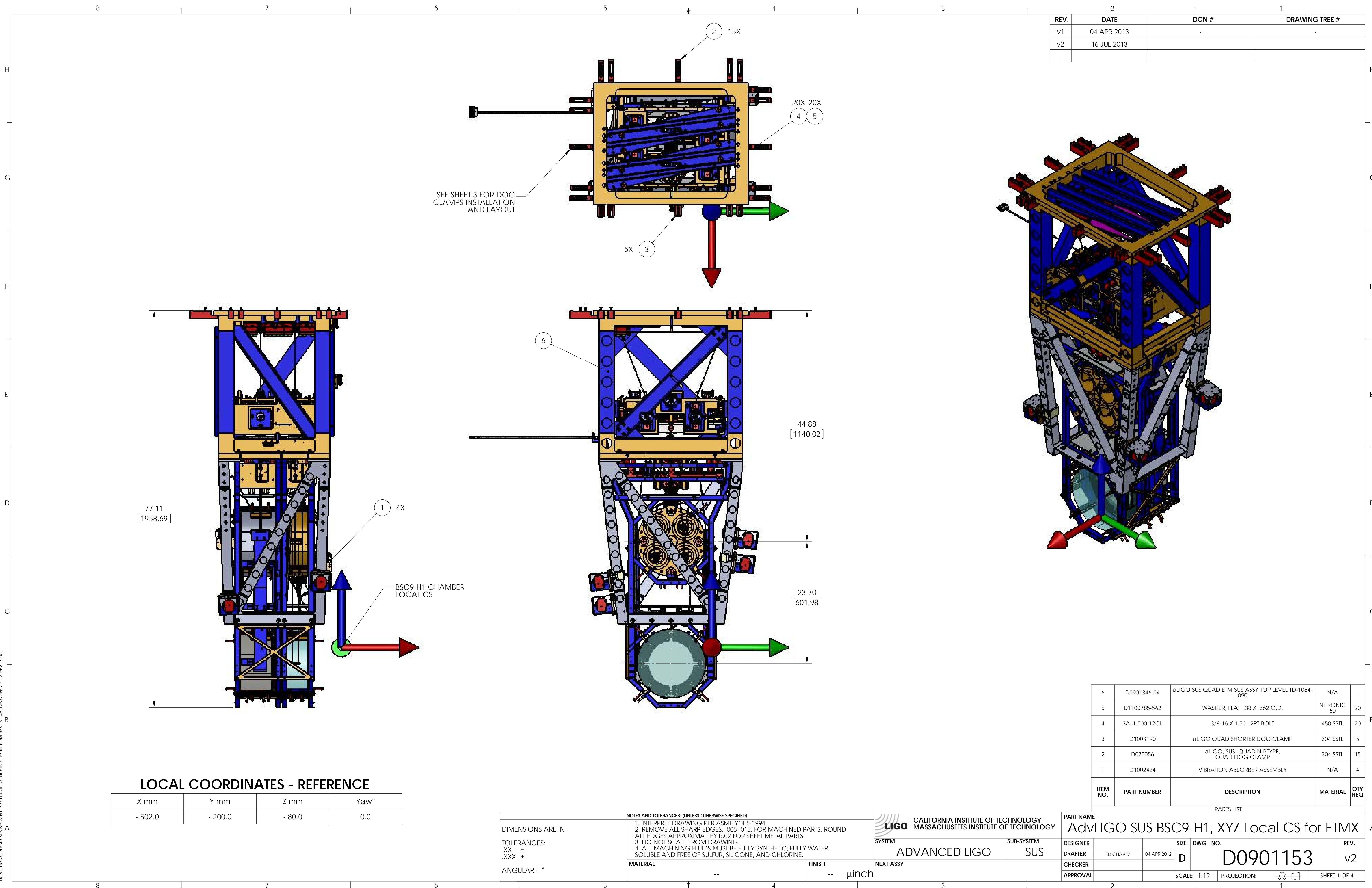


REV.	DATE	DCN #	DRAWING TREE #
v1	04 APR 2013	-	-
v2	16 JUL 2013	-	-
-	-	-	-



77.11  
[1958.69]

