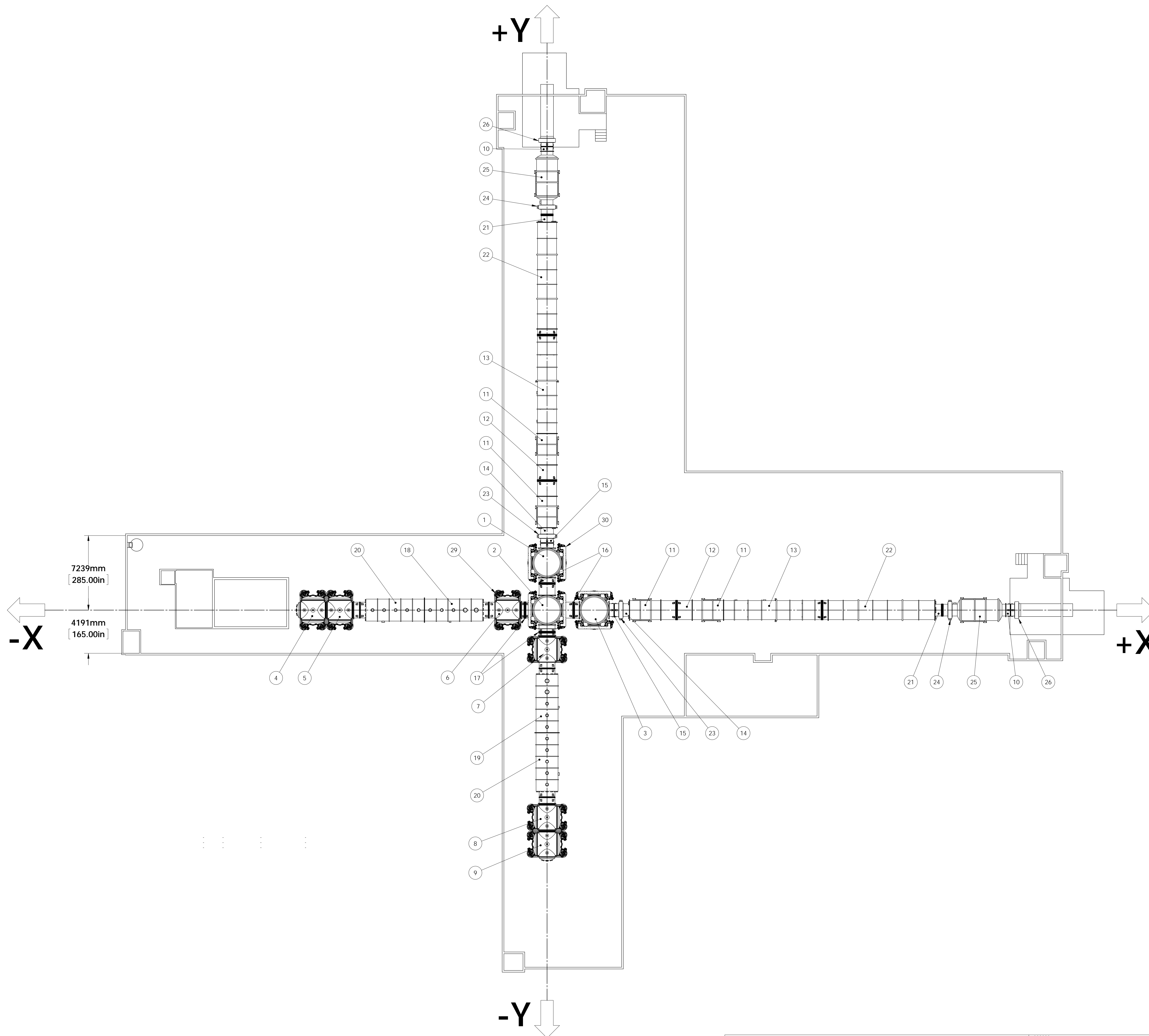


REV.	DATE	DCN #	DRAWING TREE #
v1	25 AUG 2009		
v2	18 JUN 2012		
-	-		



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
32	D0902617	MANIFOLD CRYO BAFFLE TOP ASSY, ITM	N/A	2
31	D1000774	MODE CLEANER TUBE BAFFLE TOP ASSEMBLY	--	1
30	D1000513	HEPI ASSEMBLY, BSC aLIGO	SEE BOM	3
29	D1000514	HEPI ASSEMBLY, HAM, aLIGO SEI	SEE BOMS	6
28	D1002462	AdvLIGO SYSTEMS, H1 & L1 Output Septum Plate Assembly		1
27	D1002461	ADV LIGO SYSTEMS, H1 & L1 INPUT SEPTUM PLATE ASSEMBLY		1
26	D970416	ANNULUS TUBING & ION PUMP ASSY, 4" GATE VALVE (NO SUPPORT), LIGO VE	Material not specified	2
25	D961095	80K PUMP GENERAL ARRANGEMENT-LONG-LEFT, LIGO VE	N/A	2
24	D970416	ANNULUS TUBING & ION PUMP ASSY, 44" GATE VALVE, LIGO VE	N/A	2
23	D970450	ANNULUS TUBING & ION PUMP ASSY, 48" GATE VALVE, LIGO VE	N/A	2
22	D961159	SPOOL B-9, LIGO Vacuum Equipment		2
21	D961140	Adapter A-1, LIGO Vacuum Equipment		2
20	D0902632	ADLIGO MCA TUBE SECTION	AlSi 304	2
19	D1000870	ADLIGO MCB Tube Section MCB2	AlSi 304	1
18	D1000870	ADLIGO MCB Tube Section MCB2	AlSi 304	1
17	D961162	OFFSET SPOOL BE-3, 60.50"ID X 60.50" ID, LIGO VACUUM EQUIPMENT	N/A	2
16	D961160	SPOOL BE-2, 60.50"ID, LIGO VACUUM EQUIPMENT	N/A	2
15	D961141	ADAPTER A-3, 48.25"ID X 60.50" ID, LIGO VACUUM EQUIPMENT	N/A	2
14	D970378	ADAPTER A-2, 48.25"ID X 72.25"ID, LIGO VACUUM EQUIPMENT	N/A	2
