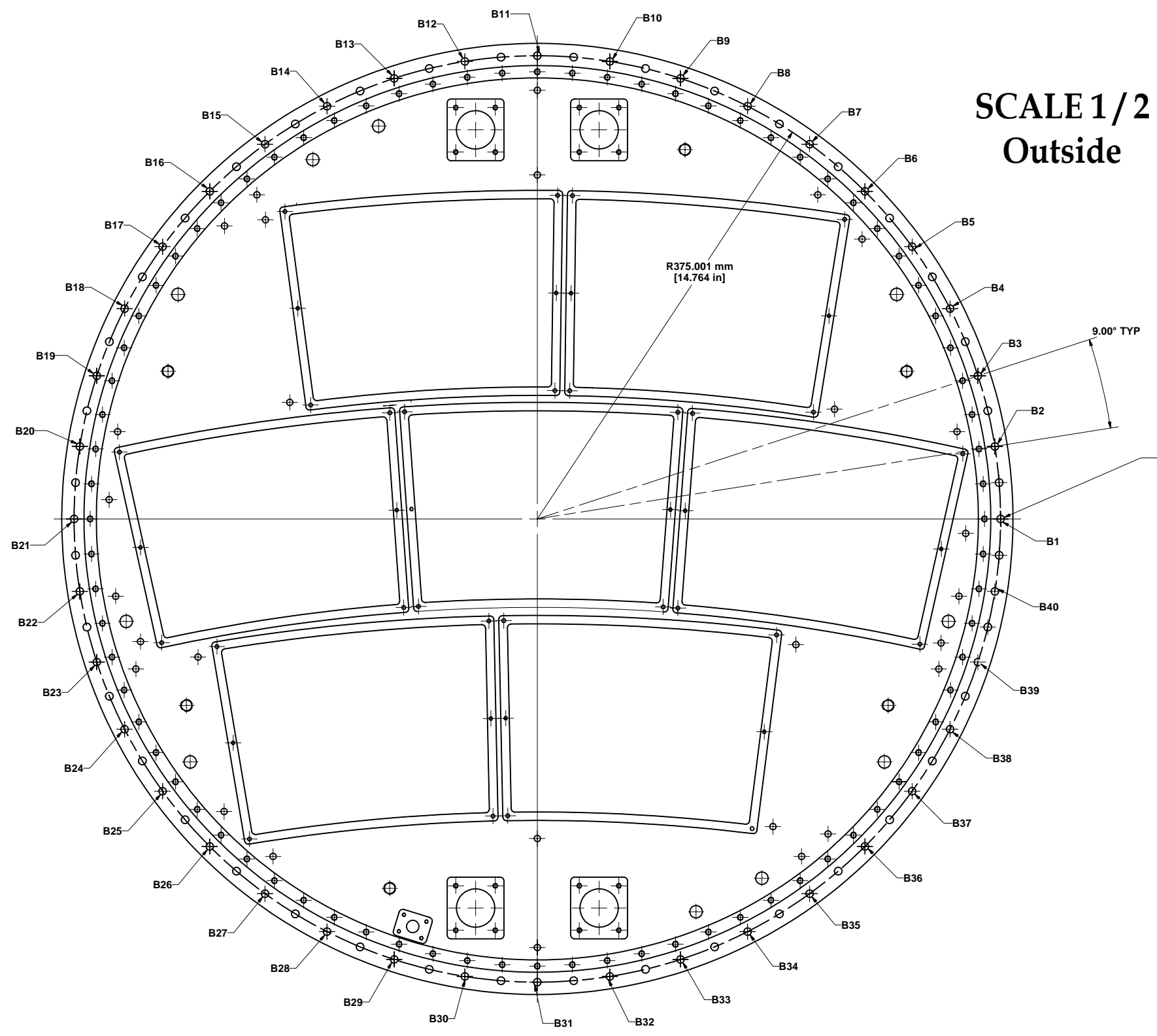
This sheet shows clearance holes in the flange area.

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				
D	6080-102	LCTPC Large Prototype Endplate					
			PRINT DISTR.				
		PLOT DATE: 7/10/2008		CAD FILE NAME: 6080-102 Endplate.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		CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS		LCTPC Large Prototype Endplate	
		CHECKED BY: Peterson		DRAWN BY: MDS		DRAWN FOR: Peterson	
		APPROVED BY: Peterson		DATE: 5/18/2007		SCALE: NOTED	
				D		6080-102	
				SH. NO. 3 OF 16		REV.	

REVISIONS		DATE	APP.
SYM.	ZONE	DESCRIPTION	



Dowel holes 'B' have tolerance 0.004 inch true position within a frame defined by holes B1, B11, B21, & B31 (see sheet 14).

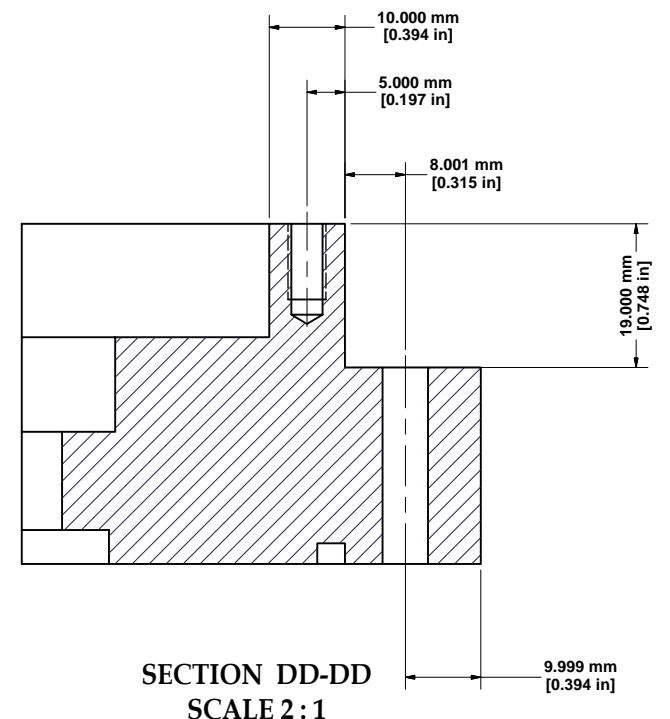
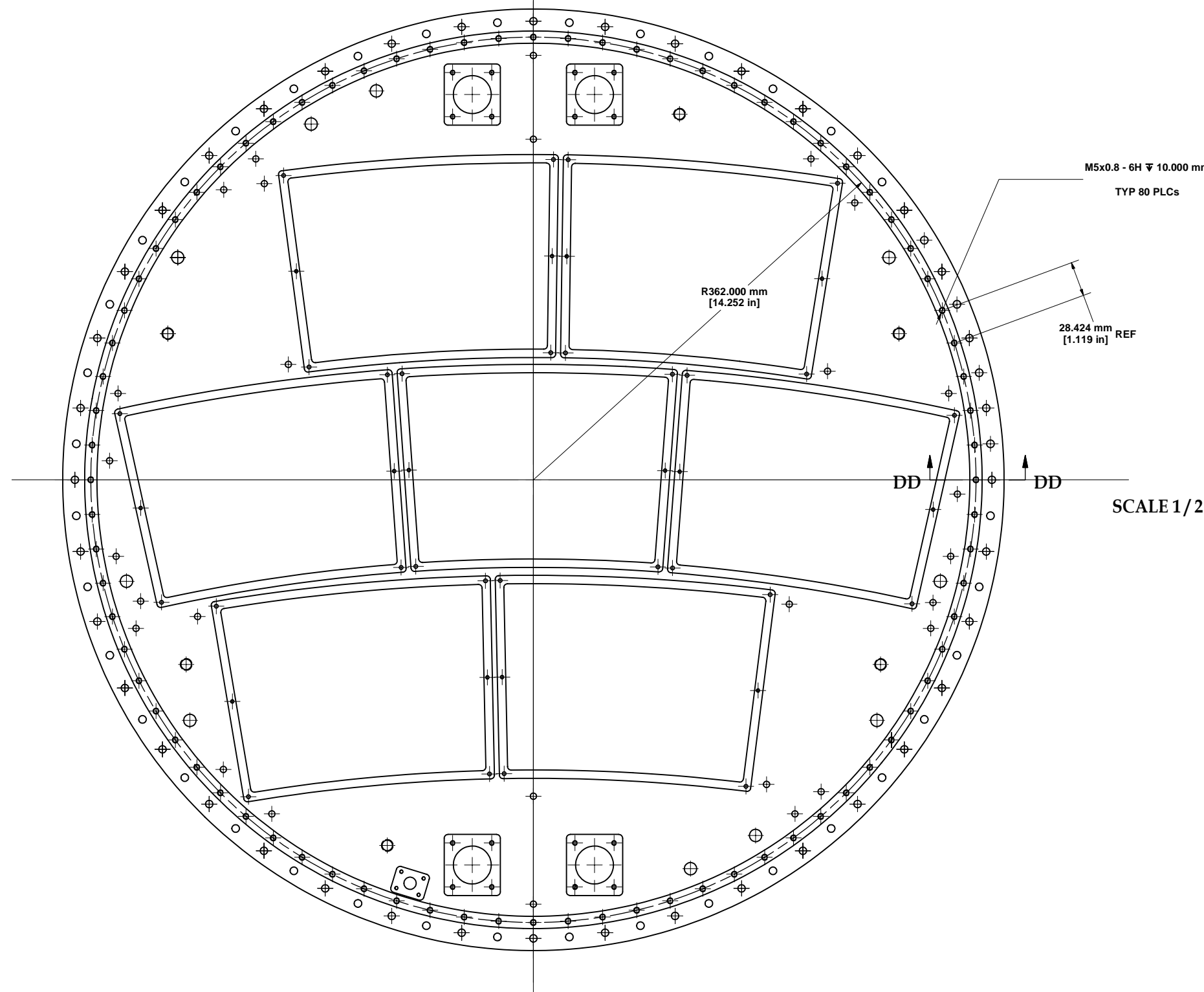
This sheet shows dowel holes in the flange area.

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				
6080-102									
PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.idw									
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES		<p>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</p> <p>LCTPC Large Prototype Endplate</p>							
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102	REV.		
APPROVED BY: Peterson						SH. NO. 4 OF 16			

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



These holes have tolerance 0.010 inch true position within a frame defined by holes B1, B11, B21, & B31 (see sheet 14).

