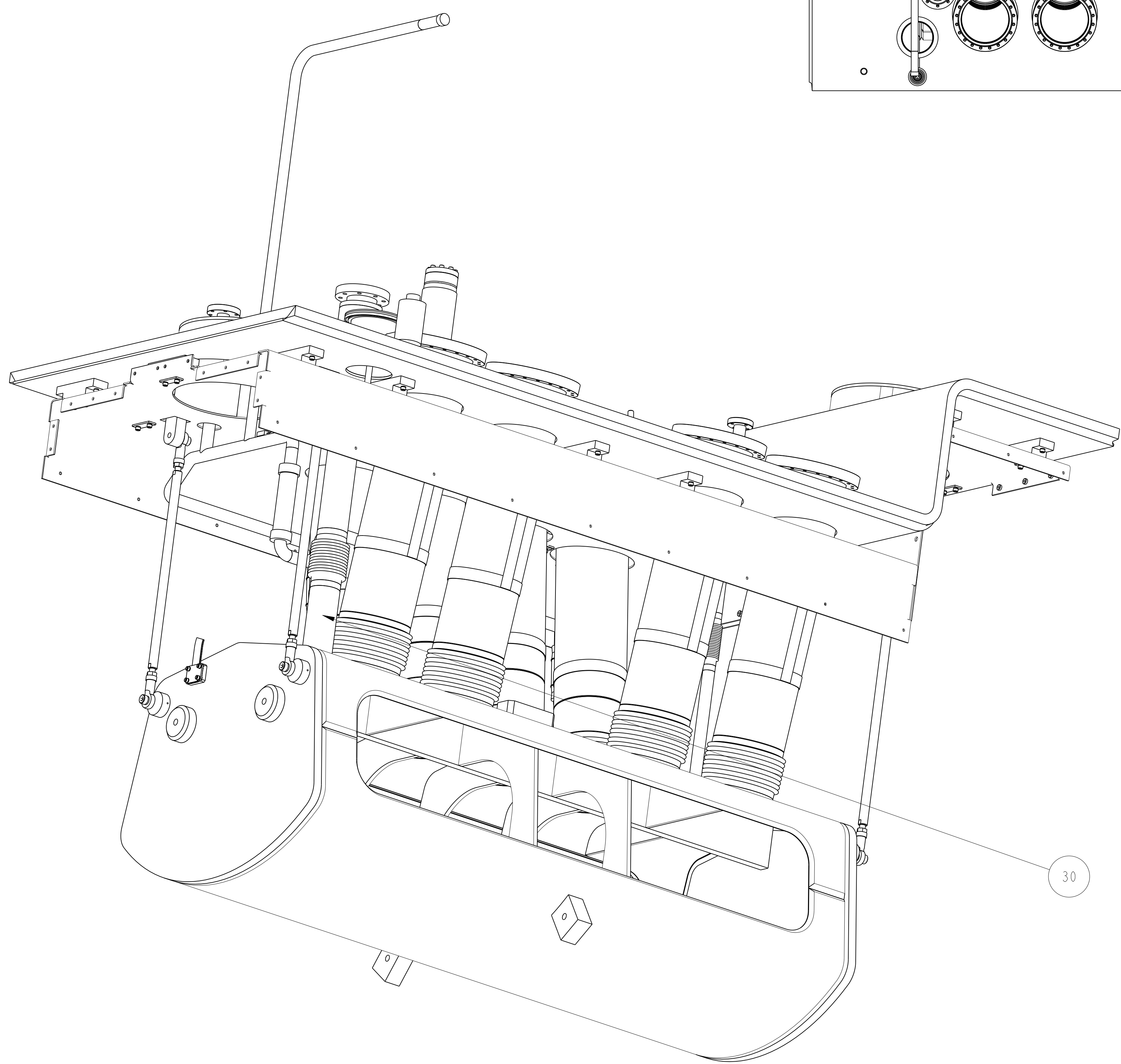