13	D961164	SPOOL BE-5, 72.25"ID X 72.25"ID, LIGO VACUUM EQUIPMENT	N/A	2
12	D970381	SPOOL BE-1, 72.25"ID, LIGO VACUUM EQUIPMENT	N/A	2
11	D961150	SPOOL B-A, 72.25" ID, LIGO VACUUM EQUIPMENT	N/A	4
10	D961163	SPOOL BE-4, 44.63" ID, LIGO VE	N/A	2
9	D0901812	AdvLIGO VE HAM6-L1, Vacuum Equipment Assembly	--	1
8	D0900457	AdvLIGO VE HAM5-L1, Vacuum Equipment Assembly	--	1
7	D0900422	AdvLIGO VE HAM4-L1, VACUUM EQUIPMENT ASSEMBLY	--	1
6	D0900521	AdvLIGO VE HAM3-L1, Vacuum Equipment Assembly	--	1
5	D0900366	AdvLIGO VE HAM2-L1, Vacuum Equipment Assembly	--	1
4	D0901810	AdvLIGO VE HAM1-L1, Vacuum Equipment Assembly	--	1
3	D0900493	AdvLIGO VE BSC3-L1, Vacuum Equipment Assembly	N/A	1
2	D0900429	AdvLIGO VE BSC2-L1, Vacuum Equipment Assembly	--	1
1	D0900443	AdvLIGO VE BSC1-L1, Vacuum Equipment Assembly	--	1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

- INTERPRET DRAWING PER ASME Y14.5-1994.
- REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

DIMENSIONS ARE IN: XX ±, XXX ±, ANGULAR ± °

MATERIAL: N/A, FINISH: N/A μinch

California Institute of Technology  
Massachusetts Institute of Technology

Part Name: AdvLIGO Vacuum Equipment Layout, LLO Corner Station

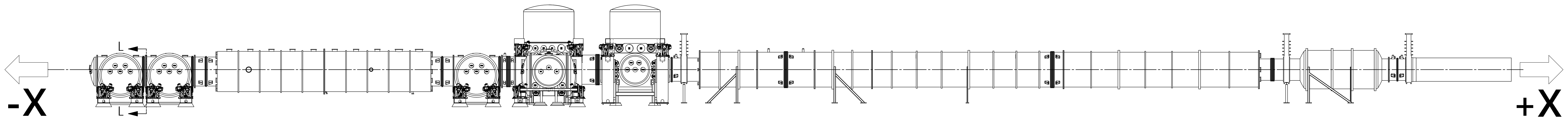
System: \_\_\_\_\_ Sub-System: \_\_\_\_\_

Designer: \_\_\_\_\_ Drafter: ED CHAVEZ, 18 JUN 2012, Checker: \_\_\_\_\_ Approver: \_\_\_\_\_

