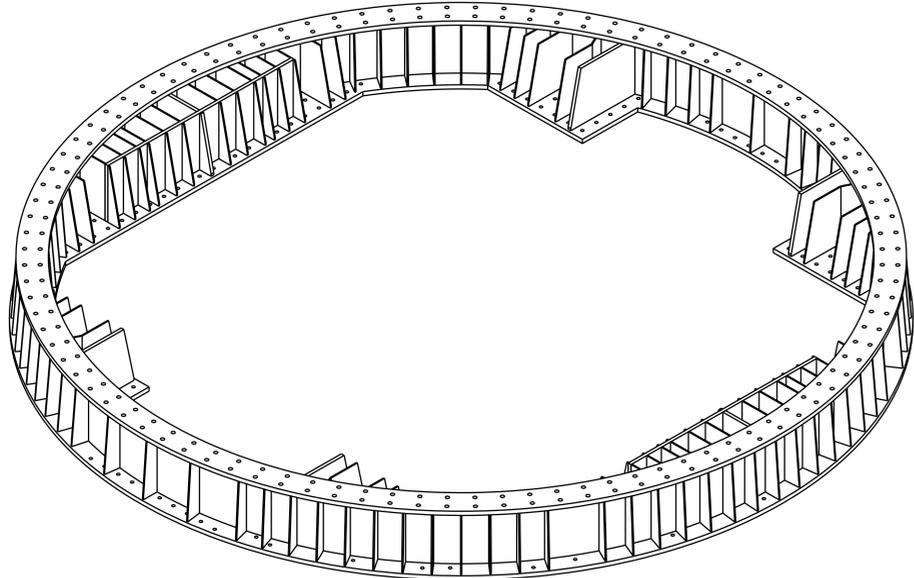
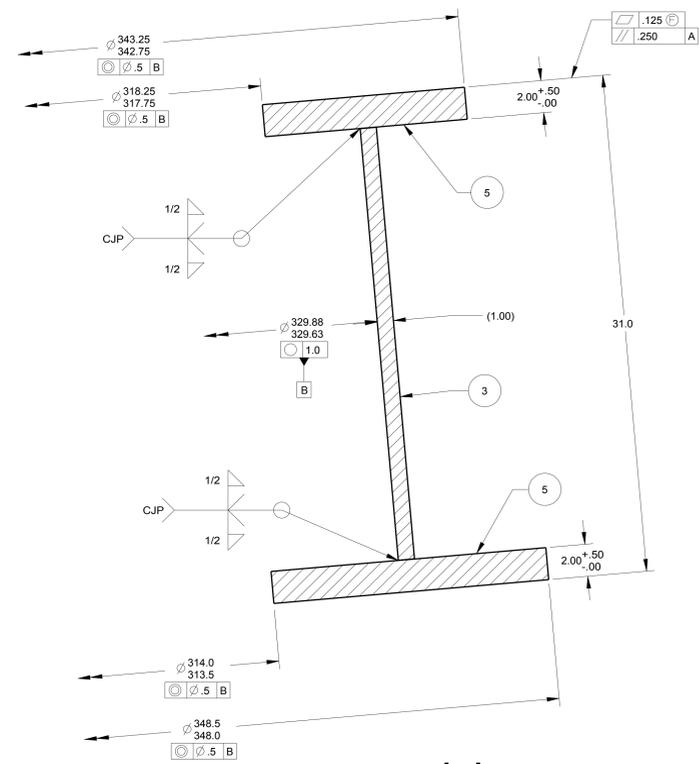