1 4X

BSC9-H1 CHAMBER  
LOCAL CS

5X 3

2 15X

20X 20X  
4 5

6

44.88  
[1140.02]

23.70  
[601.98]

**LOCAL COORDINATES - REFERENCE**

X mm	Y mm	Z mm	Yaw°
- 502.0	- 200.0	- 80.0	0.0

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	
TOLERANCES:	
.XX ±	
.XXX ±	
ANGULAR ± °	
MATERIAL	
FINISH	-- μinch

**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO    SUB-SYSTEM: SUS

PART NAME: AdvLIGO SUS BSC9-H1, XYZ Local CS for ETMX

DESIGNER: ED CHAVEZ    DATE: 04 APR 2012

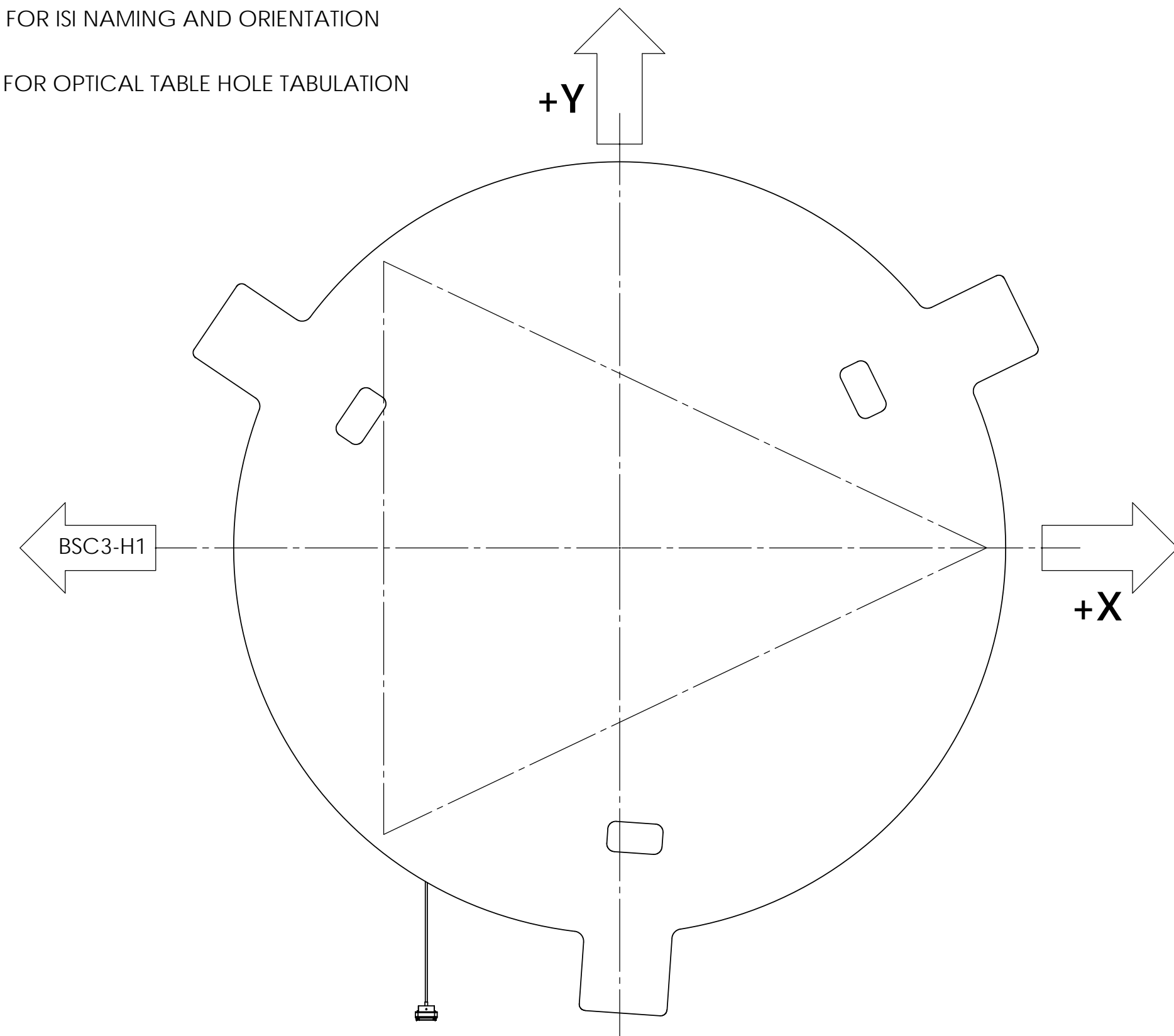
CHECKER:    APPROVAL:    SCALE: 1:12    PROJECTION:    SHEET 1 OF 4

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY REQ
6	D0901346-04	aLIGO SUS QUAD ETM SUS ASSY TOP LEVEL TD-1084-090	N/A	1
5	D1100785-562	WASHER, FLAT, .38 X .562 O.D.	NITRONIC 60	20
4	3AJ1.500-12CL	3/8-16 X 1.50 12PT BOLT	450 SSSL	20
3	D1003190	aLIGO QUAD SHORTER DOG CLAMP	304 SSSL	5
2	D070056	aLIGO, SUS, QUAD N-PYTYPE, QUAD DOG CLAMP	304 SSSL	15
1	D1002424	VIBRATION ABSORBER ASSEMBLY	N/A	4