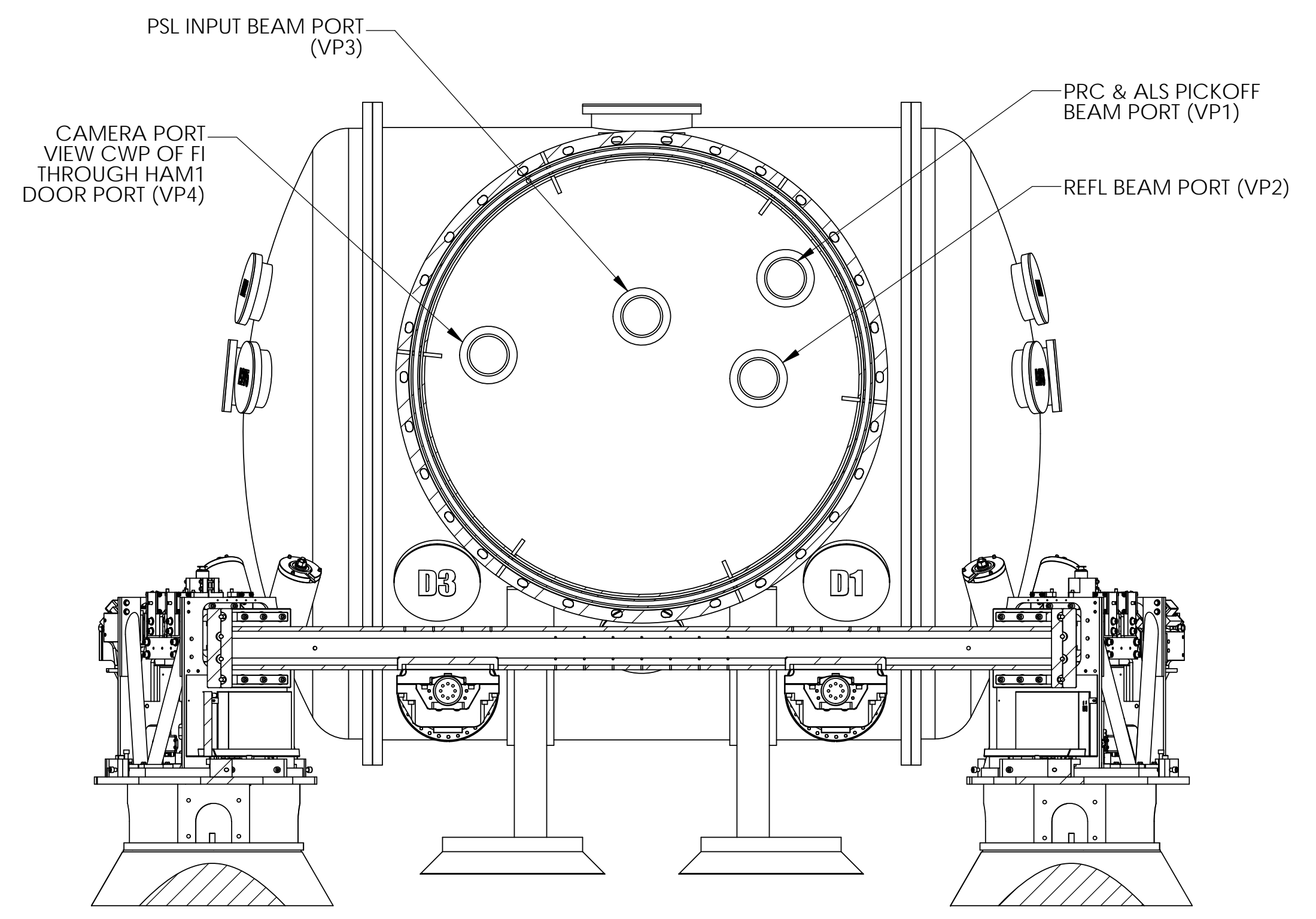
Scale: 1:384, Projection: \_\_\_\_\_

Item No. 1, Part Number D0901859, Description: \_\_\_\_\_, Material: \_\_\_\_\_, Qty: 1