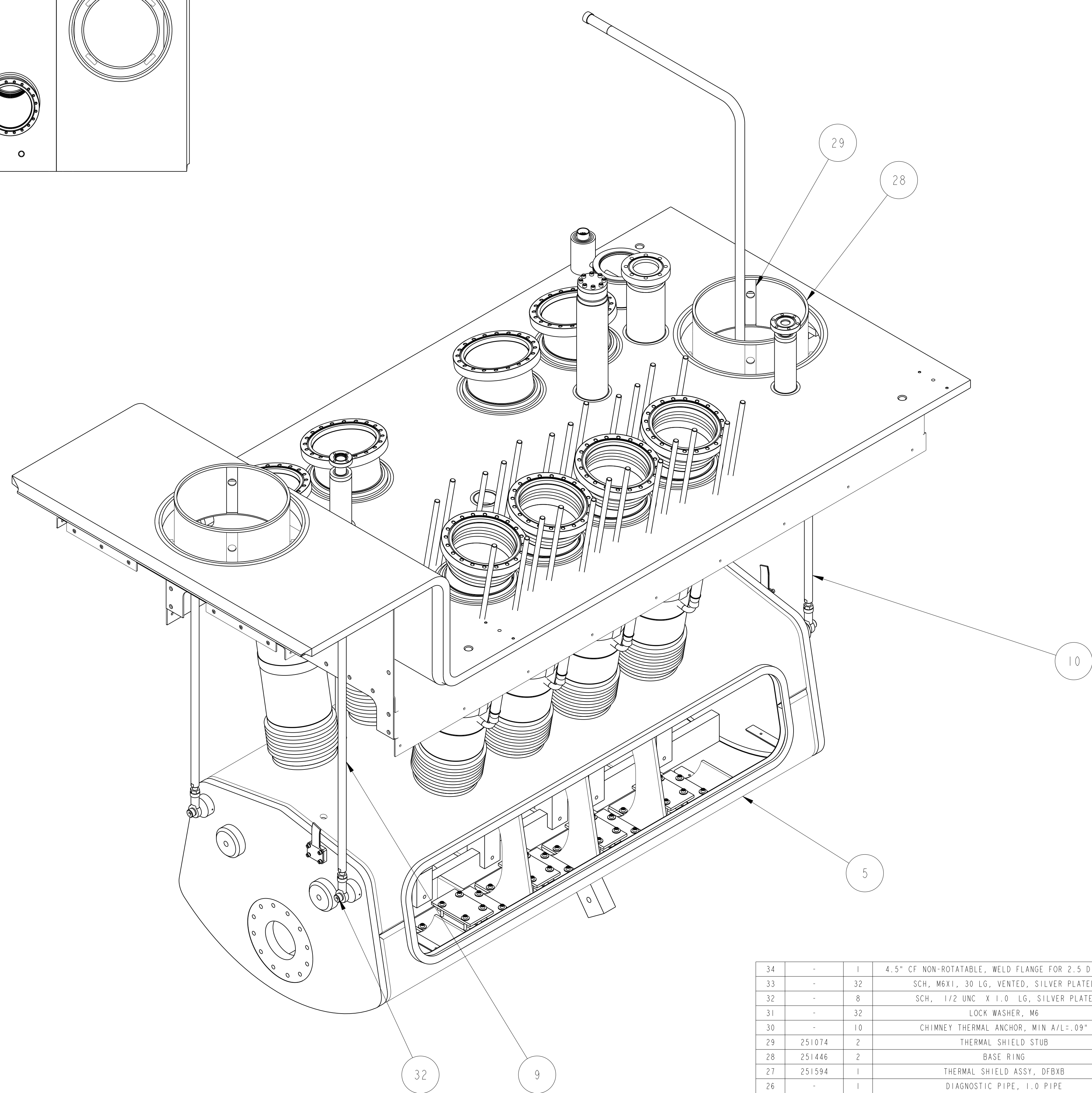