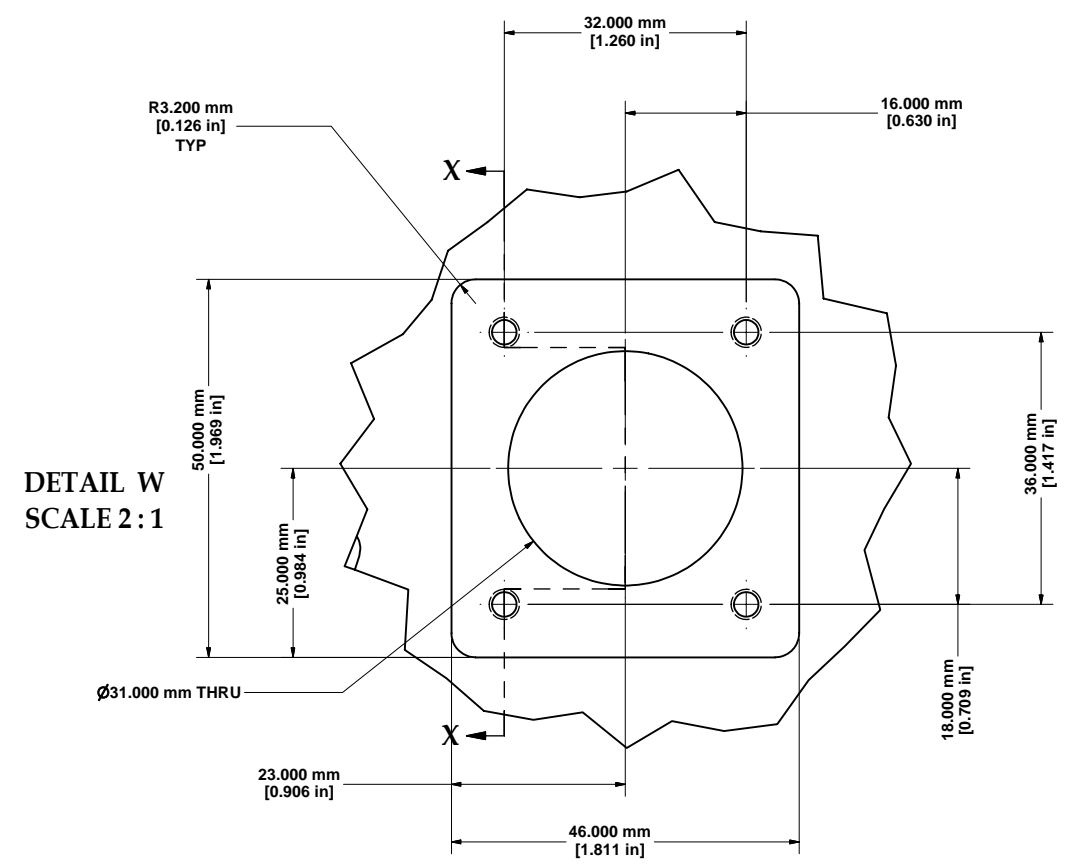
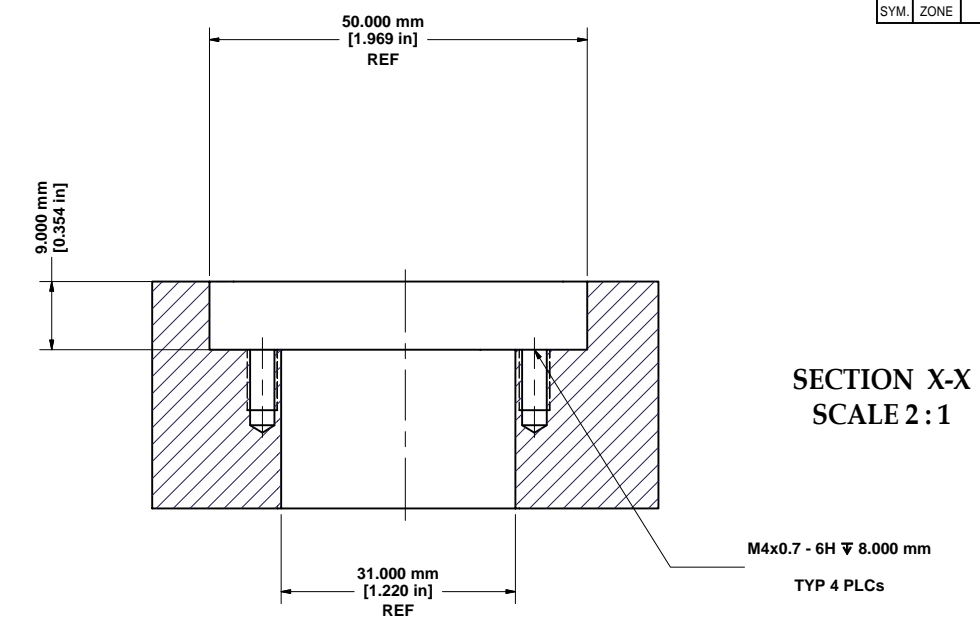
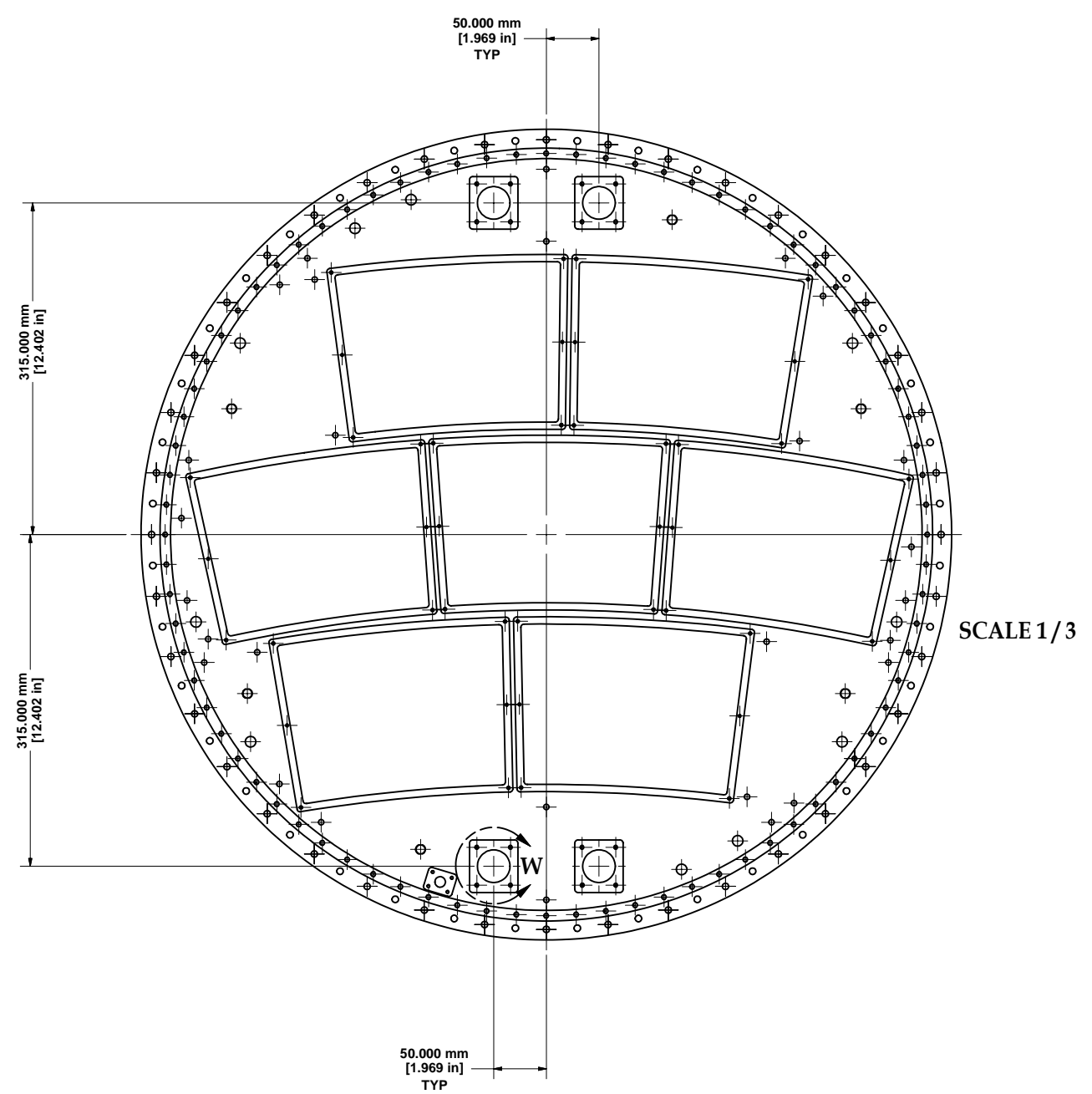
This sheet shows longitudinal threaded holes in the stiffening flange (the "fun holes").

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									
6080-102 SH. NO. 5 OF 16		PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.idw		<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓</p> <p>CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</p> <p>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</p> <p>LCTPC Large Prototype Endplate</p>					
		CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102 SH. NO. 5 OF 16	

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



These features have tolerance +/- 0.005 inch.

This sheet shows the light insert holes.