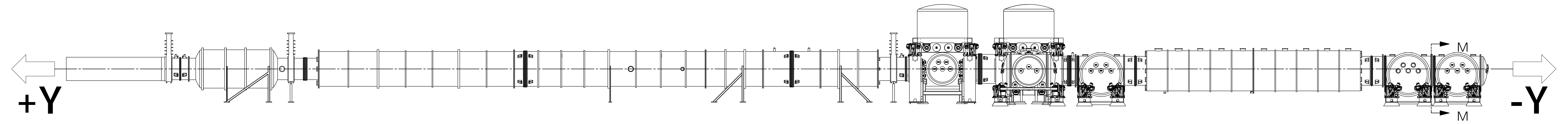
Sheet 1 of 7



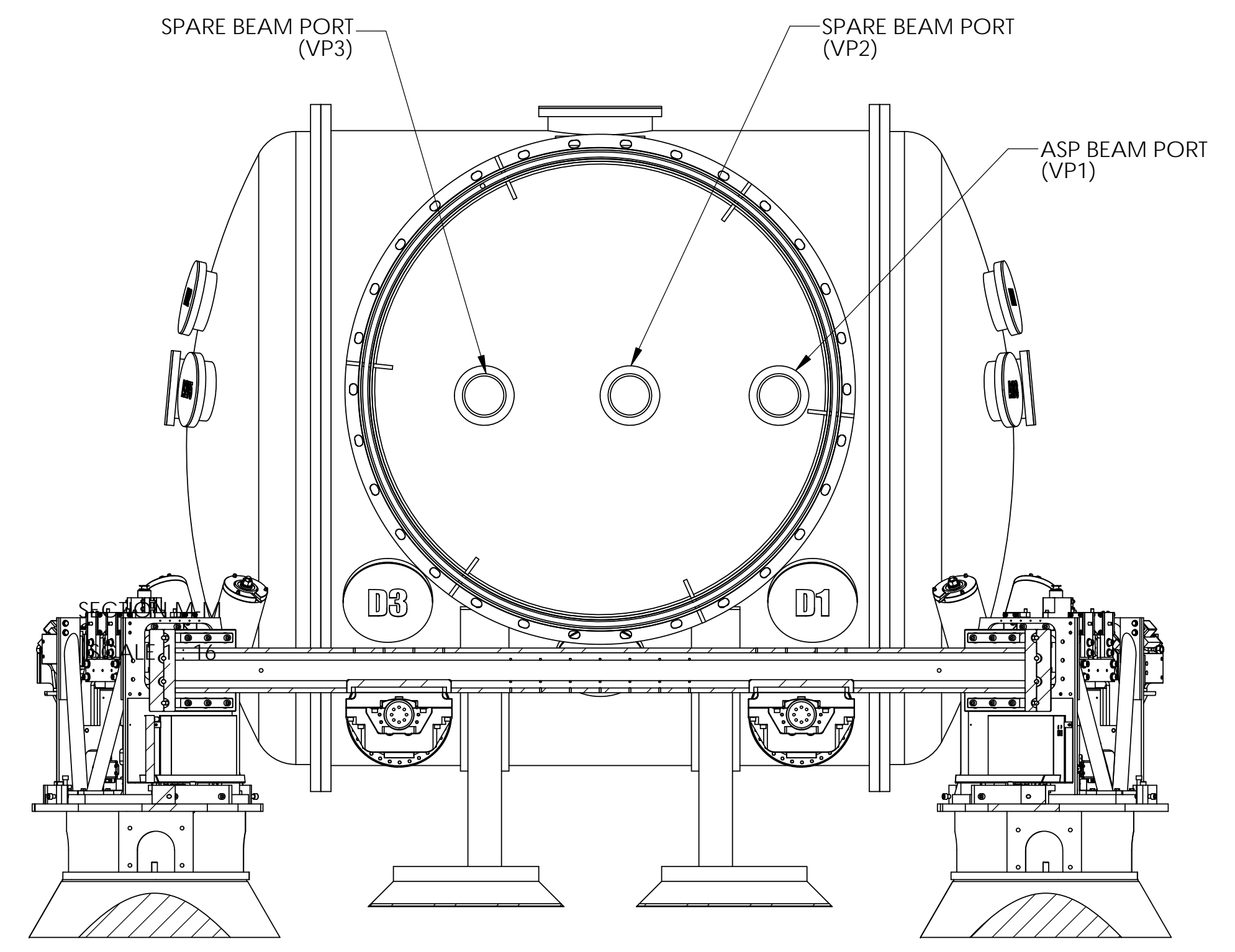