SCALE 1/8



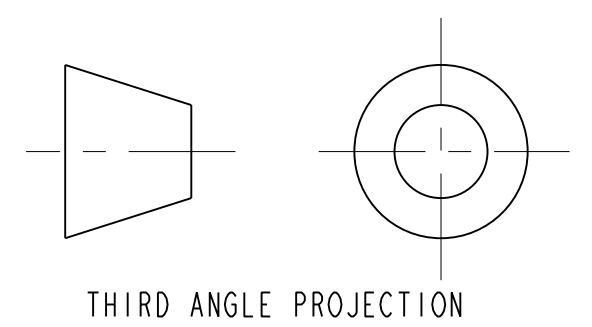
SCALE 3/16



SCALE 3/16

- NOTES: UNLESS OTHERWISE SPECIFIED,
- DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1982 UNITS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
  - USE OF SULFUR OR SILICONE BEARING OILS, LUBRICANTS, OR COOLANTS ARE STRICTLY PROHIBITED.
  - USE OF RESIN OR RUBBER BONDED ABRASIVES UNDER POWER IS STRICTLY PROHIBITED. USE VITREOUS BONDED ABRASIVES ONLY.
  - CLEAN AFTER MACHINING PER VENDOR SPECIFICATION; SUBJECT TO LBNL APPROVAL.
  - VENDOR SUGGESTED CHANGES TO WELD PREPS; SUBJECT TO LBNL APPROVAL.
  - PROTECT FINISHED PART BY BAGGING OR SIMILAR METHOD TO PROTECT AND MAINTAIN CLEANLINESS DURING SHIPMENT AND STORAGE.
  - VENDOR SUGGESTED CHANGES TO TOLERANCES TO FACILITATE ASSEMBLY; SUBJECT TO LBNL APPROVAL.
  - DIMENSIONS SHOWN IN THE INSPECTION OVAL ARE REFERENCED IN THE FABRICATION TRAVELLER.
  - ALL COMPONENTS TO BE INSULATED PER MLI SPECIFICATION PROVIDED BY THE VENDOR. SUBJECT TO LBNL APPROVAL.

| ITEM | PART NO. | RECD | DESCRIPTION   | MATERIAL           |
|------|----------|------|---|--------------------|
| 34   | -        | 1    | 4.5" CF NON-ROTATABLE, WELD FLANGE FOR 2.5 DIA PIPE | SS 304L            |
| 33   | -        | 32   | SCH. 8X1, 30 LG. VENTED, SILVER PLATED              | SS 18-8            |
| 32   | -        | 8    | SCH. 1/2 UNC. X 1.0 LG. SILVER PLATE                | SS 18-8            |
| 31   | -        | 32   | LOCK WASHER, M6                                     | SS                 |
| 30   | -        | 10   | CHIMNEY THERMAL ANCHOR, MIN A/L: .09"               | COPPER, OFHC, C101 |
| 29   | 251074   | 2    | THERMAL SHIELD STUB                                 | COPPER, OFHC, C101 |
| 28   | 251446   | 2    | BASE RING   | COPPER, OFHC, C101 |
| 27   | 251594   | 1    | THERMAL SHIELD ASSY, DFBXB                          | CD401              |
| 26   | -        | 1    | DIAGNOSTIC PIPE, 1.0 PIPE                           | 304L SS            |
| 25   | -        | 1    | CONFLAT, NON-ROTATABLE, 2"                          | 304L SS            |
| 24   | -        | 1    | VENT SLEEVE 3"PIPE                                  | 304L SS            |
| 23   | 25M85    | 10   | WELD FLANGE, CHIMNEY TUBE                           | 304L SS            |
| 22   | 25M84    | 1    | VENT SLEEVE CAP                                     | 304L SS            |
| 21   | 25M55    | 2    | DN SLEEVE CAP                                       | 304L SS            |
| 20   | -        | 2    | 2.0" TUBE X 6.78 LG                                 | 304L SS            |
| 19   | 25M19    | 16   | PLATE, 2 HOLE                                       | 304L SS            |
| 18   | -        | 1    | TUBE, 2.5 OD X .049 WALL                            | 300 SERIES SS      |
| 17   | 25M17    | 1    | BELLOWS, 2.5 BORE, HYSPAN FILE H-1339-2             | 300 SERIES SS      |
| 16   | 25M16    | 1    | BELLOWS, 1.0 BORE                                   | 300 SERIES SS      |
| 15   | 25M16    | 1    | BELLOWS, 1.0 BORE, HYSPAN FILE H-1339-1             | 300 SERIES SS      |
| 14   | 251334   | 4    | M12 X 1.75 ROD, 9.04 LG                             | 18-8 SS            |
| 13   | 251333   | 8    | M12 X 1.75 ROD, 9.22 LG                             | 18-8 SS            |
| 12   | 251332   | 4    | M12 X 1.75 ROD, 10.75 LG                            | 18-8 SS            |
| 11   | 251331   | 8    | M12 X 1.75 ROD, 10.54 LG                            | 18-8 SS            |
| 10   | 25M51    | 2    | SHORT VERTICAL SUPPORT ASSEMBLY                     | -                  |
| 9    | 25M50    | 2    | LONG VERTICAL STRUT ROD ASSEMBLY                    | -                  |
| 8    | 251634   | 1    | DN VENT PIPE  | -                  |
| 7    | 251152   | 1    | TOP PLATE WELDMENT IPI RIGHT                        | -                  |
| 6    | 251161   | 1    | CHECK VALVE ASSY                                    | -                  |
| 5    | 251574   | 1    | LIQUID HELIUM TANK - B PORT RIGHT                   | -                  |
| 4    | 251327   | 4    | HTS CHIMNEY ASSY TOP                                | -                  |
| 3    | 251177   | 1    | 4 1/2" PUMPING PORT, CRYOGENIC DIAGNOSTIC ASSY.     | -                  |
| 2    | 251175   | 4    | VAPOR COOLED LEAD CHIMNEY ASSY                      | -                  |
| 1    | 251174   | 4    | HTS CHIMNEY ASSY LOWER                              | -                  |