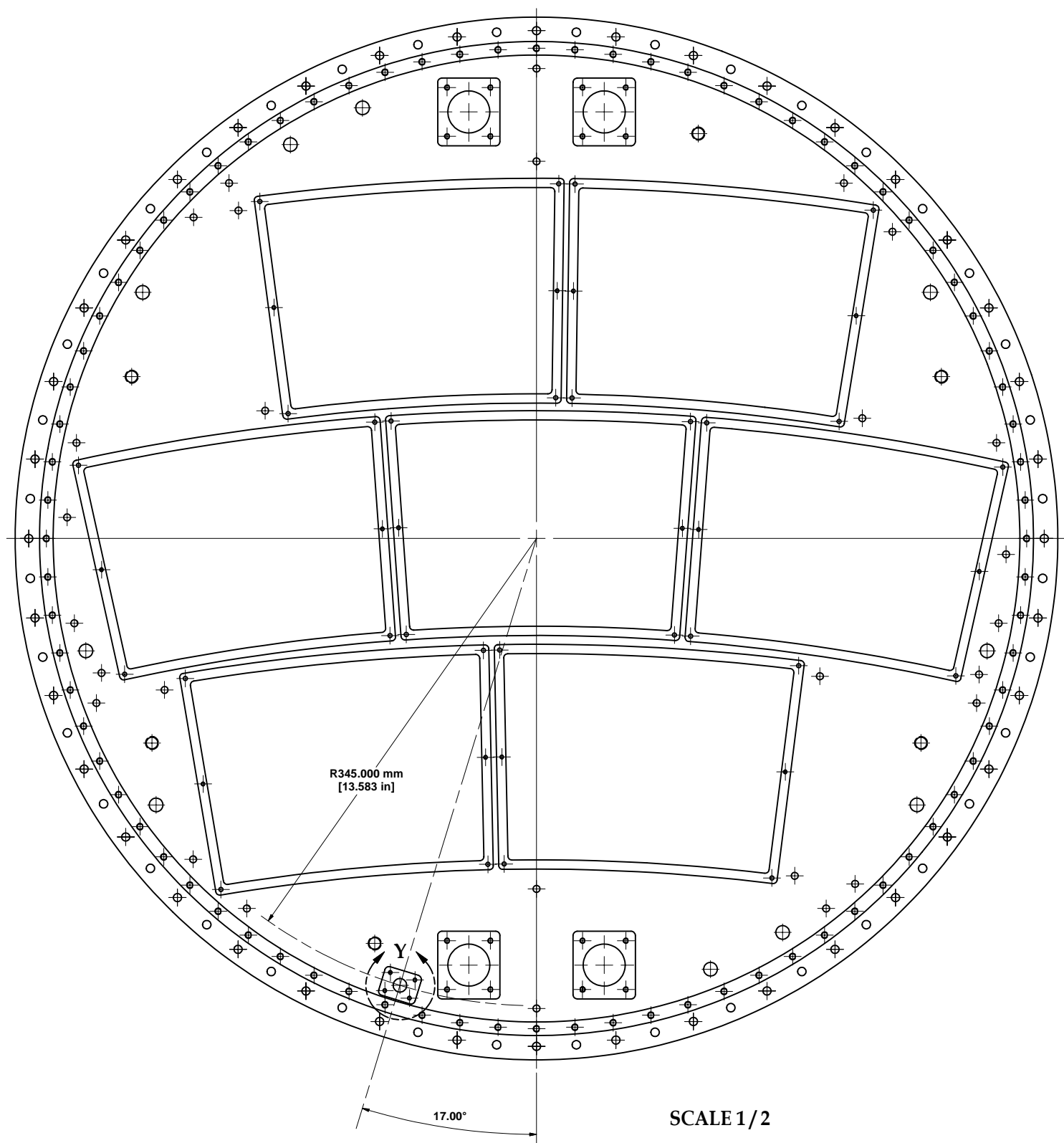
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

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):			

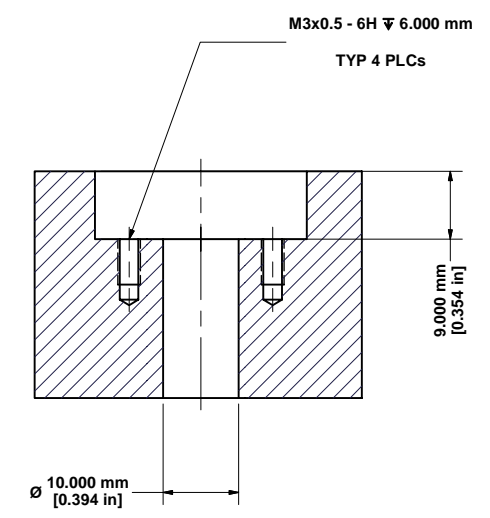
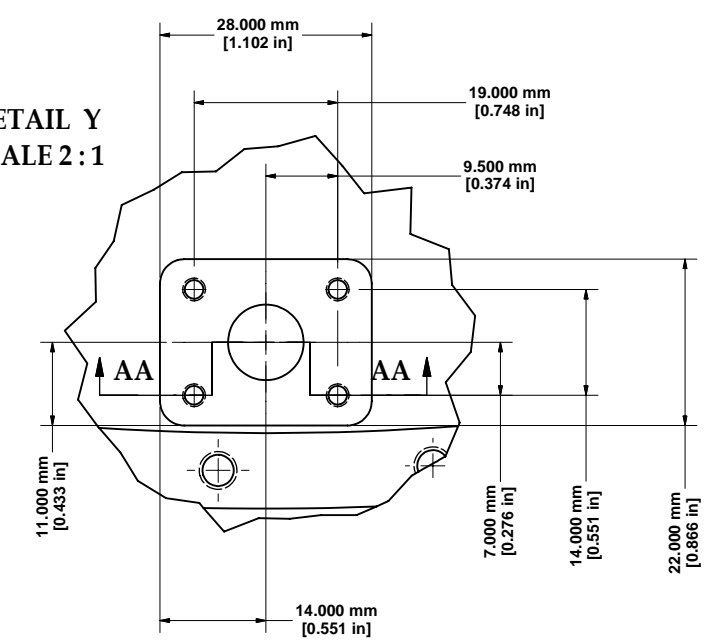
REV.	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
				QUANTITY				

PRINT DISTR. PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.idw	CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓	LCTPC Large Prototype Endplate
CHECKED BY: Peterson APPROVED BY: Peterson	DRAWN BY: MDS DRAWN FOR: Peterson DATE: 5/18/2007 SCALE: Noted D 6080-102 SH. NO. 6 OF 16

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	B7	Added extruded geometry for mounting window	2/7/08	DPP



DETAIL Y
SCALE 2:1



SECTION AA-AA
SCALE 2:1

These features have tolerance +/- 0.005 inch.

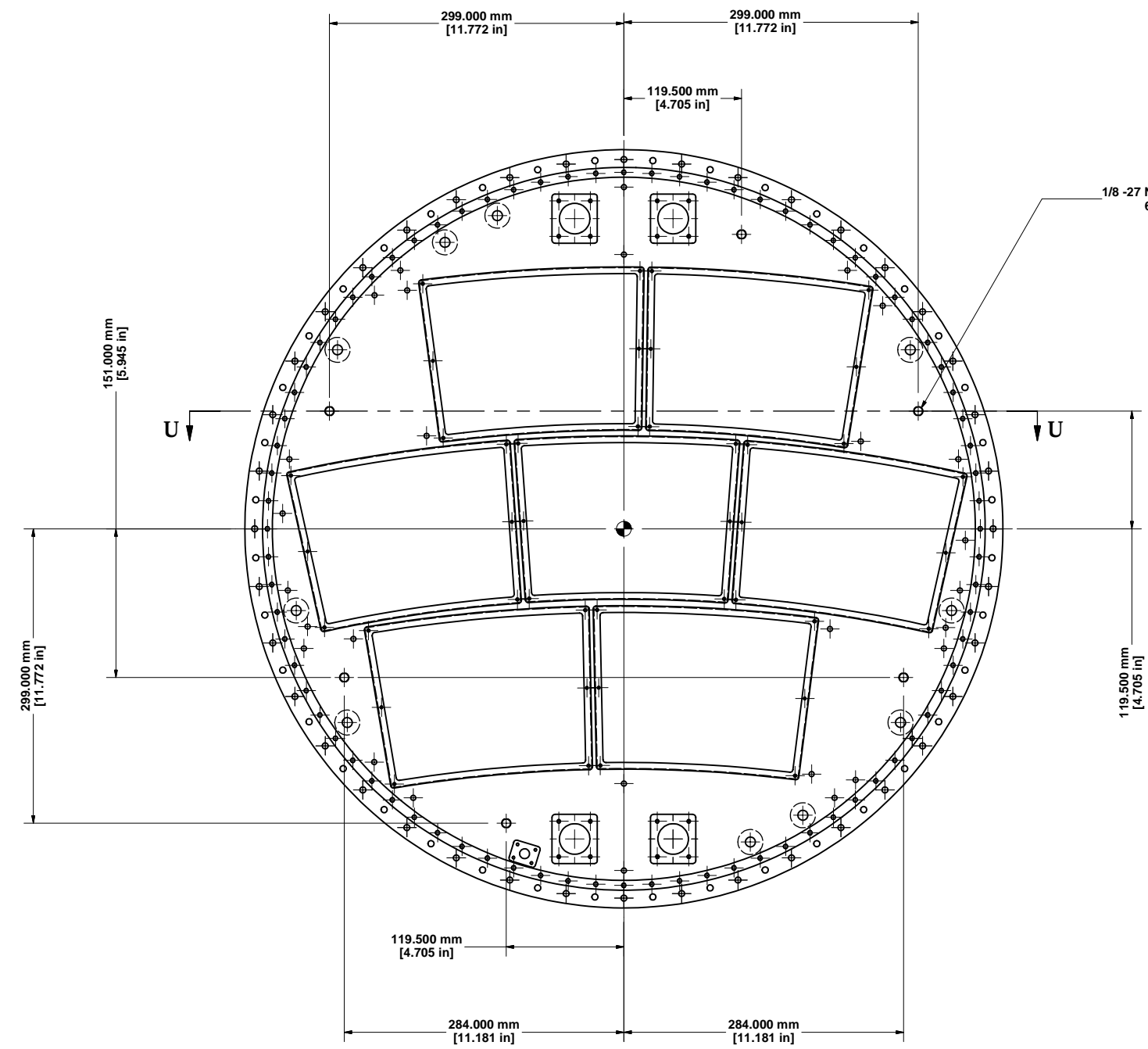
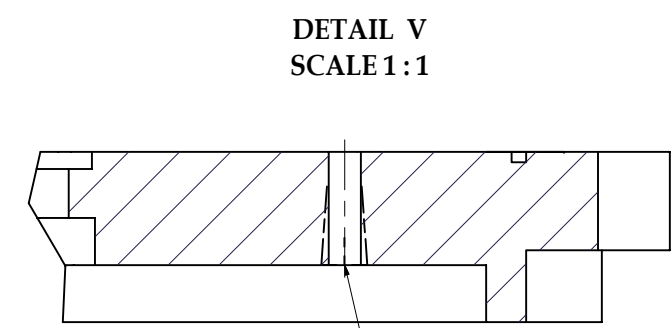
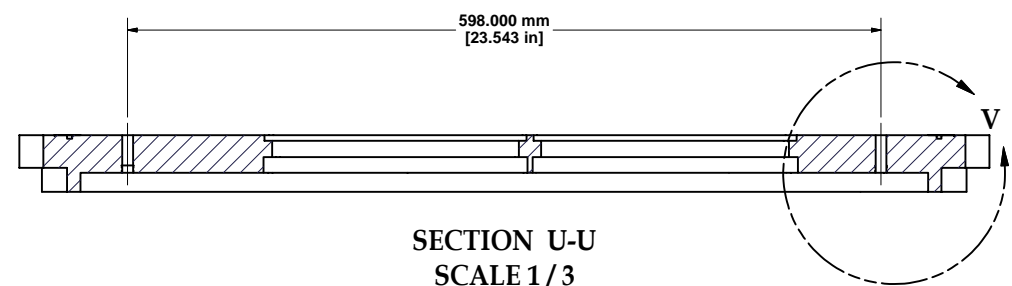
This sheet shows the Laser Access hole.