**FRONT VIEW  
"X" ARM**



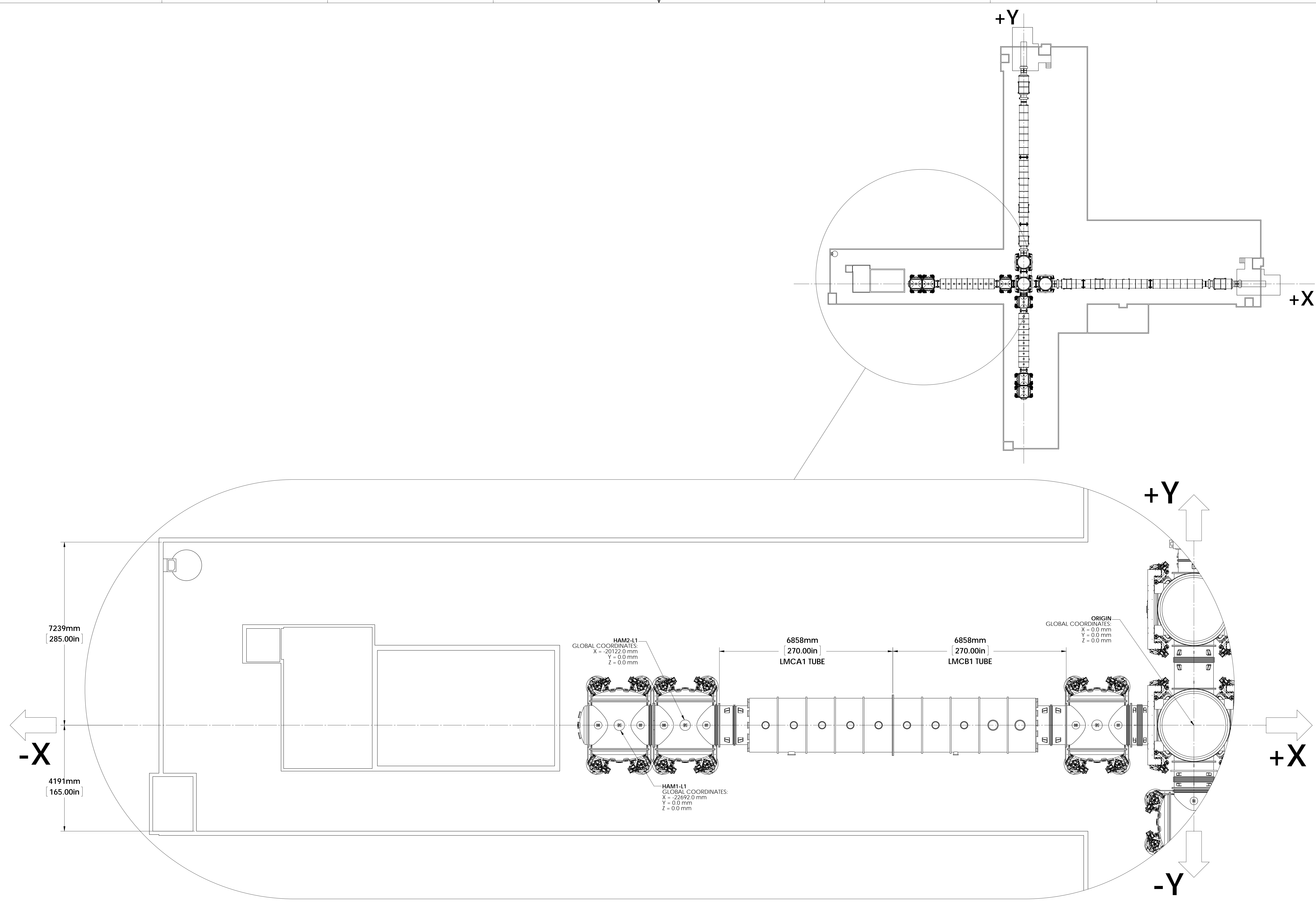
**INPUT SEPTUM PLATE  
DETAIL VIEW "L-L"**