THIRD ANGLE PROJECTION

| REV | DWG    | CHK | ZONE | DATE    | INITIALS | DESCRIPTION     |
|-----|--------|-----|------|---------|----------|-----------------|
| A   | JDRDPO |     |      | 10/7/02 |          | INITIAL RELEASE |

| UNLESS OTHERWISE SPECIFIED                       | SHOP ORDERS | SCALE |
|--|-------------|-------|
| TOLERANCES: X.X ± 0.1 FRACTION ± 1/64            | NO          | 1/4   |
| X.XX ± 0.03 ANGLES ± 1.00°                       | NO          |       |
| X.XXX ± 0.010 FINISH 125 μm                      | NO          |       |
| DO NOT SCALE PRINT                               | NO          |       |
| THREAD ANG CLASS 1                               | NO          |       |
| CHAMFER ENDS OF ALL SCREW THREADS 30°            | NO          |       |
| OUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS | NO          |       |
| BREAK EDGES .016 MAX. ON MACHINED WORK           | NO          |       |
| REMOVE BURRS, WELD SPATTER A LOOSE SCALE         | NO          |       |
| IN ACCORDANCE WITH ADP 114 SM 1 EN 1             | NO          |       |

**ERNEST ORLANDO LAWRENCE**  
**BERKELEY NATIONAL LABORATORY**  
 UNIVERSITY OF CALIFORNIA - BERKELEY

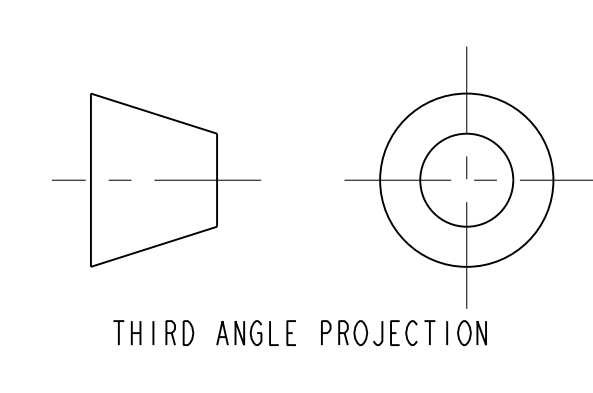
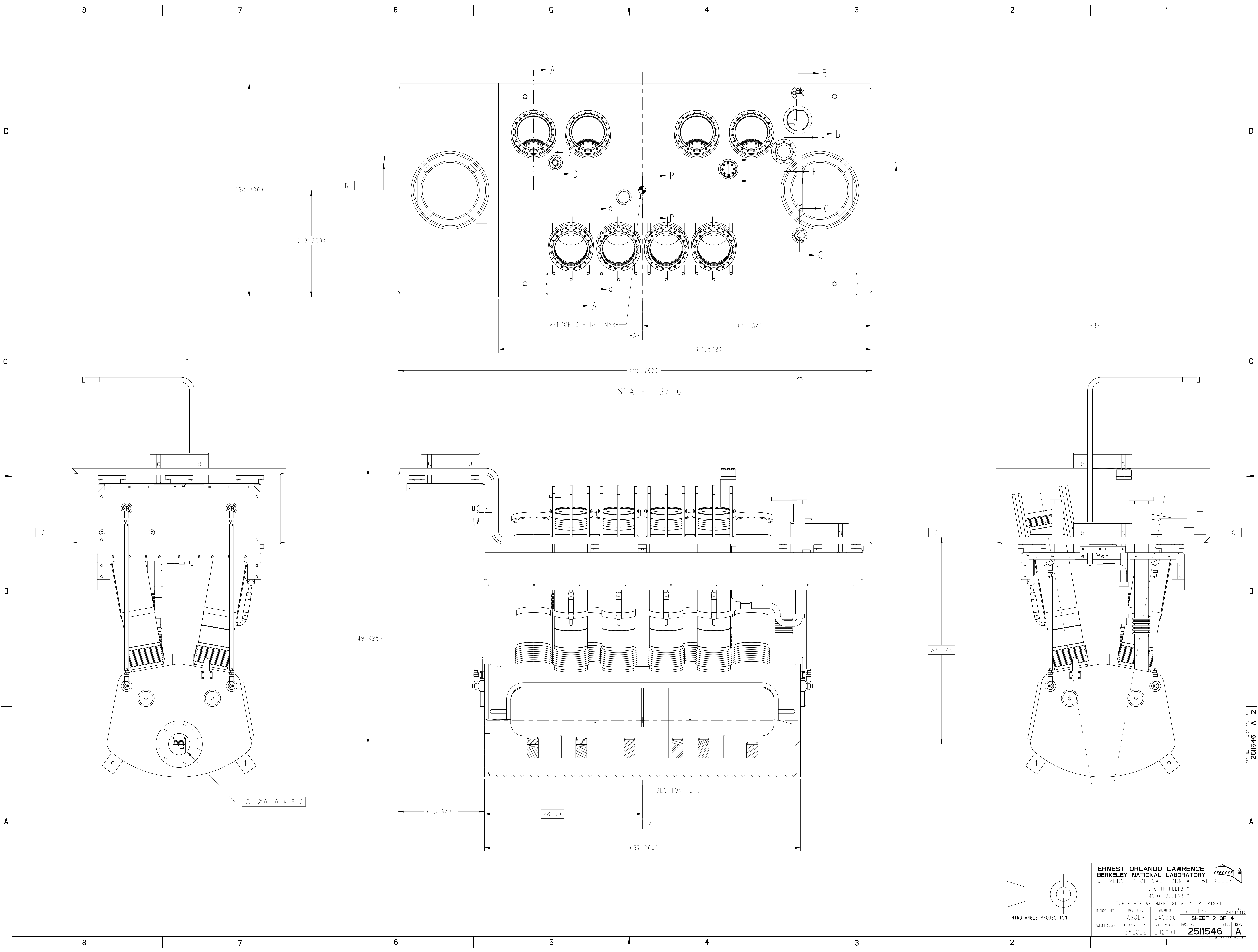
LHC IR FEEDBOX  
 MAJOR ASSEMBLY  
 TOP PLATE WELDMENT SUBASSY IPI RIGHT