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 DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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				
LCTPC Large Prototype Endplate							
CHECKED BY: Peterson APPROVED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102 SH. NO. 7 OF 16	REV.

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



1/8 -27 NPT PIPE TAP
6 PLCs

Ø 'R' (0.399) Drill Thru
1/8 - 27 NPT Tap

These feature have tolerance +/- 0.010 inch.

SCALE 1/3

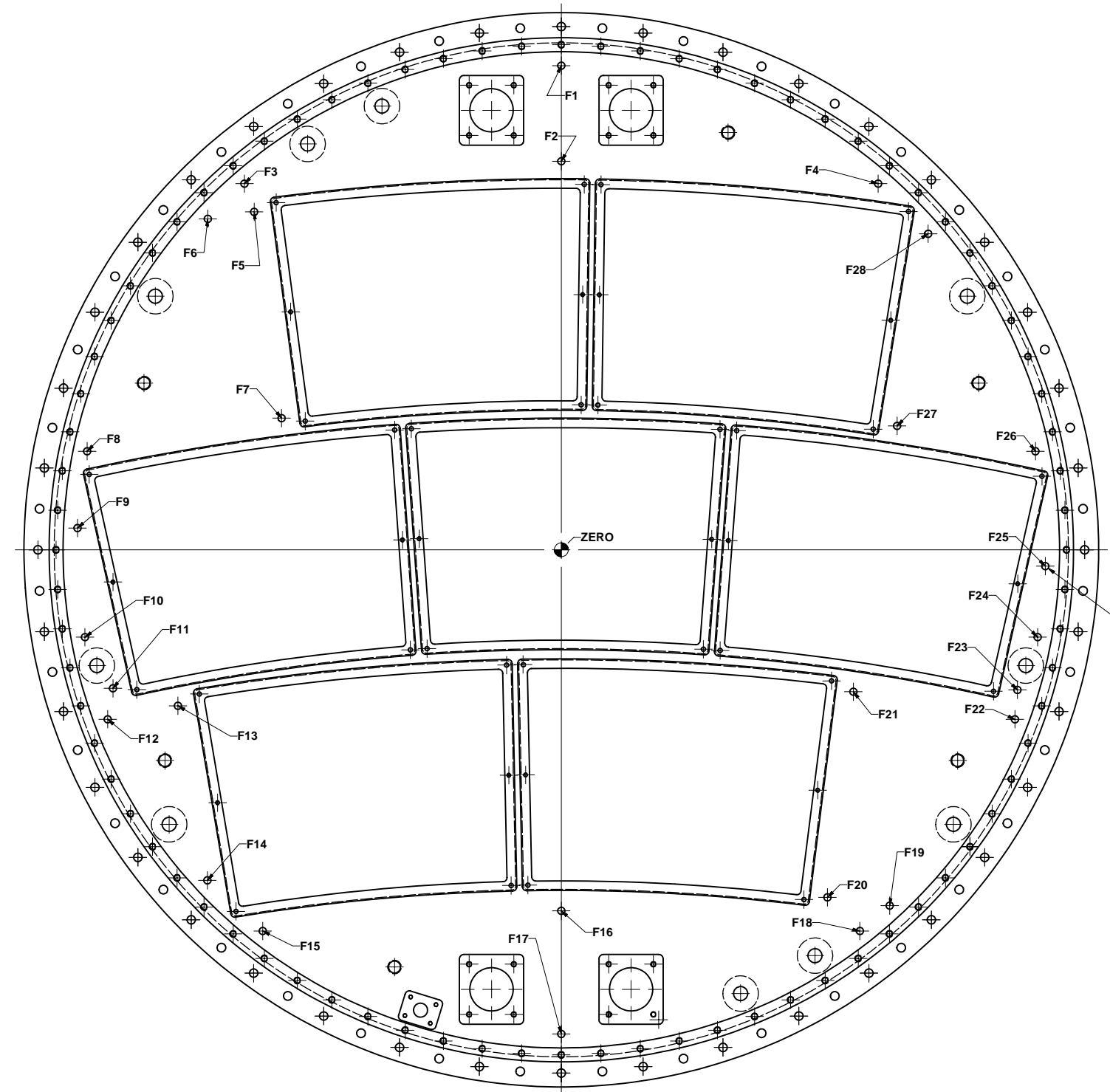
This sheet shows the Gas holes.

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.	6080-102	PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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					
LCTPC Large Prototype Endplate								
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102	REV.	
APPROVED BY: Peterson						SH. NO. 8 OF 16		

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added 5.100 mm DIA (6.1 mm machined) hole dimension	6/10/08	DPP



Hole Positions mm			
HOLE	XDIM	YDIM	DESCRIPTION
F1	0.000	347.000	Ø5.100 mm Thru
F2	0.000	278.500	Ø5.100 mm Thru
F3	-227.039	262.416	Ø5.100 mm Thru
F4	227.039	262.416	Ø5.100 mm Thru
F5	-220.089	242.189	Ø5.100 mm Thru
F6	-253.277	237.191	Ø5.100 mm Thru
F7	-200.416	94.366	Ø5.100 mm Thru
F8	-339.733	70.644	Ø5.100 mm Thru
F9	-346.649	15.593	Ø5.100 mm Thru
F10	-341.311	-62.575	Ø5.100 mm Thru
F11	-321.255	-99.263	Ø5.100 mm Thru
F12	-325.038	-121.487	Ø5.100 mm Thru
F13	-274.684	-111.804	Ø5.100 mm Thru
F14	-253.574	-236.874	Ø5.100 mm Thru
F15	-213.934	-273.206	Ø5.100 mm Thru
F16	0.000	-258.743	Ø5.100 mm Thru
F17	0.000	-347.000	Ø5.100 mm Thru
F18	213.934	-273.206	Ø5.100 mm Thru
F19	235.310	-255.026	Ø5.100 mm Thru
F20	190.696	-249.073	Ø5.100 mm Thru
F21	209.294	-101.721	Ø5.100 mm Thru
F22	325.038	-121.487	Ø5.100 mm Thru
F23	326.822	-100.408	Ø5.100 mm Thru
F24	341.311	-62.575	Ø5.100 mm Thru
F25	346.803	-11.700	Ø5.100 mm Thru
F26	339.733	70.644	Ø5.100 mm Thru
F27	240.593	88.813	Ø5.100 mm Thru
F28	262.878	226.504	Ø5.100 mm Thru
ZERO	0.000	0.000	0.000

Ø5.100 mm THRU
NOTE - THESE HOLES WERE DRILLED AT 6.1 mm DIA.
WHEN PRODUCED June 2008.

SCALE 1/2

**Tolerance is 0.006 inch true position
within a frame defined by holes B1, B11, B21, & B31 (see sheet 14).**

This sheet shows holes to mount the Field Cage Termination plates.

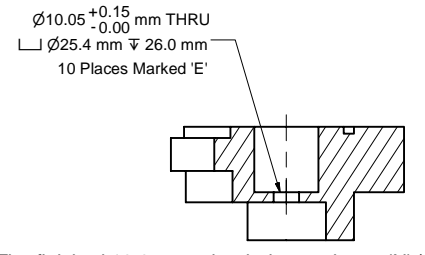
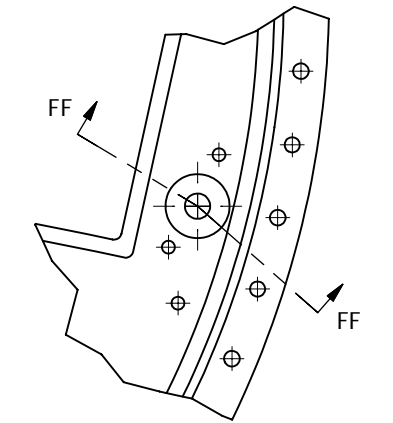
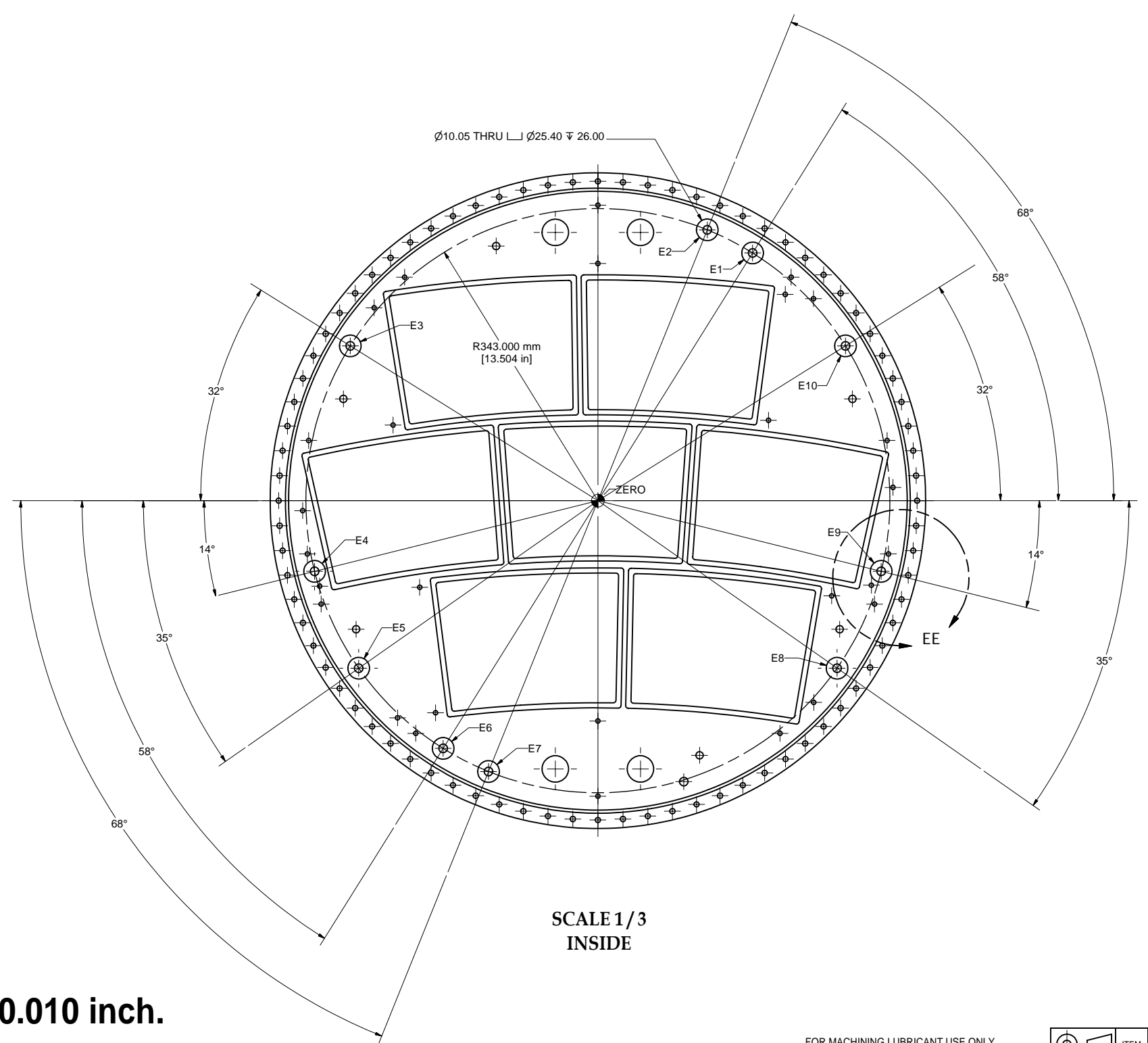
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