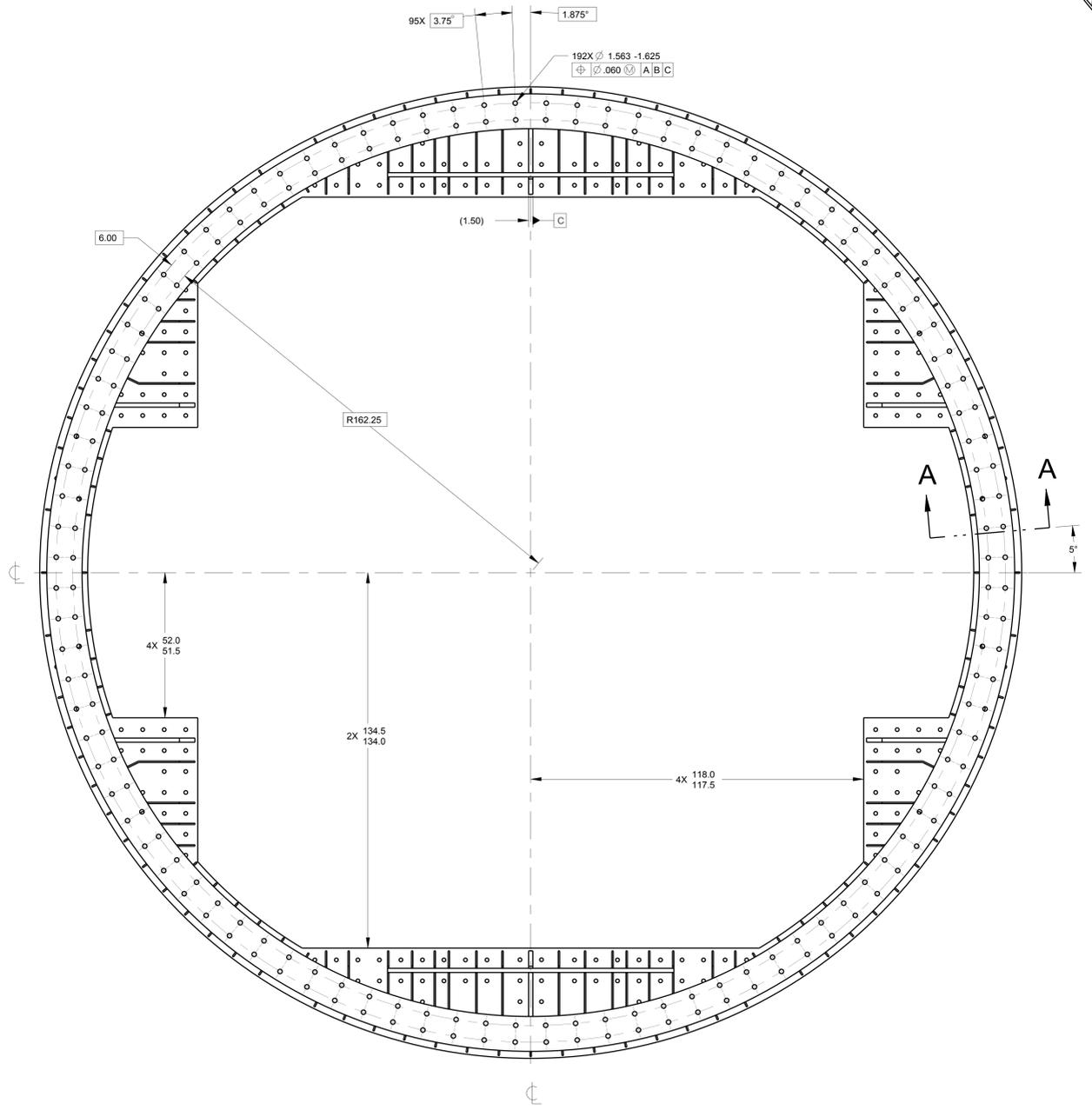