SCALE: 1/4  
 SHEET 1 OF 4

DATE: 29-Sep-02  
 DATE: 04-APR-02  
 DATE: 04-APR-02

DESIGN ACCT. NO: 24C350  
 CATEGORY CODE: LH2001

DWG. NO: 2511546



|                                      |                  |                |          |                                   |      |
|--------------------------------------|------------------|----------------|----------|-----------------------------------|------|
| ERNEST ORLANDO LAWRENCE              |                  |                |          | UNIVERSITY OF CALIFORNIA BERKELEY |      |
| LHC IR FEEDBOX                       |                  |                |          | MAJOR ASSEMBLY                    |      |
| TOP PLATE WELDMENT SUBASSY IPI RIGHT |                  |                |          |                                   |      |
| MICROFILMED:                         | DWG. TYPE:       | SHOWN ON:      | SCALE:   | DO NOT SCALE PRINTS               |      |
|                                      | ASSEM            | 24C350         | 1/4      |                                   |      |
| PATENT CLEAR:                        | DESIGN ACCT. NO. | CATEGORY CODE: | DWG. NO. | SIZE                              | REV. |
|                                      | Z5LCE2           | LH2001         | 2511546  | A                                 |      |

DWG. NO. 2511546

SHEET 2 OF 4

REV. A

DATE

BY

CHECKED

APPROVED

DATE

BY

CHECKED

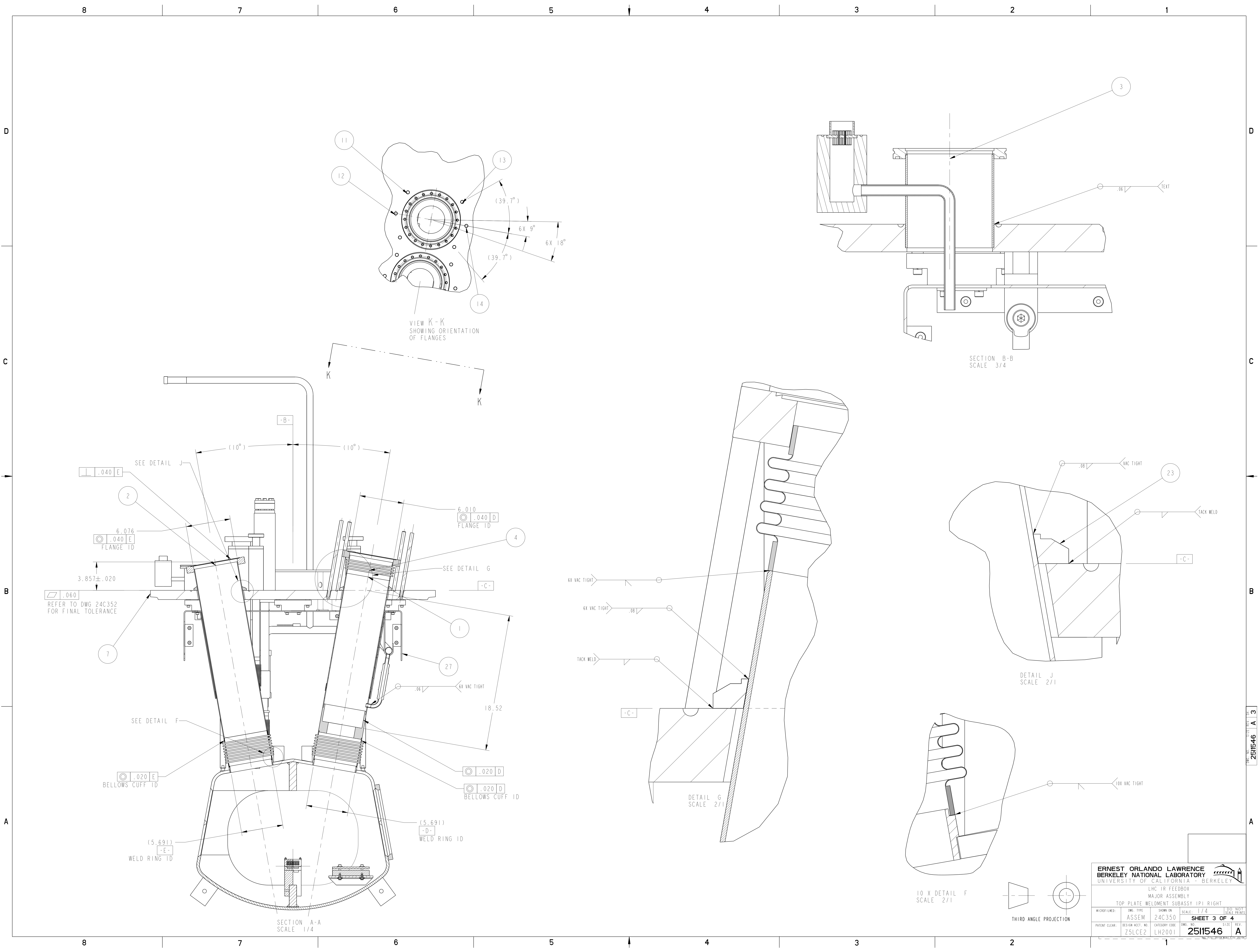
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DATE