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.	6080-102	PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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	
LCTPC Large Prototype Endplate							
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102 SH. NO. 9 OF 16	REV. A

Hole Table			
HOLE	XDIM	YDIM	DESCRIPTION
E1	181.762	290.880	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E2	128.490	318.024	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E3	-290.880	181.762	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E4	-332.811	-82.979	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E5	-280.969	-196.737	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E6	-181.762	-290.880	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E7	-128.490	-318.024	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E8	280.969	-196.737	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E10	290.880	181.762	$\varnothing 10.05^{+0.15}_{-0.00}$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
E9	332.811	-82.979	$\varnothing 10.05 \pm 0.15$ mm THRU $\varnothing 25.4$ mm ∇ 26.0 mm
ZERO	0.000	0.000	Value

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		10.05 mm thru hole (at -E-) was 10.00 mm.	3/18/08	TIO



The finished 10.05 mm thru hole may be an 'X' (0.3970 in) drill.

Hole location tolerance is +/- 0.010 inch.

This sheet shows holes to accept HV connectors for the Field Cage Termination.

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ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

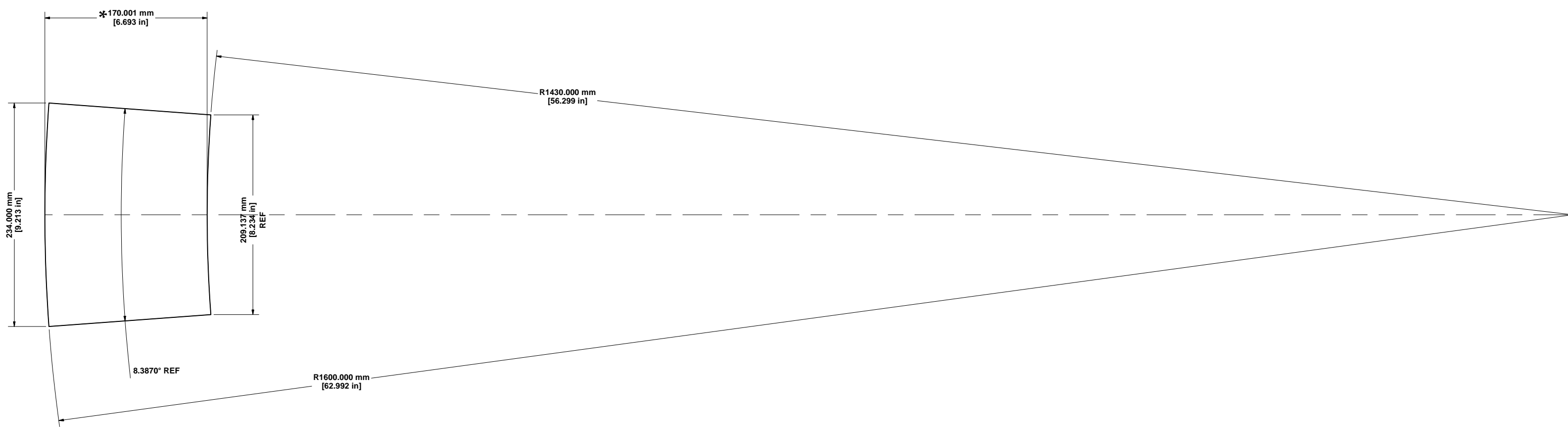
TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):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

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
PRINT DISTR.	6080-102	PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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	
LCTPC Large Prototype Endplate							
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102 SH. NO. 10 OF 16	REV. A

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

SCALE 1 / 2

* This dimensions includes the small, non zero, offset of the radii of curvature needed to keep the model adaptive.



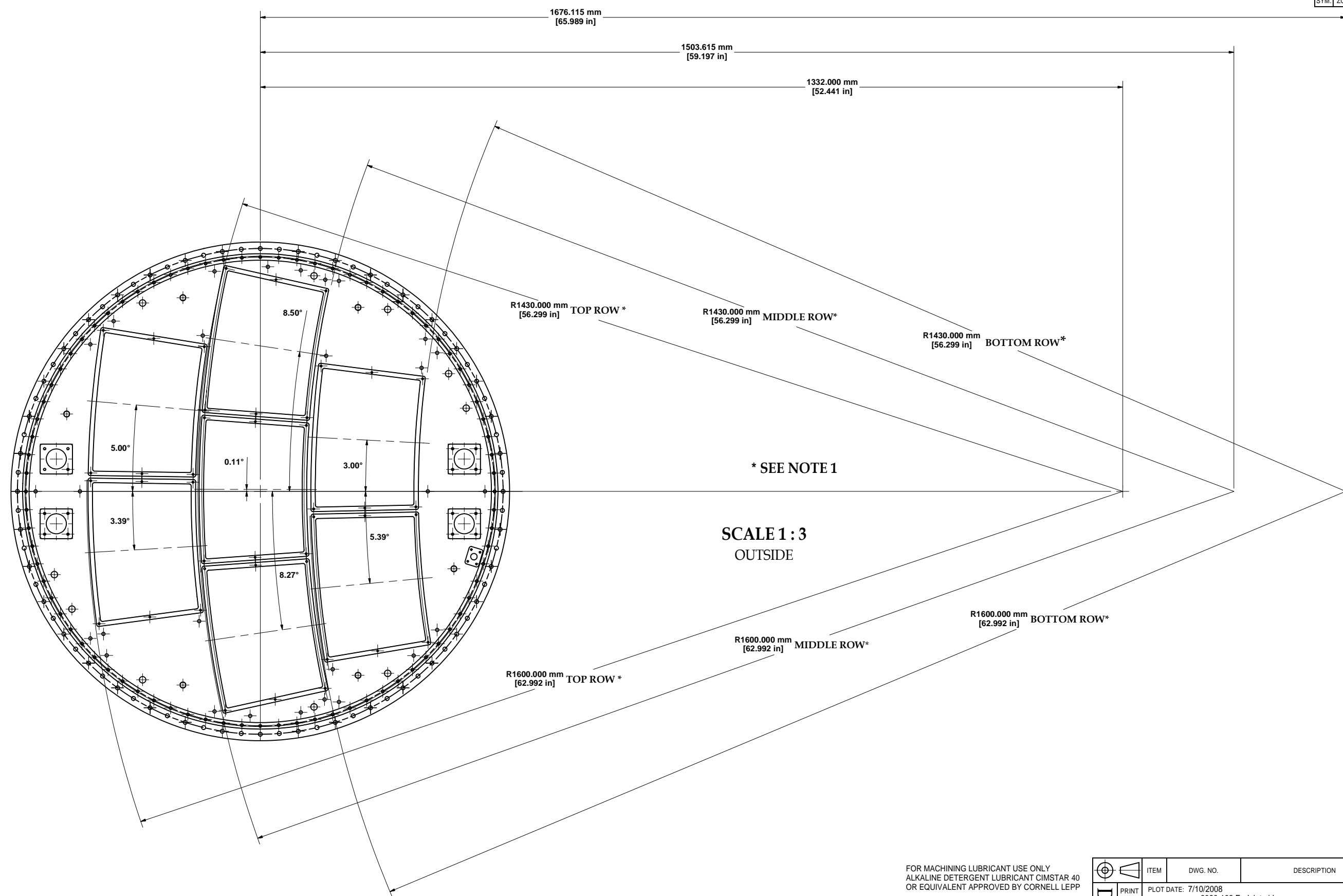
**NOTE: This is the Bounding Box.
It is not a part for construction.
It is an abstract geometrical shape,
located on the Endplate,
within which the module and all
mountings for the module are defined.**

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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):			

D	PRINT DISTR.	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
					QUANTITY				
6080-102 SH. NO. 11 OF 16		PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.idw		<p>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</p>					
REV.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		LCTPC Large Prototype Endplate					
		CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102 SH. NO. 11 OF 16	REV.