**LEFT VIEW  
"Y" ARM**



**OUTPUT SEPTUM PLATE  
DETAIL VIEW "M-M"**



**DETAIL "A"**  
**-X ARM LLO**

HAM2-L1  
 GLOBAL COORDINATES:  
 X = -20122.0 mm  
 Y = 0.0 mm  
 Z = 0.0 mm

HAM1-L1  
 GLOBAL COORDINATES:  
 X = -22692.0 mm  
 Y = 0.0 mm  
 Z = 0.0 mm

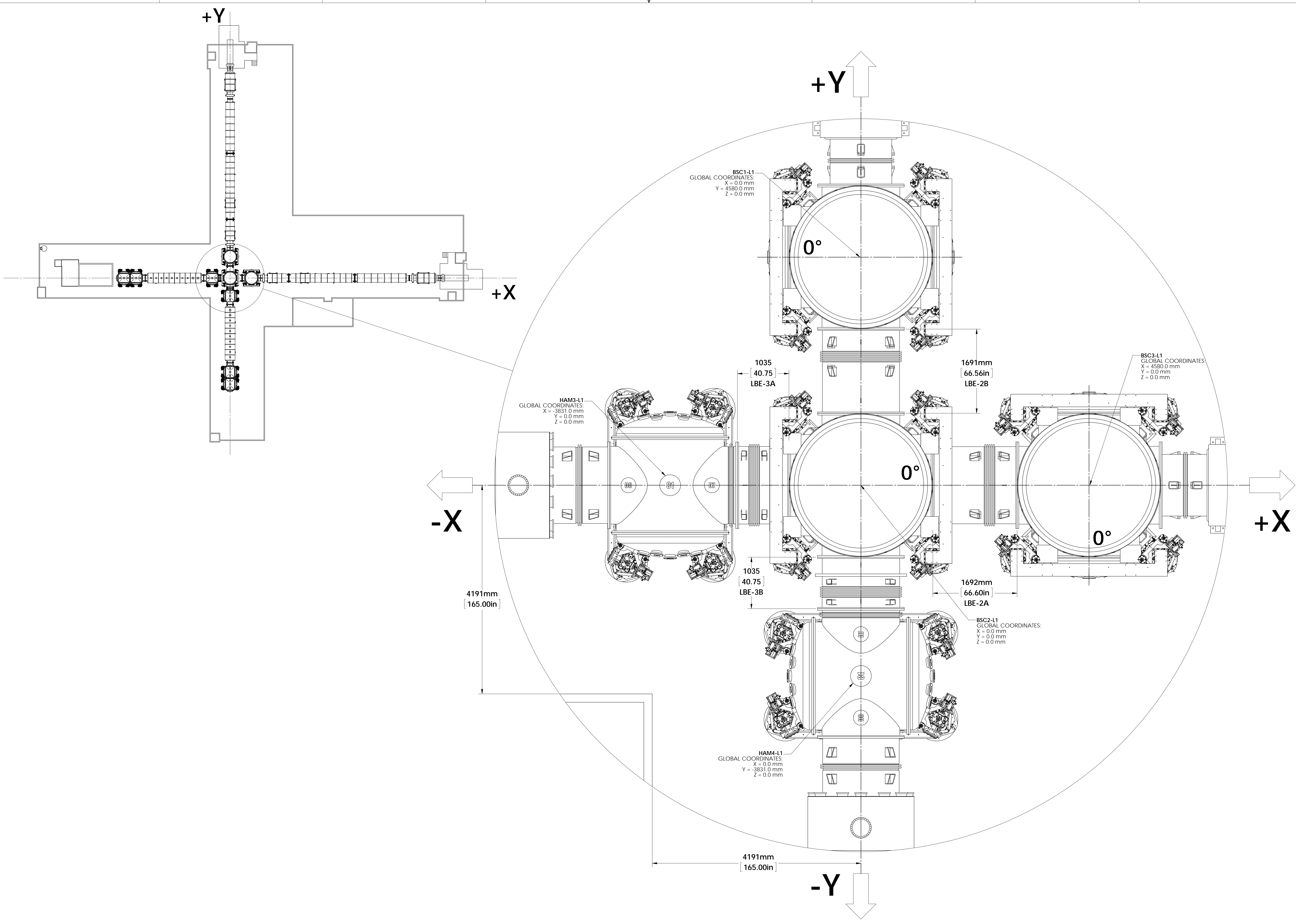
6858mm  
 [270.00in]  
 LMCA1 TUBE

6858mm  
 [270.00in]  
 LMCA1 TUBE

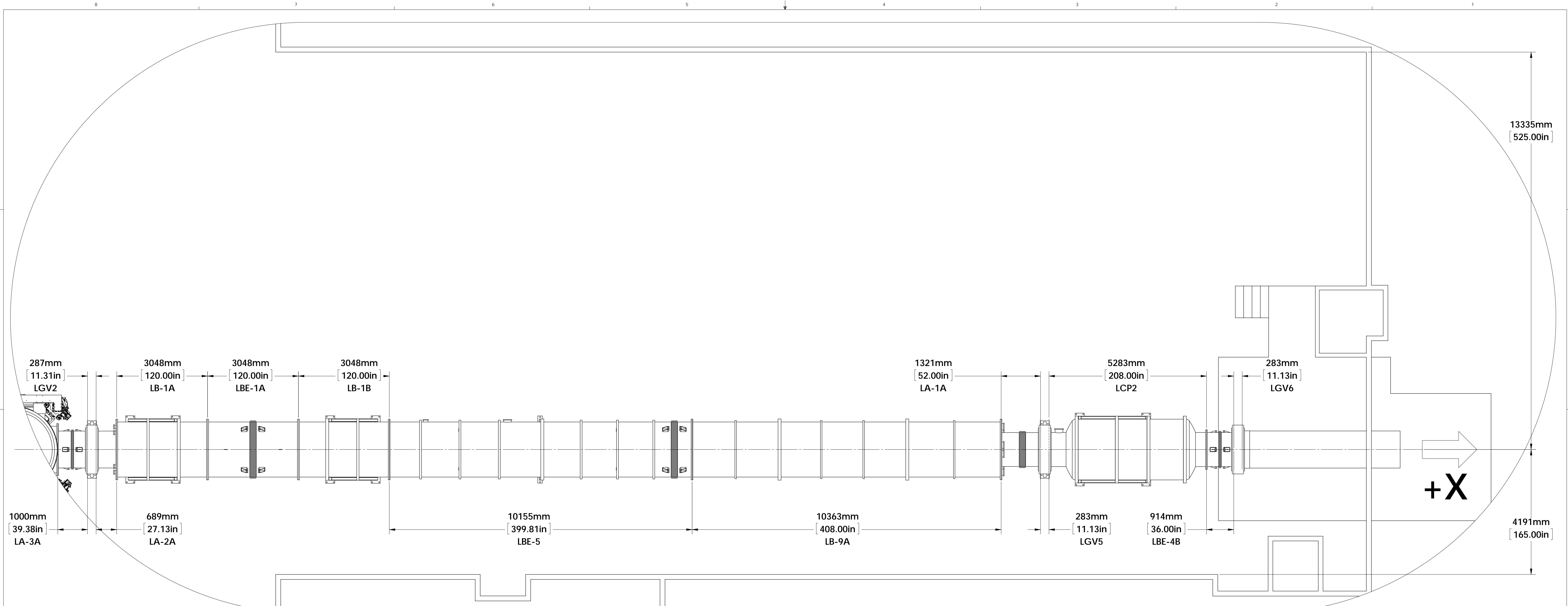
ORIGIN  
 GLOBAL COORDINATES:  
 X = 0.0 mm  
 Y = 0.0 mm  
 Z = 0.0 mm