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REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



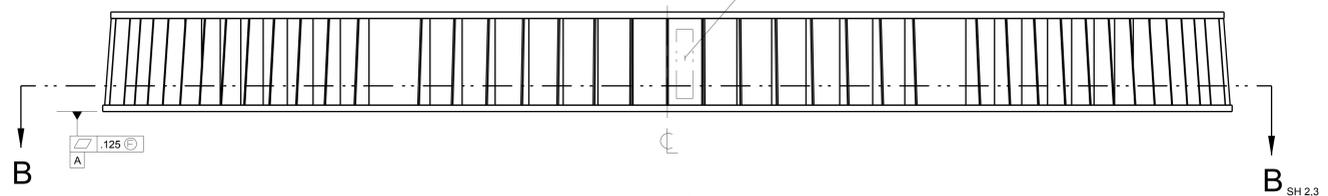
ISOMETRIC VIEW FOR REFERENCE ONLY



SECTION A-A (GUSSETS NOT SHOWN FOR CLARITY) SCALE 1/4

- UNLESS OTHERWISE SPECIFIED:
- REMOVE ALL BURRS AND BREAK ALL SHARP EDGES.
 - REMOVE MACHINED SURFACES.
 - DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5-1994.
 - STENCIL PART NUMBER IN THE APPROXIMATE LOCATION SHOWN USING A CONTRASTING COLOR AND 2.0" TALL LETTERS.
 - STEEL WELDING DESIGN, PROCEDURES, AND NON-DESTRUCTIVE EVALUATION SHALL BE PER ANSI/AWS D1.1/D1.1M, "STRUCTURAL WELDING CODE-STEEL" AND CURRENT AS OF THE RELEASE DATE OF THIS DRAWING. UTILIZE WELDING PRACTICES AND TECHNIQUES TO MINIMIZE DISTORTION. UNLESS OTHERWISE SPECIFIED, WELDS SHALL BE 100% VISUALLY INSPECTED.
 - PREPARE SURFACES PER PAINT MANUFACTURER'S RECOMMENDATIONS, ABRASIVE CLEANING WHERE NECESSARY. PRIME USING A POLYURETHANE PRIMER AND PAINT USING A POLYURETHANE ENAMEL TOP COAT. FINISH COLOR: BLUE NO. 15102 PER FED-STD-595 (OR A SIMILAR GLOSSY SHADE). DO NOT PAINT HOLES, THREADS, OR MACHINED SURFACES. REPAINT AREAS DAMAGED DURING ASSEMBLY OR INSTALLATION.

- PRELIMINARY -
THIS DRAWING HAS NOT COMPLETED THE REVIEW PROCESS AND IS SUBJECT TO CHANGE.
02-28-14
DATE



FIND NO. 1 SCALE 1/20

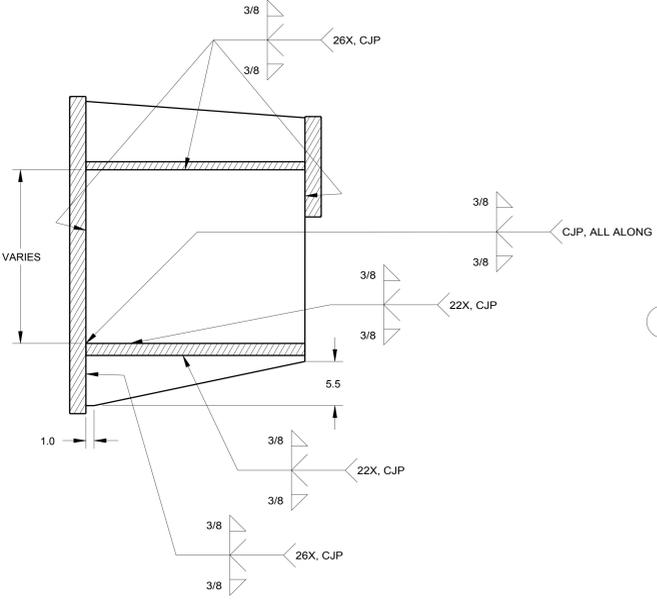
FIND NO.	CALLOUT	DETAIL	TOT	PART NO.	DESCRIPTION	VEND NO.	REMARKS
5	1	AR	P	90M14153-5	PLATE, STOCK THICKNESS AS DEEMED NECESSARY BY FABRICATOR		ASTM A572, GRADE 50 UPPER / LOWER
4	2	AR	P	90M14153-4	1.5" THICK STEEL PLATE		ASTM A572, GRADE 50 GUSSETS
3	1	AR	P	90M14153-3	1.0" THICK STEEL PLATE		ASTM A572, GRADE 50 CYLINDER
2	2	AR	P	90M14153-2	0.5" THICK STEEL PLATE		ASTM A572, GRADE 50 GUSSETS
1	1	-	A	90M14153-1	WELDMENT, UPPER REACTION RING, SLS LH2 TANK TEST		

STRESS	DATE	DESIGNER/WRITER	DATE	UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: FRACTIONS DECIMALS 1 ± 1/16 ± 0.06 16 ± 1/32 ± 0.03 XXX ± 0.010 ± ± 0.005	SPECIAL TEST EQUIPMENT DESIGN BRANCH - ET50 GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Huntsville, Alabama
MATERIALS	DATE	TEST ENGINEER/INSPECTOR	DATE		
MANUFACTURING	DATE	FIELD ENGINEER/INSPECTOR	DATE		
Safety and Health Assurance	DATE	CRW ORL SERVICE LEAD	DATE		
DESIGN TEST CONDUCTOR	DATE	ORDER	DATE	(DIMENSIONS ARE IN INCHES, DO NOT SCALE DRAWING)	WELDMENT, UPPER REACTION RING, SLS LH2 TANK TEST 90M14153
PRELIMINARY DISTRIBUTION MANAGER	DATE	PRODUCTION/PRINTING/ISSUE	DATE	DRAWN BY: CJ NONA PART NUMBER: 90M14152-1 DATE: 12-03-13	