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



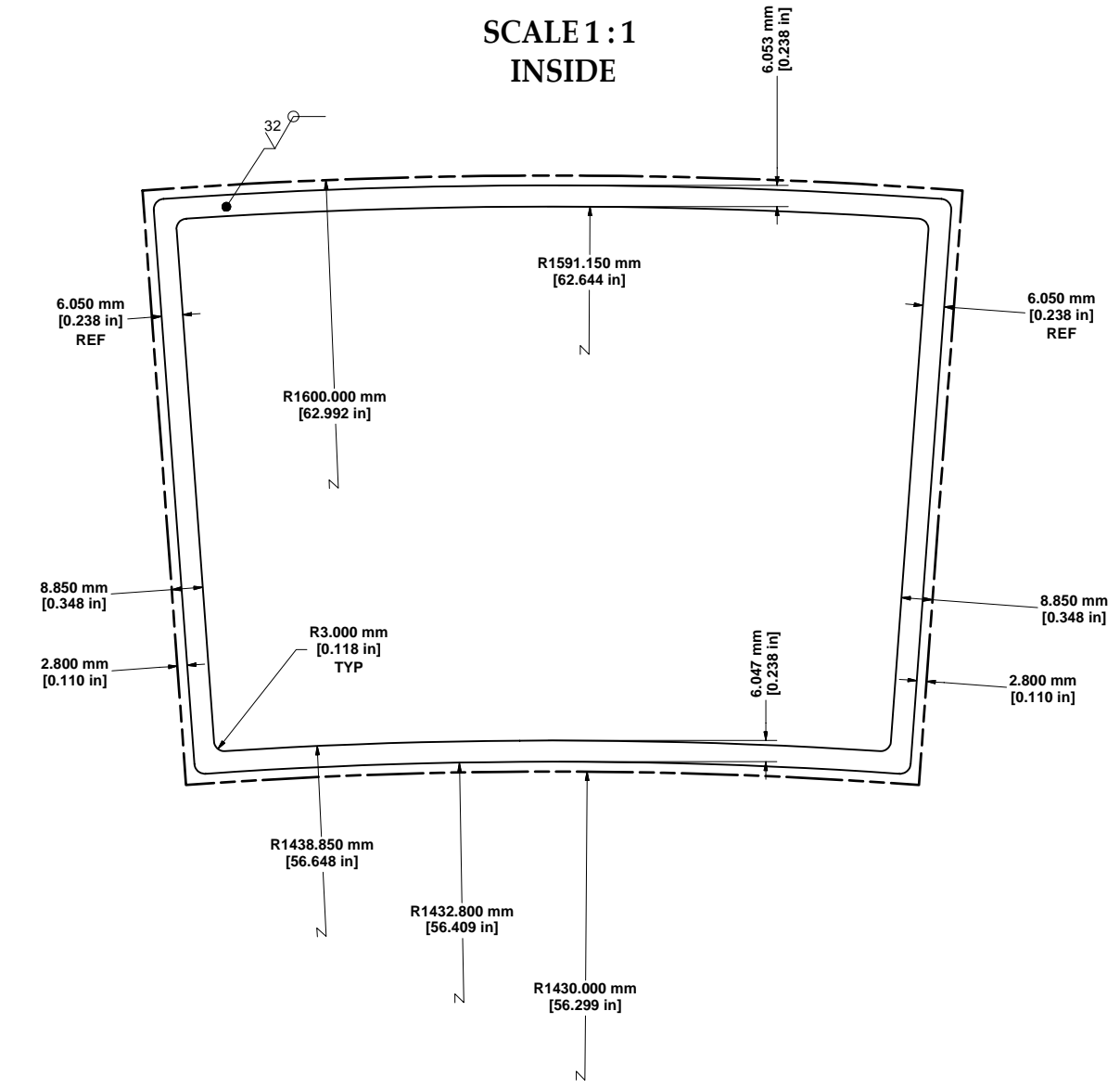
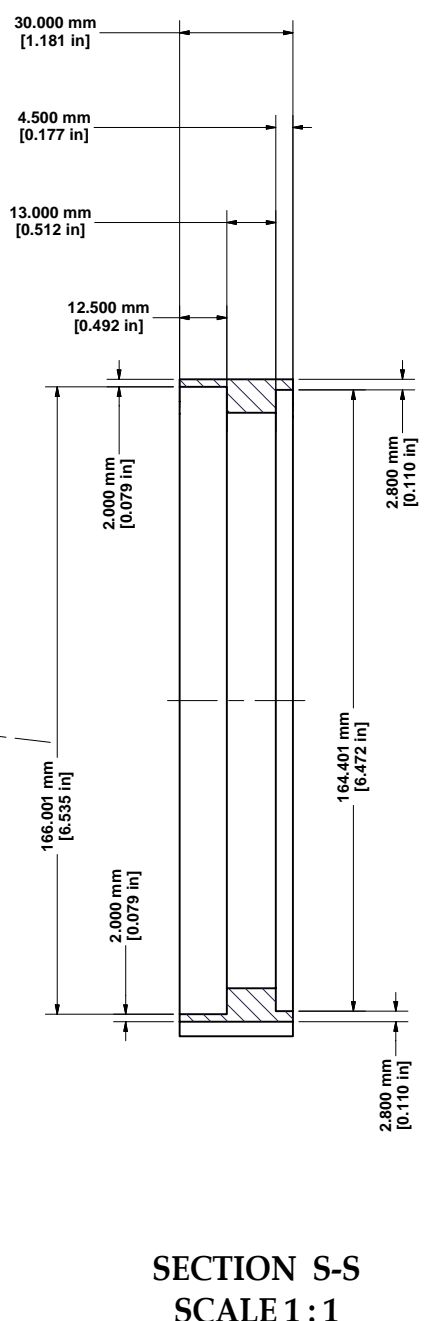
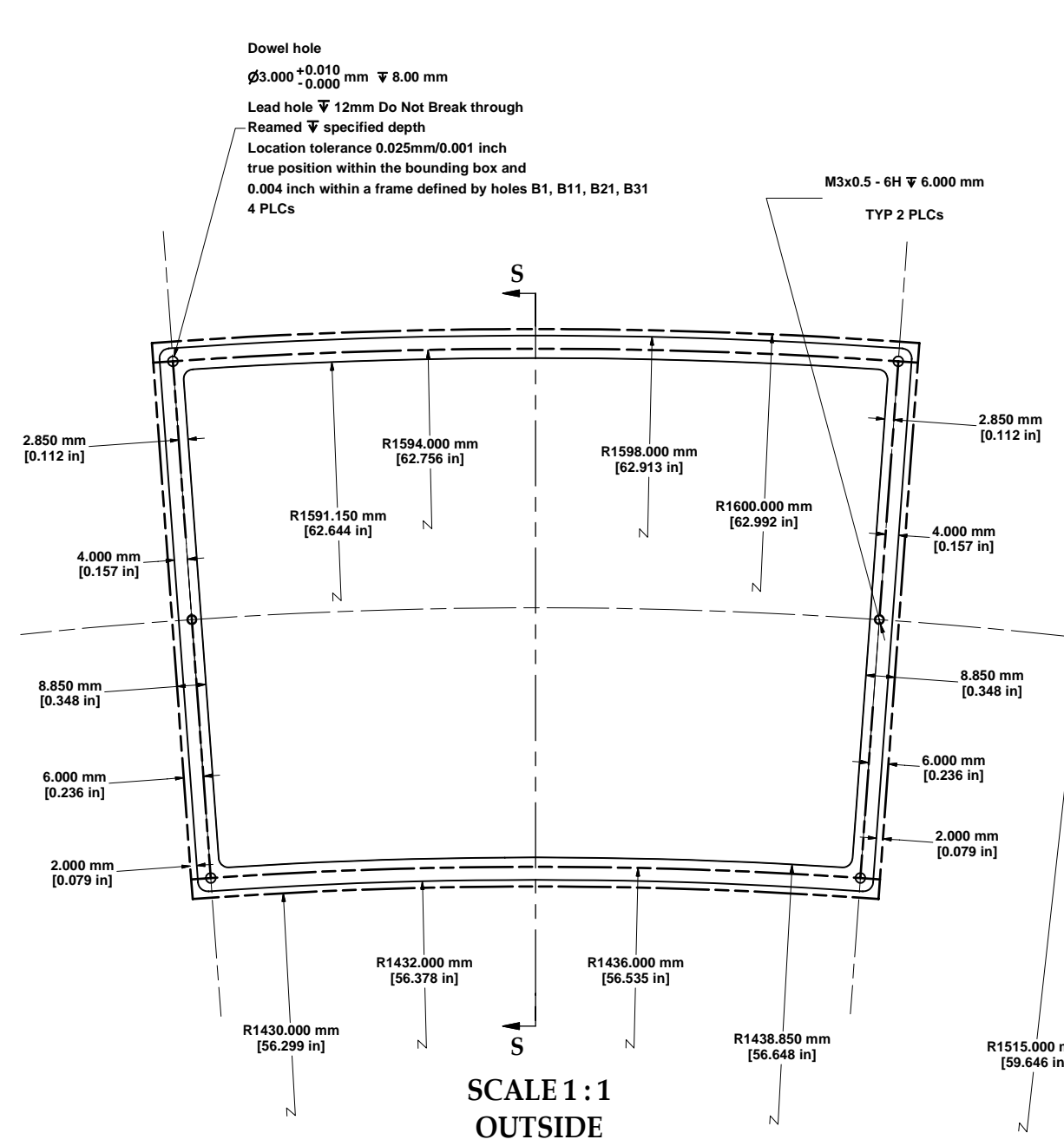
This sheet shows the locations of seven (7) replications of the Bounding Box on the Endplate.

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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.	6080-102	PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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					
LCTPC Large Prototype Endplate								
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102	REV.	
APPROVED BY: Peterson						SH. NO. 12 OF 16		

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Opened up bounding box counterbore on "inside" to provide 0.2 mm clearance to part 6080-104.	7/10/08	DPP



Dowel holes are to be made in process step 5, without pre-drilling in earlier steps.

Dowel holes have location tolerance 0.001 inch true position within the bounding box and 0.004 inch true position within a frame defined by holes B1, B11, B21, B31 (see sheet 14). Surface features have tolerance +/-0.002 inch within the bounding box.

Certification measurements for dowel holes and surface features, within the bounding box, are shown on sheet 16.

Certification measurements for dowel holes, within the frame defined by holes B1, B11, B21, & B31, are shown on sheet 15.

This sheet shows the details of features that are placed within each bounding box.