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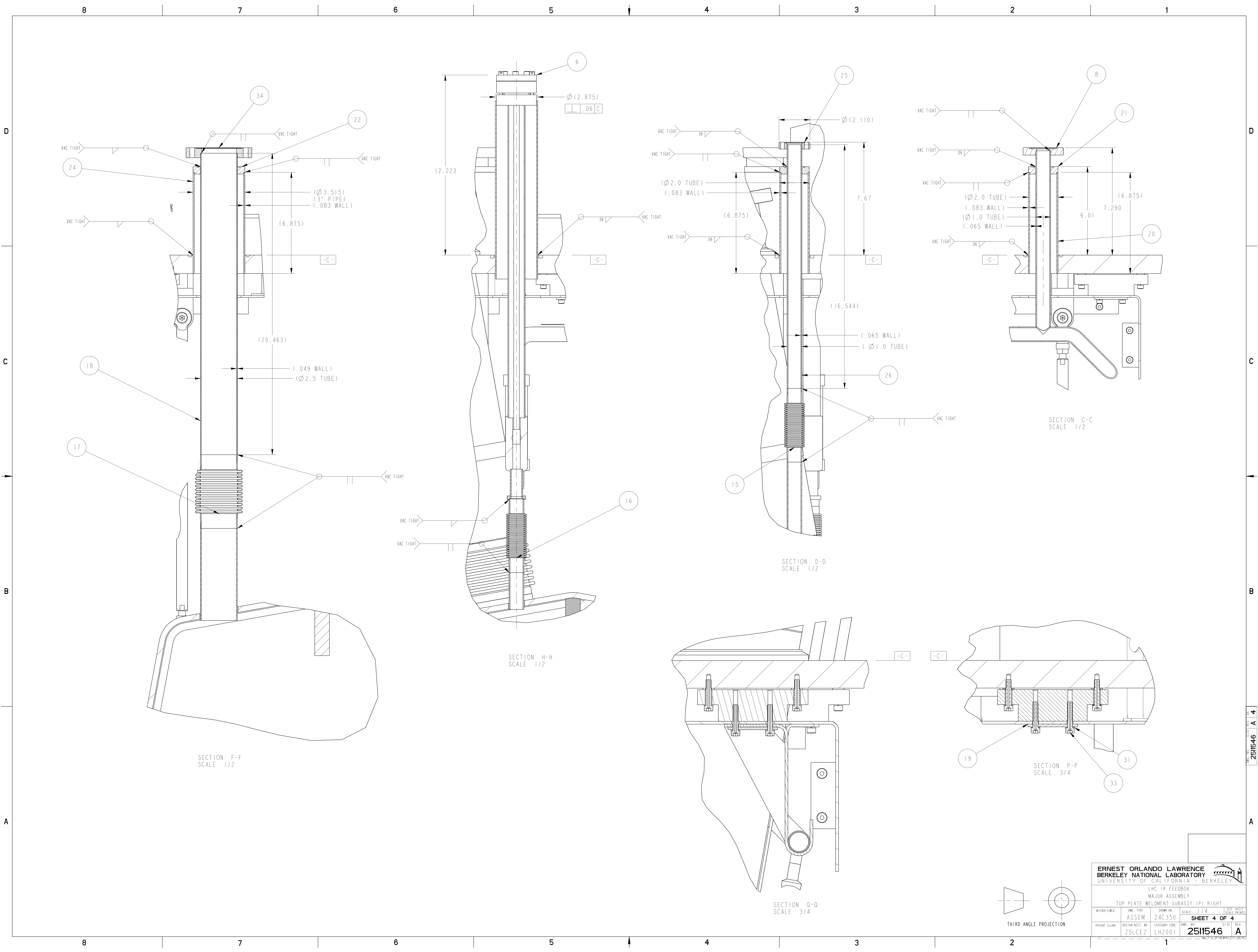
CHECKED