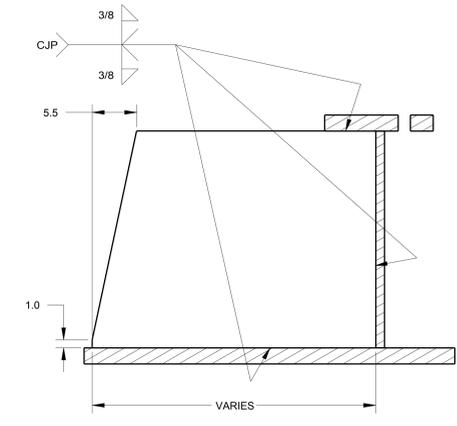
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REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL

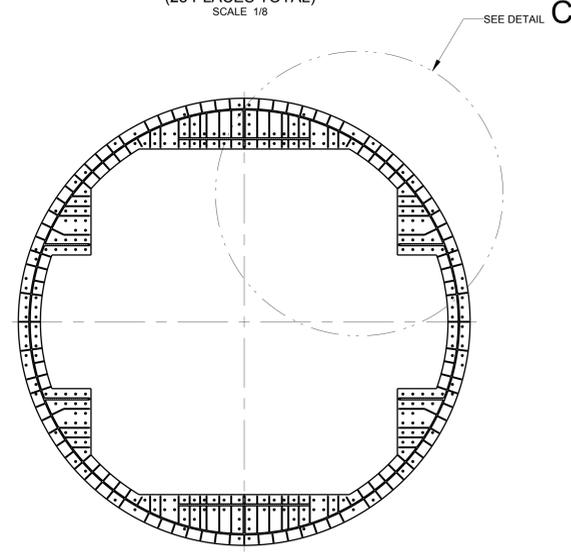
NOTE: ALL GUSSET LOCATIONS TO BE MIRRORED ABOUT Y-axis AND X-axis, AS SHOWN.