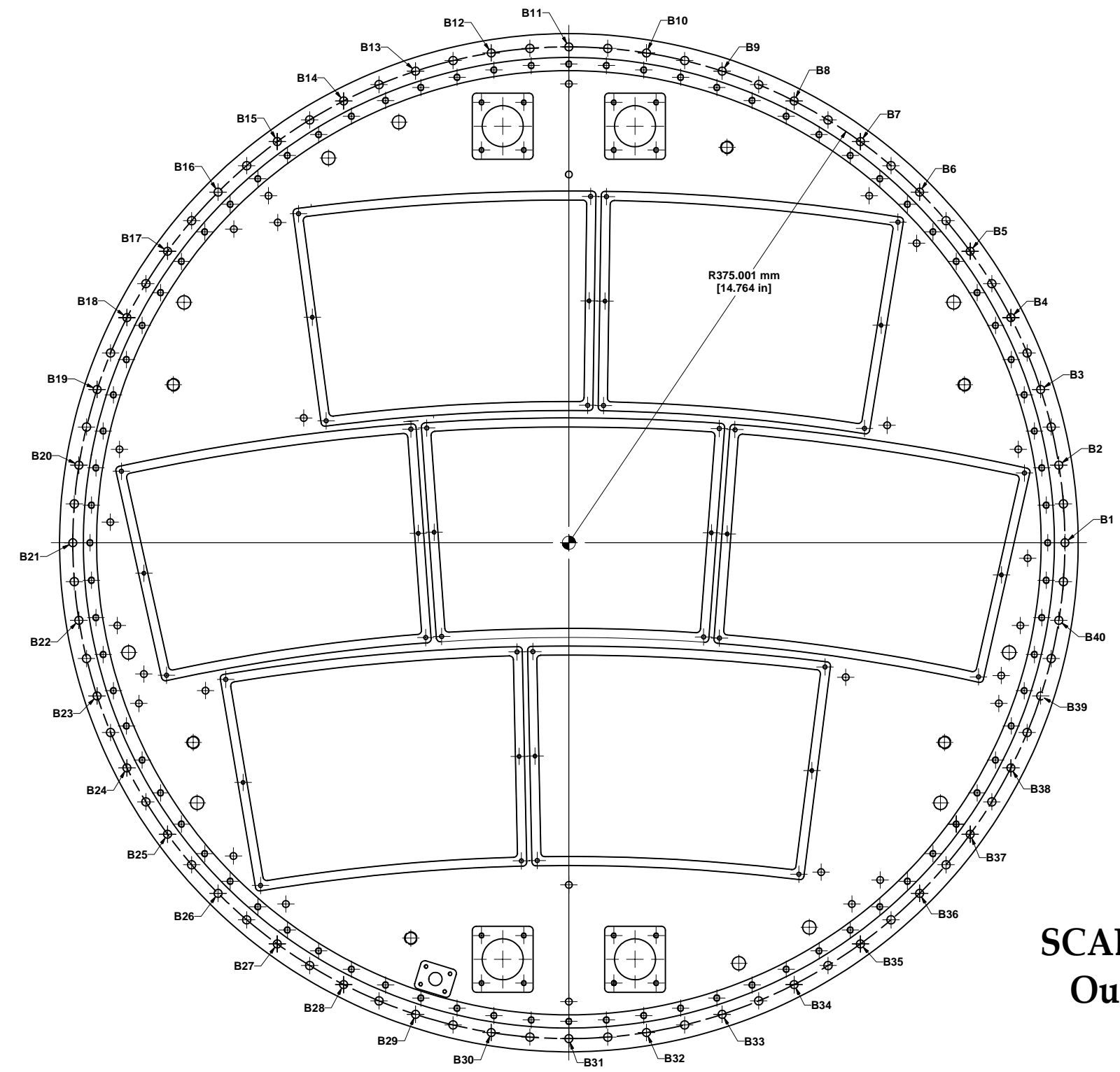
FOR MACHINING LUBRICANT USE ONLY
 ALKALINE DETERGENT LUBRICANT CIMSTAR 40
 OR EQUIVALENT APPROVED BY CORNELL LEPP

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: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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	
LCTPC Large Prototype Endplate							
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102 SH. NO. 13 OF 16	REV. A

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

Hole Position mm			
HOLE	XDIM	YDIM	DESCRIPTION
B1	375.001	0.000	Ø6.000 mm THRU
B2	370.384	58.663	Ø6.000 mm THRU
B3	356.647	115.882	Ø6.000 mm THRU
B4	334.128	170.247	Ø6.000 mm THRU
B5	303.382	220.420	Ø6.000 mm THRU
B6	265.165	265.165	Ø6.000 mm THRU
B7	220.420	303.382	Ø6.000 mm THRU
B8	170.247	334.128	Ø6.000 mm THRU
B9	115.882	356.647	Ø6.000 mm THRU
B10	58.663	370.384	Ø6.000 mm THRU
B11	0.000	375.001	Ø6.000 mm THRU
B12	-58.663	370.384	Ø6.000 mm THRU
B13	-115.882	356.647	Ø6.000 mm THRU
B14	-170.247	334.128	Ø6.000 mm THRU
B15	-220.420	303.382	Ø6.000 mm THRU
B16	-265.165	265.165	Ø6.000 mm THRU
B17	-303.382	220.420	Ø6.000 mm THRU
B18	-334.128	170.247	Ø6.000 mm THRU
B19	-356.647	115.882	Ø6.000 mm THRU
B20	-370.384	58.663	Ø6.000 mm THRU
B21	-375.001	0.000	Ø6.000 mm THRU
B22	-370.384	-58.663	Ø6.000 mm THRU
B23	-356.647	-115.882	Ø6.000 mm THRU
B24	-334.128	-170.247	Ø6.000 mm THRU
B25	-303.382	-220.420	Ø6.000 mm THRU
B26	-265.165	-265.165	Ø6.000 mm THRU
B27	-220.420	-303.382	Ø6.000 mm THRU
B28	-170.247	-334.128	Ø6.000 mm THRU
B29	-115.882	-356.647	Ø6.000 mm THRU
B30	-58.663	-370.384	Ø6.000 mm THRU
B31	0.000	-375.001	Ø6.000 mm THRU
B32	58.663	-370.384	Ø6.000 mm THRU
B33	115.882	-356.647	Ø6.000 mm THRU
B34	170.247	-334.128	Ø6.000 mm THRU
B35	220.420	-303.382	Ø6.000 mm THRU
B36	265.165	-265.165	Ø6.000 mm THRU
B37	303.382	-220.420	Ø6.000 mm THRU
B38	334.128	-170.247	Ø6.000 mm THRU
B39	356.647	-115.882	Ø6.000 mm THRU
B40	370.384	-58.663	Ø6.000 mm THRU



SCALE 1/2
Outside

This sheet shows certification measurements for dowel holes 'B' that are specified on sheet 3.

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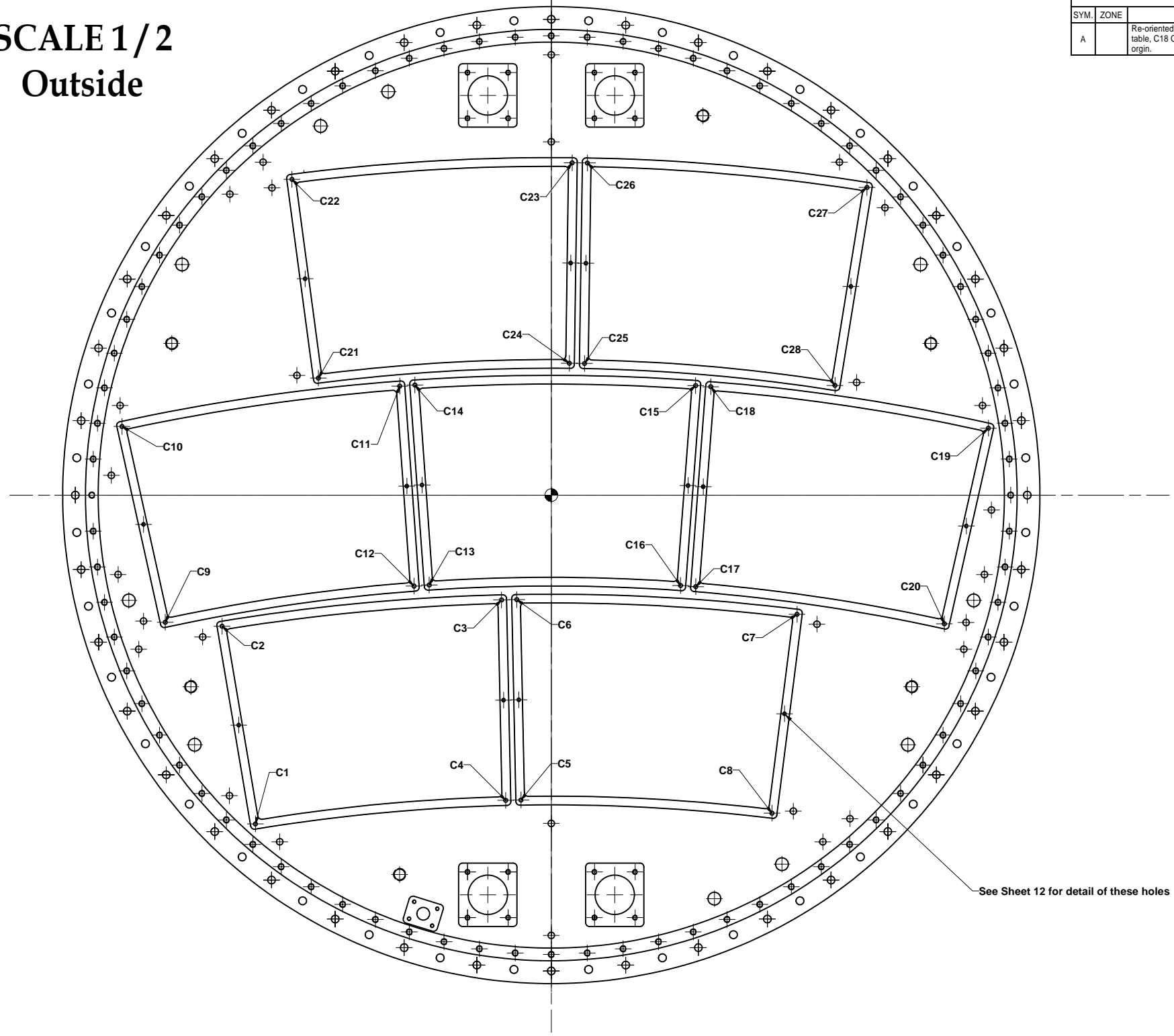
TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):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

ITEM	DWG. NO.	DESCRIPTION	QUANTITY			REMARKS	REV.
			G1	G2	G3		
PRINT DISTR.	6080-102	PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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 LCTPC Large Prototype Endplate					
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102	REV.
APPROVED BY: Peterson						SH. NO. 14 OF 16	

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-oriented hole table pattern to 0,0 of part. Re-sorted table, C18 CL was "OFF" and is now re-oriented to hole origin.	6/10/08	DPP