APPROVED



|  |                  |                |                     |
|--|------------------|----------------|---------------------|
| <b>ERNEST ORLANDO LAWRENCE</b><br>UNIVERSITY OF CALIFORNIA - BERKELEY    |                  |                |                     |
| LHC IR FEEDBOX<br>MAJOR ASSEMBLY<br>TOP PLATE WELDMENT SUBASSY IPI RIGHT |                  |                |                     |
| MICROFILMED:   | DWG. TYPE:       | SHOW ON:       | SCALE:              |
|  | ASSEM            | 24C350         | 1/4                 |
| PATENT CLEAR:  | DESIGN ACCT. NO. | CATEGORY CODE: | DWG. NO.            |
|  | Z5LCE2           | LH2001         | 2511546             |
|  |                  |                | DO NOT SCALE PRINTS |
|  |                  |                | SHEET 3 OF 4        |
|  |                  |                | SIZE REV. A         |

DWG. NO. 2511546  
 SHEET 3 OF 4  
 A



SECTION F-F  
SCALE 1/2

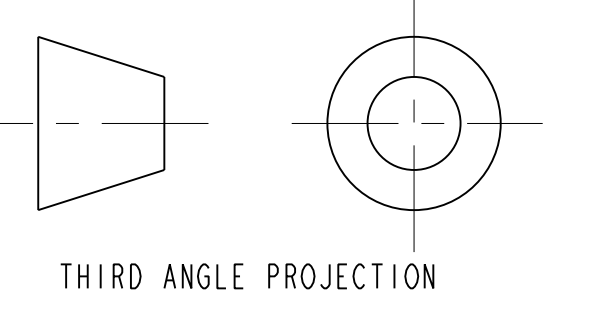
SECTION H-H  
SCALE 1/2

SECTION D-D  
SCALE 1/2

SECTION C-C  
SCALE 1/2

SECTION P-P  
SCALE 3/4

SECTION Q-Q  
SCALE 3/4



|  |            |                                |           |
|--|------------|--------------------------------|-----------|
| <b>ERNEST ORLANDO LAWRENCE</b><br>UNIVERSITY OF CALIFORNIA - BERKELEY    |            |                                |           |
| LHC IR FEEDBOX<br>MAJOR ASSEMBLY<br>TOP PLATE WELDMENT SUBASSY IPI RIGHT |            |                                |           |
| MICROFILMED:   | DWG. TYPE: | SHOWN ON:                      | SCALE:    |
|  | ASSEM      | 24C350                         | 1/4       |
| PATENT CLEAR:  |            | DESIGN ACCT. NO:               | DWG. NO.: |
|  |            | Z5LCE2                         | LH2001    |
|  |            | <b>2511546</b><br>SHEET 4 OF 4 |           |
|  |            | SIZE:                          | REV.:     |
|  |            | A                              | A         |

2511546  
 SHEET 4 OF 4