7239mm  
 [285.00in]

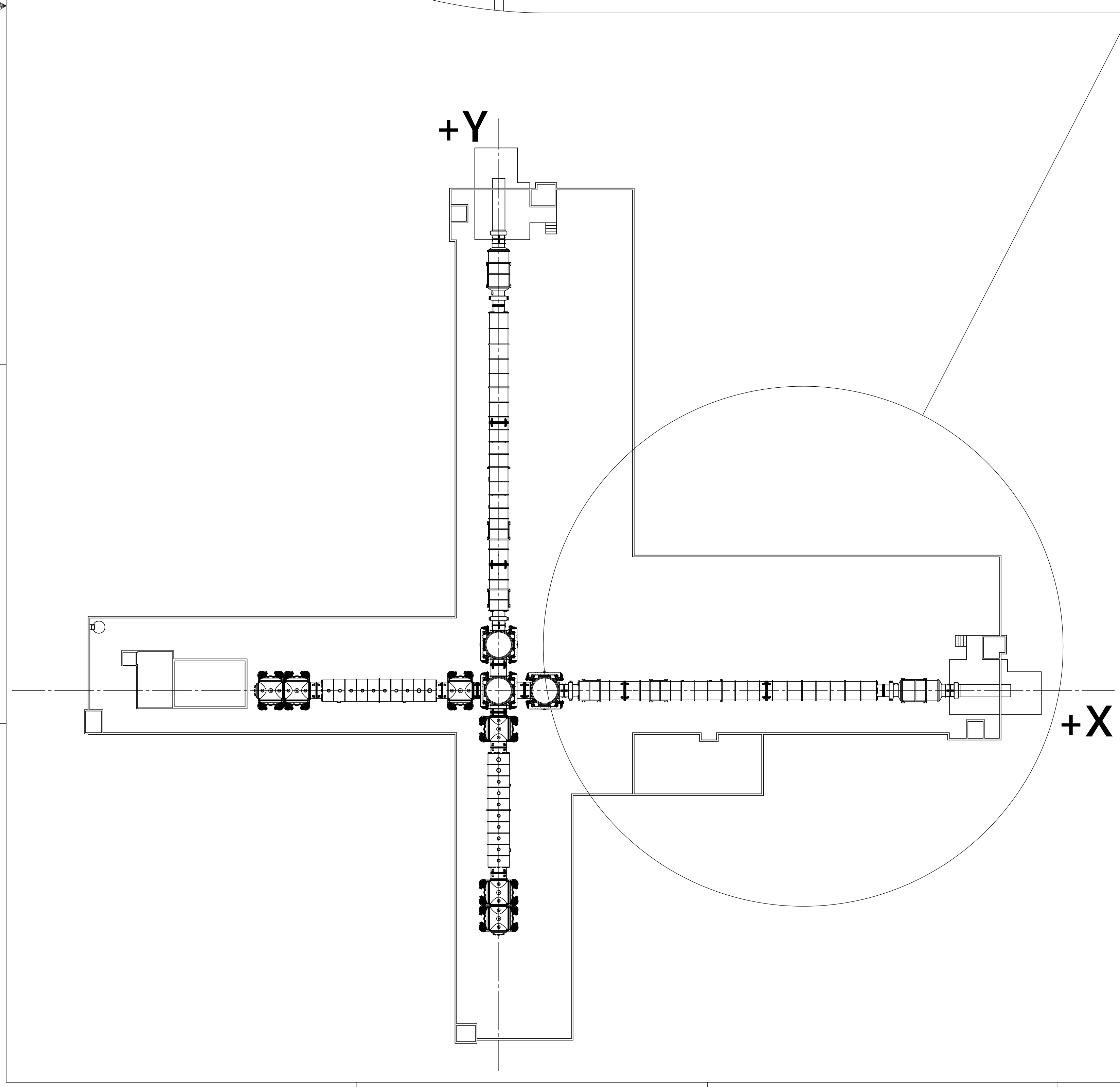
4191mm  
 [165.00in]