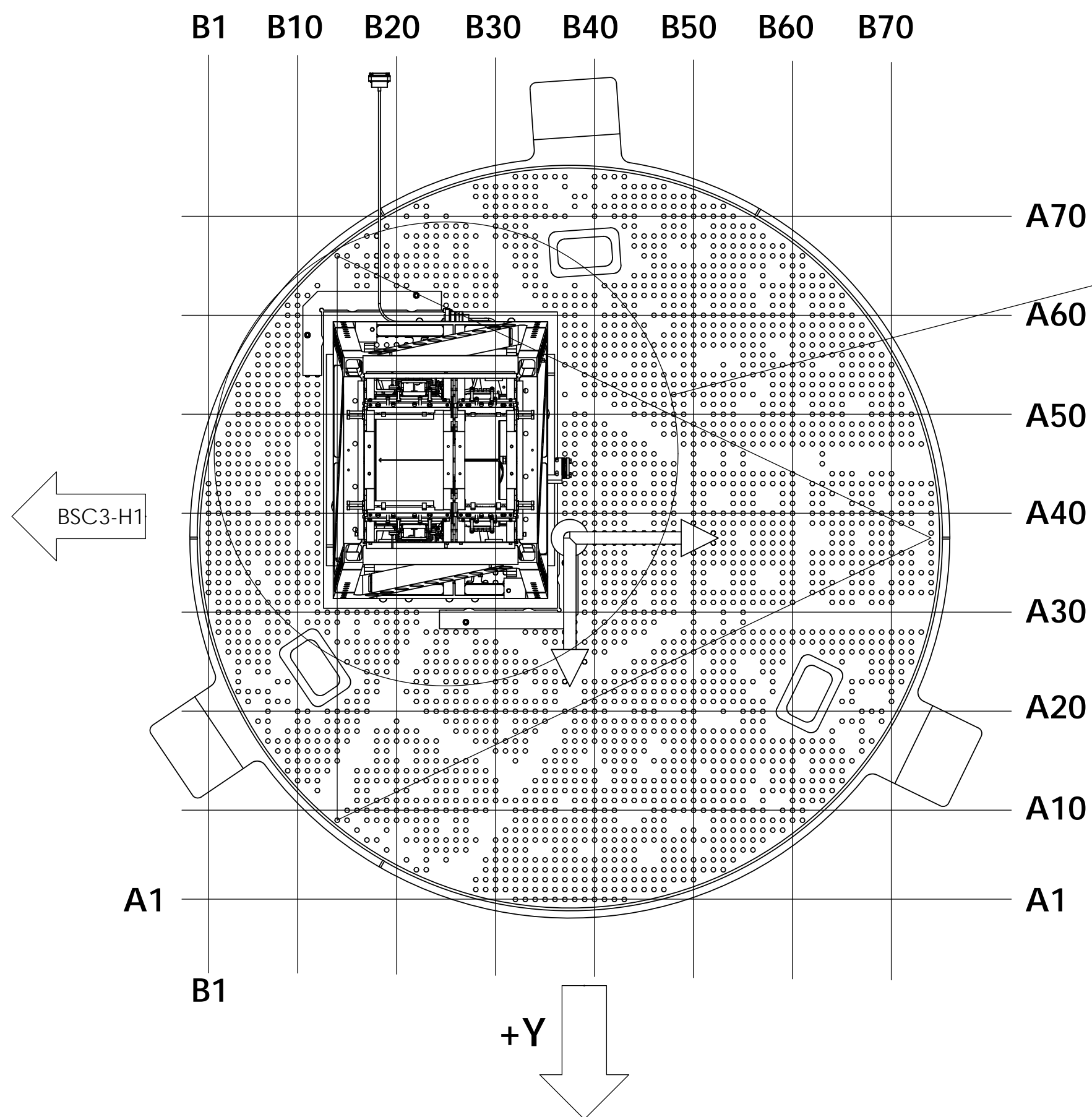
PARTS LIST

D0901153-ADV LIGO SUS BSC9-H1, XYZ Local CS for ETMX, PART PDM REV. X-2016, DRAWING PDM REV. X-001

5. REFER TO G1000125 FOR ISI NAMING AND ORIENTATION CONVENTION.  
 6. REFER TO D1101271 FOR OPTICAL TABLE HOLE TABULATION CONVENTION



TOP VIEW  
(LOOKING DOWN)



BOTTOM VIEW  
(LOOKING UP)