SCALE 1/2
Outside

Hole Position mm			
HOLE	XDIM	YDIM	DESCRIPTION
C1	-233.079	-259.158	Ø 3.000mm √ 8.000mm
C2	-259.376	-103.359	Ø 3.000mm √ 8.000mm
C3	-39.200	-82.597	Ø 3.000mm √ 8.000mm
C4	-35.909	-240.565	Ø 3.000mm √ 8.000mm
C5	-23.911	-240.315	Ø 3.000mm √ 8.000mm
C6	-27.202	-82.347	Ø 3.000mm √ 8.000mm
C7	193.647	-93.921	Ø 3.000mm √ 8.000mm
C8	173.862	-250.680	Ø 3.000mm √ 8.000mm
C9	-304.150	-100.196	Ø 3.000mm √ 8.000mm
C10	-338.261	54.081	Ø 3.000mm √ 8.000mm
C11	-119.410	85.906	Ø 3.000mm √ 8.000mm
C12	-108.166	-71.696	Ø 3.000mm √ 8.000mm
C13	-96.197	-70.842	Ø 3.000mm √ 8.000mm
C14	-107.440	86.760	Ø 3.000mm √ 8.000mm
C15	113.713	86.324	Ø 3.000mm √ 8.000mm
C16	101.848	-71.232	Ø 3.000mm √ 8.000mm
C17	113.814	-72.133	Ø 3.000mm √ 8.000mm
C18	125.679	85.423	Ø 3.000mm √ 8.000mm
C19	344.403	52.734	Ø 3.000mm √ 8.000mm
C20	309.684	-101.406	Ø 3.000mm √ 8.000mm
C21	-183.486	92.228	Ø 3.000mm √ 8.000mm
C22	-204.330	248.850	Ø 3.000mm √ 8.000mm
C23	16.437	261.915	Ø 3.000mm √ 8.000mm
C24	14.213	103.929	Ø 3.000mm √ 8.000mm
C25	26.212	103.760	Ø 3.000mm √ 8.000mm
C26	28.436	261.746	Ø 3.000mm √ 8.000mm
C27	248.747	242.472	Ø 3.000mm √ 8.000mm
C28	223.497	86.460	Ø 3.000mm √ 8.000mm



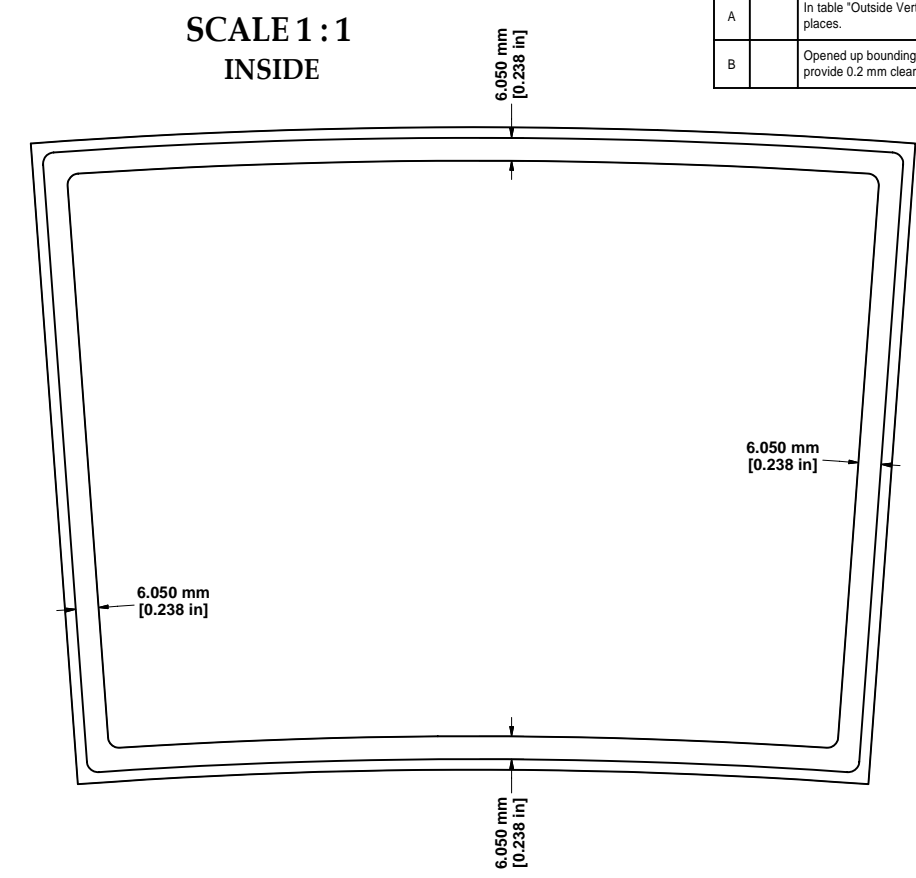
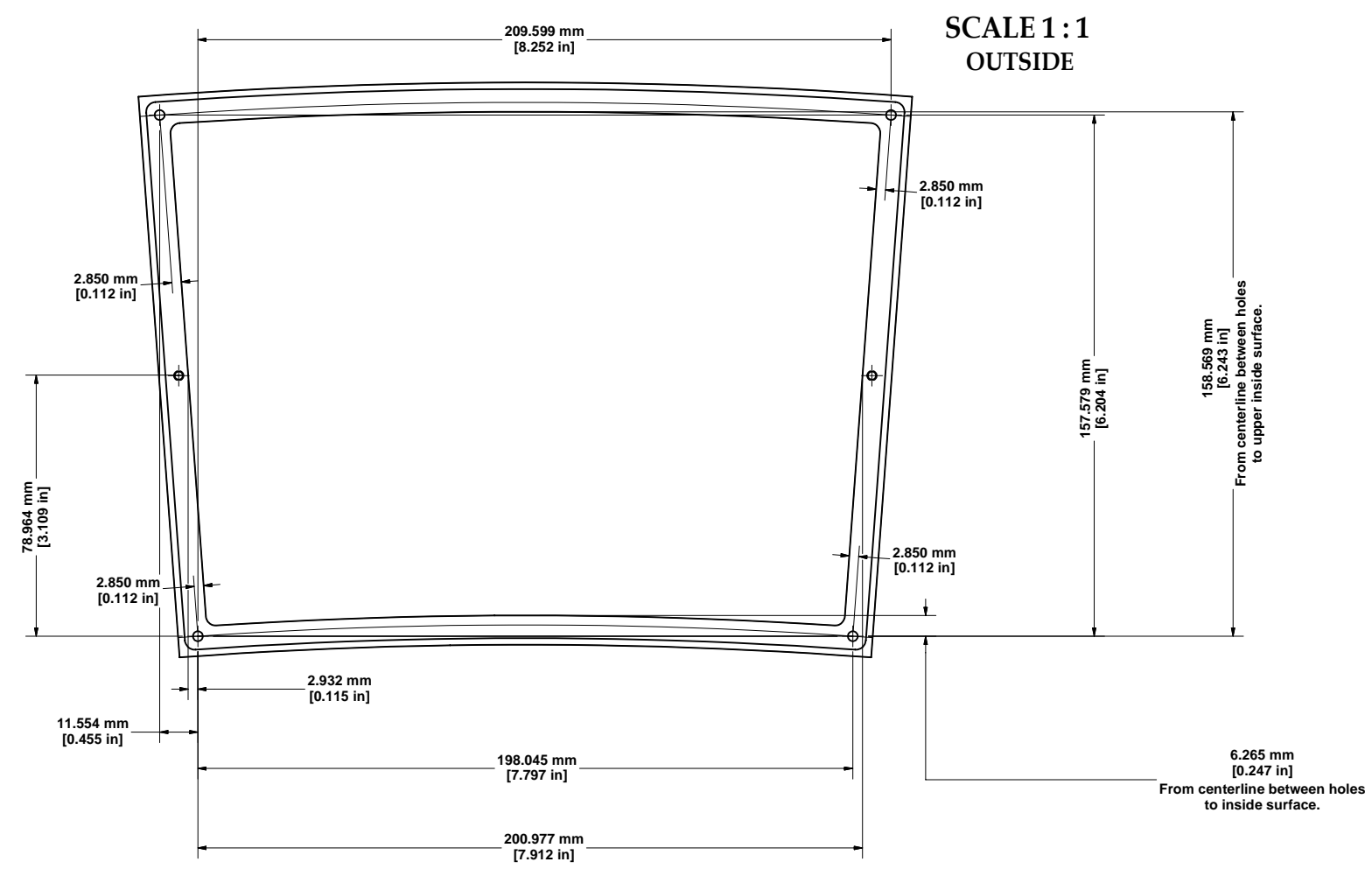
This sheet shows certification measurements of global locations of dowel holes that are defined within the Bounding Box on sheet 13.

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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: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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	
LCTPC Large Prototype Endplate							
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: NOTED	D	6080-102 SH. NO. 15 OF 16	REV. A

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		In table "Outside Vertical..." 78.964 was 78.967, 2 places.	6/10/08	DPP
B		Opened up bounding box counterbore on "inside" to provide 0.2 mm clearance to part 6080-104.	7/10/08	DPP



OUTSIDE HOLE MEASUREMENTS (MM)

NUMBER	MEASURE X	MEASURE Y
1	0.000	0.000
2	198.045	0.000
3	-11.554	157.579
4	209.599	157.579

OUTSIDE HORIZONTAL SURFACE MEASUREMENT (MM)

NUMBER	SET X	MEASURE Y
1	99.022	6.265
2	99.022	158.569

OUTSIDE VERTICAL SURFACE MEASUREMENT (MM)

NUMBER	SET Y	MEASURE X
1	78.964	-2.932
2	78.964	200.977

INSIDE WIDTH MEASUREMENT (MM)

LOCATION	VALUE
LEFT	6.050
RIGHT	6.050
TOP	6.050
BOTTOM	6.050

This sheet shows certification measurements within the Bounding Box of dowel holes and surface features that are specified within the Bounding Box on sheet 13.

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.	6080-102	PLOT DATE: 7/10/2008 CAD FILE NAME: 6080-102 Endplate.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	
LCTPC Large Prototype Endplate							
CHECKED BY: Peterson	DRAWN BY: MDS	DRAWN FOR: Peterson	DATE: 5/18/2007	SCALE: Noted	D	6080-102 SH. NO. 16 OF 16	REV. B