**DETAIL "C"  
+X ARM LLO**



+Y

+X

-Y

6858mm  
[270.00in]  
LMCB1 TUBE

6858mm  
[270.00in]  
LMCA1 TUBE

HAM5-L1  
GLOBAL COORDINATES:  
X = 0.0 mm  
Y = -20122.0 mm  
Z = 0.0 mm

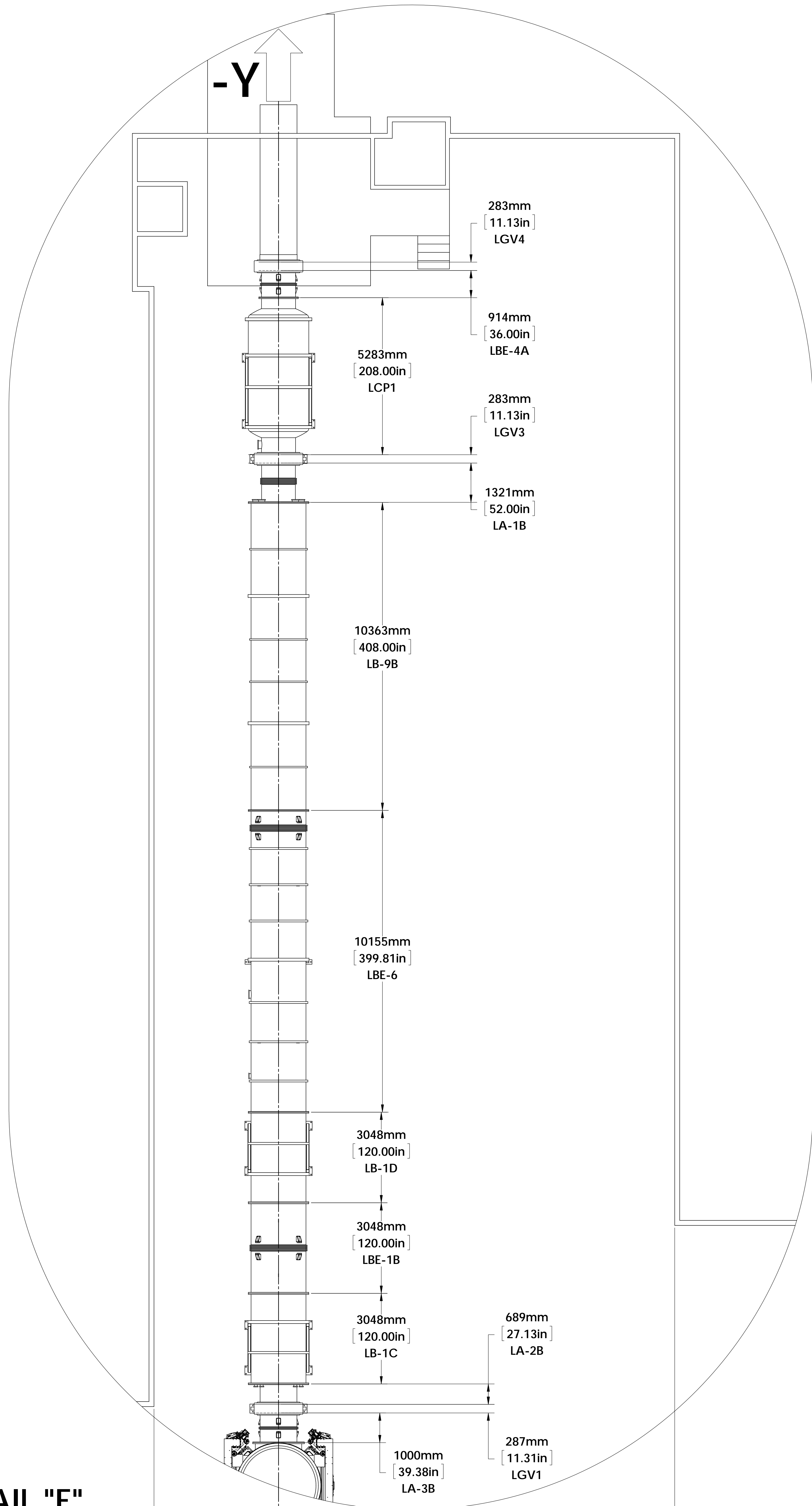
HAM6-L1  
GLOBAL COORDINATES:  
X = 0.0 mm  
Y = -22692.0 mm  
Z = 0.0 mm

4191mm  
[165.00in]

7239mm  
[285.00in]

**DETAIL "D"**  
**-Y ARM LLO**

D:\0901859\AutoCAD Vacuum Equipment Layout\_LLO\Comp Station 081312\_PART FOR REV A.031 DRAWING FOR REV



**DETAIL "E"**  
**+Y ARM LLO**

4191mm [165.00in]      13335mm [525.00in]