D1101050-19 ALIGNMENT TEMPLATE.  
 NOTE: ONLY 1 TEMPLATE USED, THIS ONE  
 OR D1101050-20 ON OPPOSITE SIDE

ATTACH SCREW AT LOCATION A58, B11

ATTACH SCREW AT LOCATION A62, B22

HR SIDE

AR SIDE

ATTACH SCREW AT LOCATION A29, B27

ATTACH SCREW AT LOCATION A35, B37

D1101050-20 ALIGNMENT TEMPLATE.  
 NOTE: ONLY 1 TEMPLATE USED, THIS ONE  
 OR D1101050-19 ON OPPOSITE SIDE

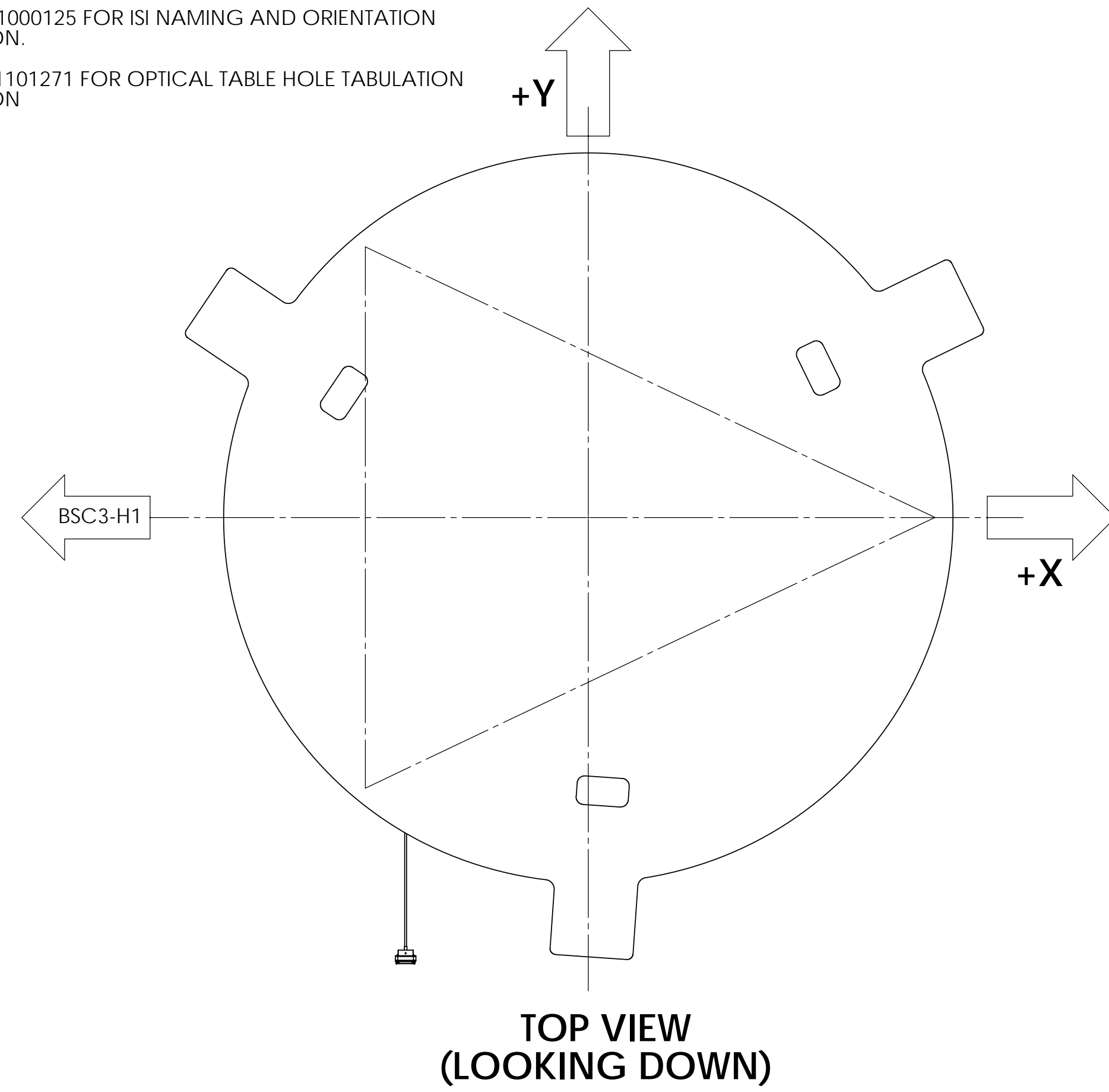
DETAIL 'A'  
SCALE 1:3

BOTTOM VIEW (LOOKING UP)  
 D0901516 OPTICAL TABLE SHOWN FOR QUAD POSITIONING  
 TEMPLATE LOCATION AND ORIENTATION ONLY. (DOG CLAMPS  
 AND MOUNTING HARDWARE NOT SHOWN FOR CLARITY)