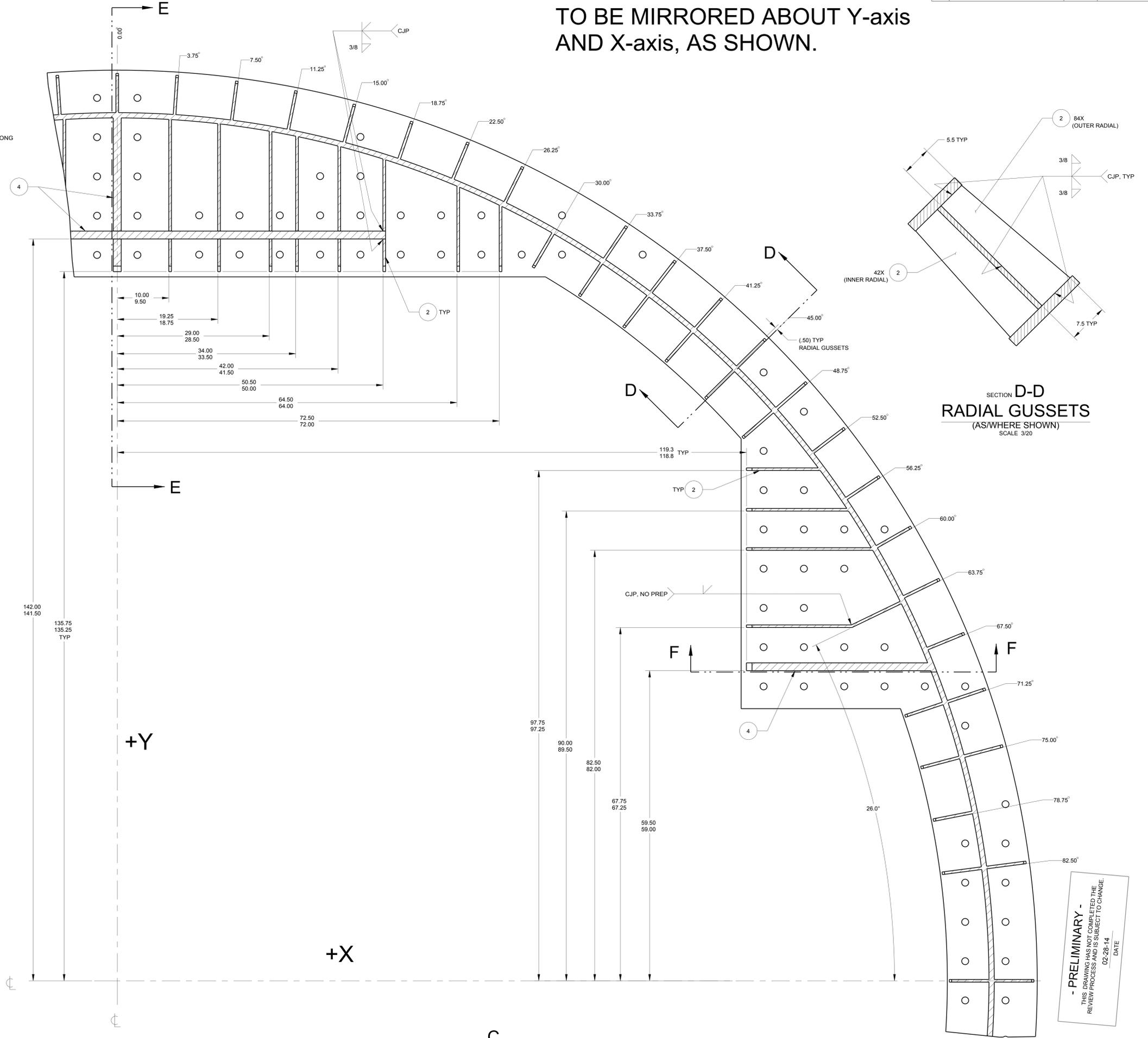
**SECTION E-E
INTERSECTED GUSSETS**
SCALE 1/8



**SECTION F-F
NON-RADIAL GUSSETS**
(28 PLACES TOTAL)
SCALE 1/8



SECTION B-B SH 1
SCALE 1/50



**SECTION D-D
RADIAL GUSSETS**
(AS/WHERE SHOWN)
SCALE 3/20

DETAIL C
SCALE 3/20

- PRELIMINARY -
THIS DRAWING HAS NOT COMPLETED THE REVIEW PROCESS AND IS SUBJECT TO CHANGE.
DATE: 02-28-14

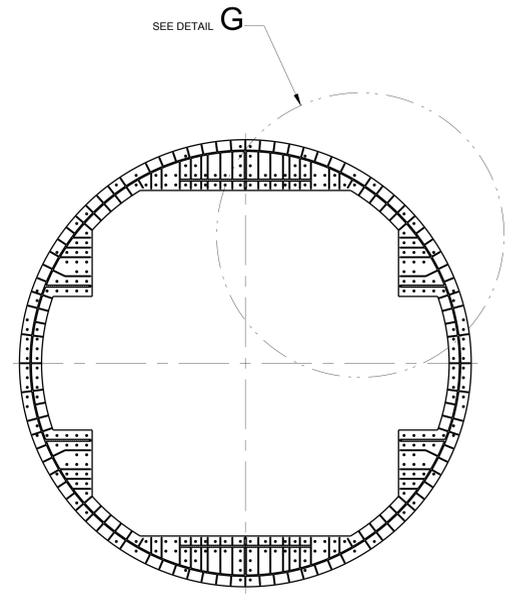
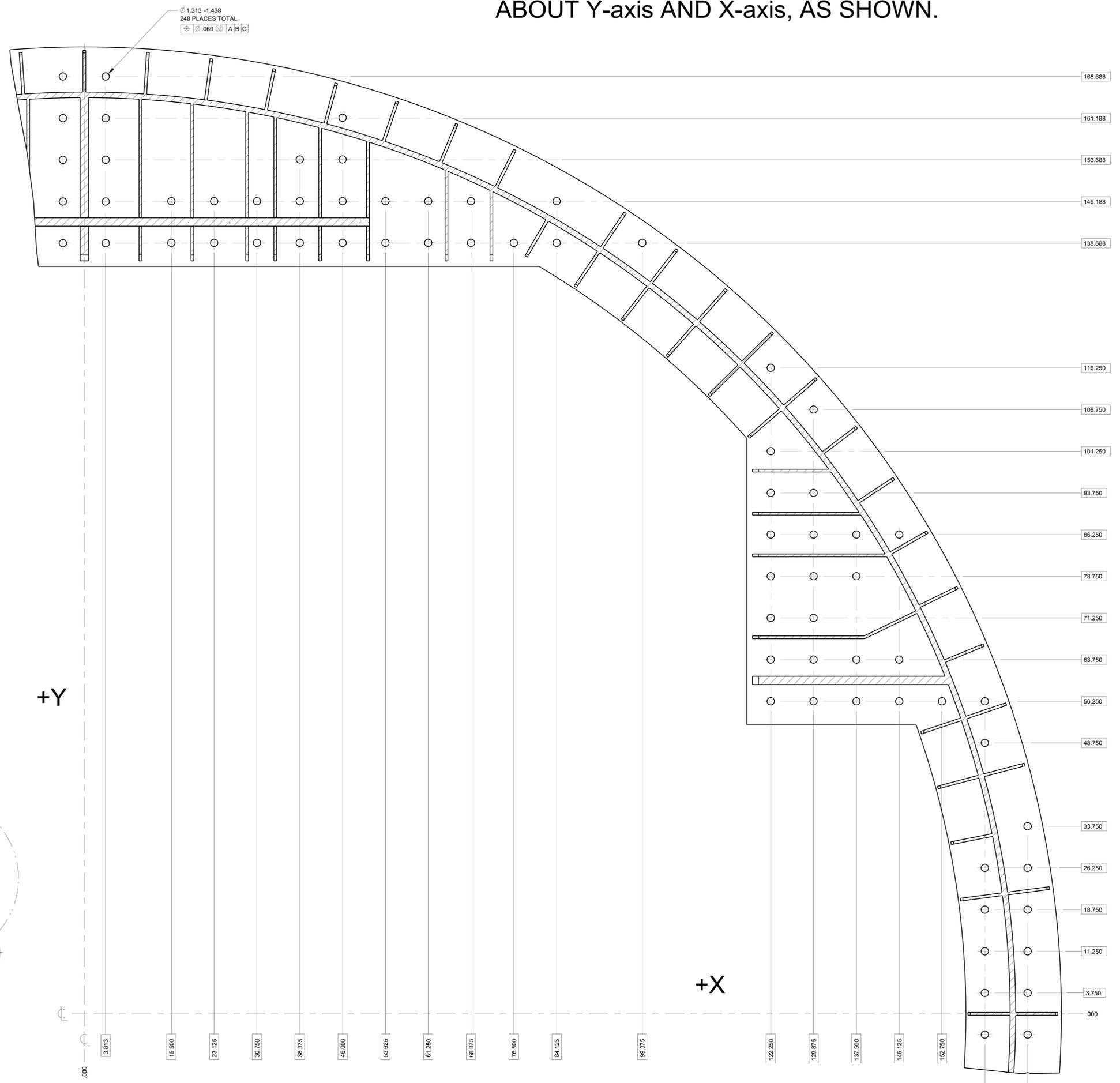
**WELDMENT,
UPPER REACTION RING,
SLS LH2 TANK TEST**

SPECIAL TEST EQUIPMENT DESIGN BRANCH - ET50 GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Huntsville, Alabama	REVISION 90M14153 SEE SHT 1
DATE: 02-28-14	DATE: 02-28-14
2	3

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SYM	DESCRIPTION	DATE	APPROVAL

NOTE: ALL DIMENSIONED HOLES TO BE MIRRORED ABOUT Y-axis AND X-axis, AS SHOWN.



SECTION **B-B** SH 1
SCALE 1/50

DETAIL **G**
SCALE 3/20

- PRELIMINARY -
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02-28-14
DATE

WELDMENT,
UPPER REACTION RING,
SLS LH2 TANK TEST

SPECIAL TEST EQUIPMENT
DESIGN BRANCH - ET50
GEORGE C. MARSHALL
SPACE FLIGHT CENTER
NATIONAL AERONAUTICS
AND SPACE ADMINISTRATION
Huntsville, Alabama

90M14153

REVISION
SEE
SHT11

DATE: E 3 3