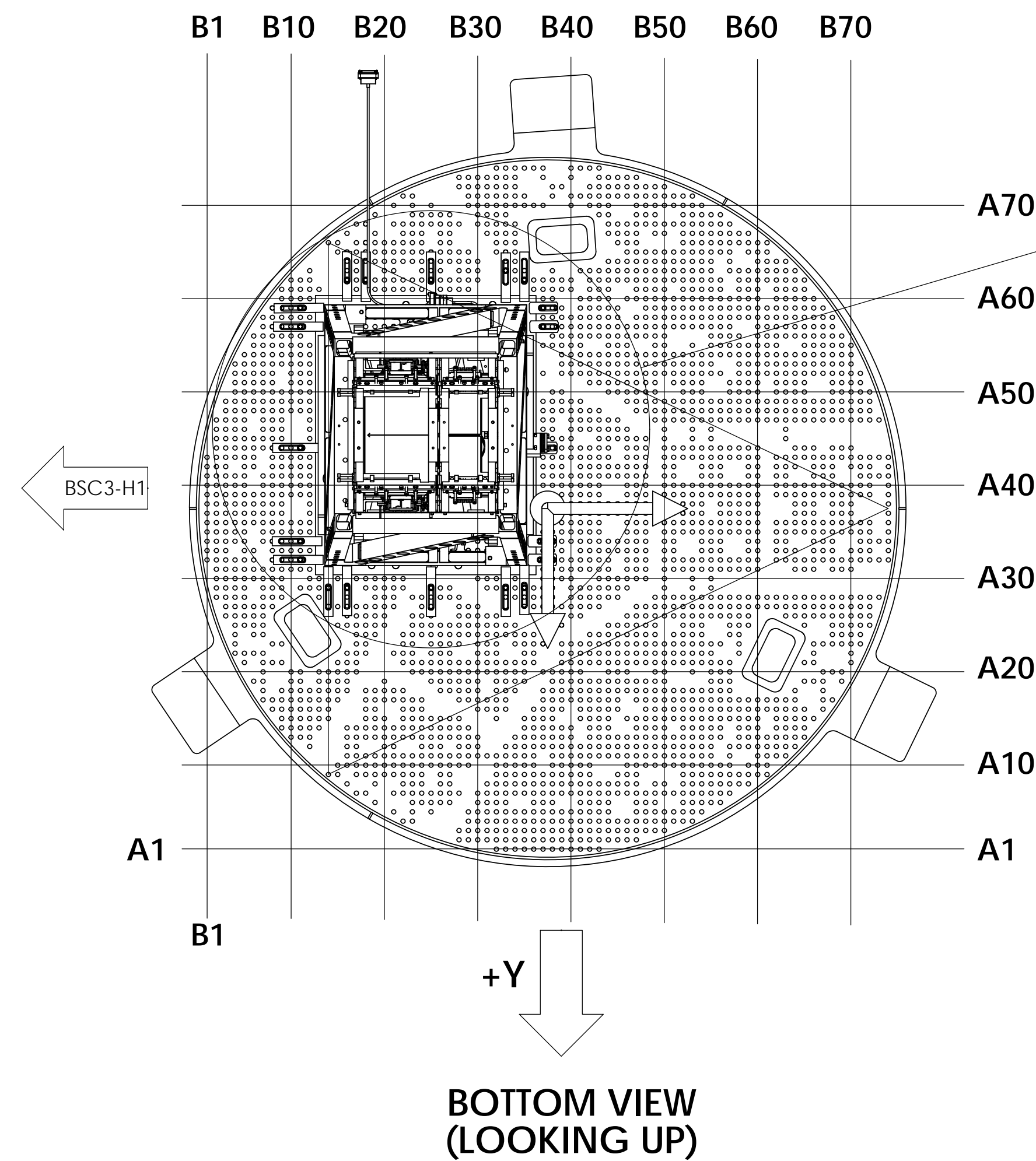
<b>LIGO</b> CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE DWG. NO.	REV.
D D0901153	v2
SCALE: 1:16	PROJECTION:
SHEET 2 OF 4	

D0901153.ASM/LIGO.SLS/BSC3-H1.XYZ Local CS for ETMC. PART PDM REV. X.046. DRAWING PDM REV. X.001

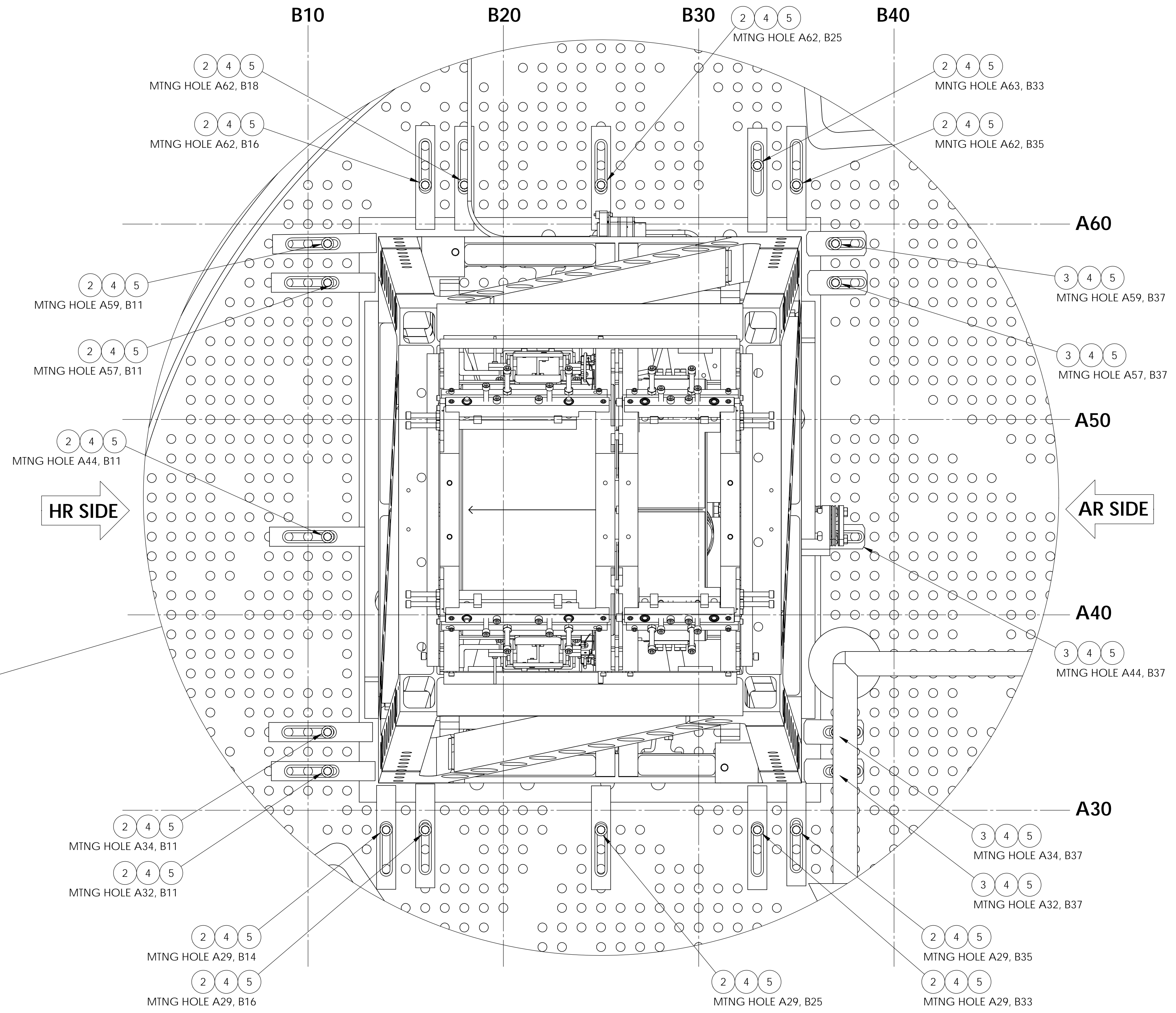
5. REFER TO G1000125 FOR ISI NAMING AND ORIENTATION CONVENTION.  
 6. REFER TO D1101271 FOR OPTICAL TABLE HOLE TABULATION CONVENTION



**TOP VIEW  
(LOOKING DOWN)**



**BOTTOM VIEW  
(LOOKING UP)**

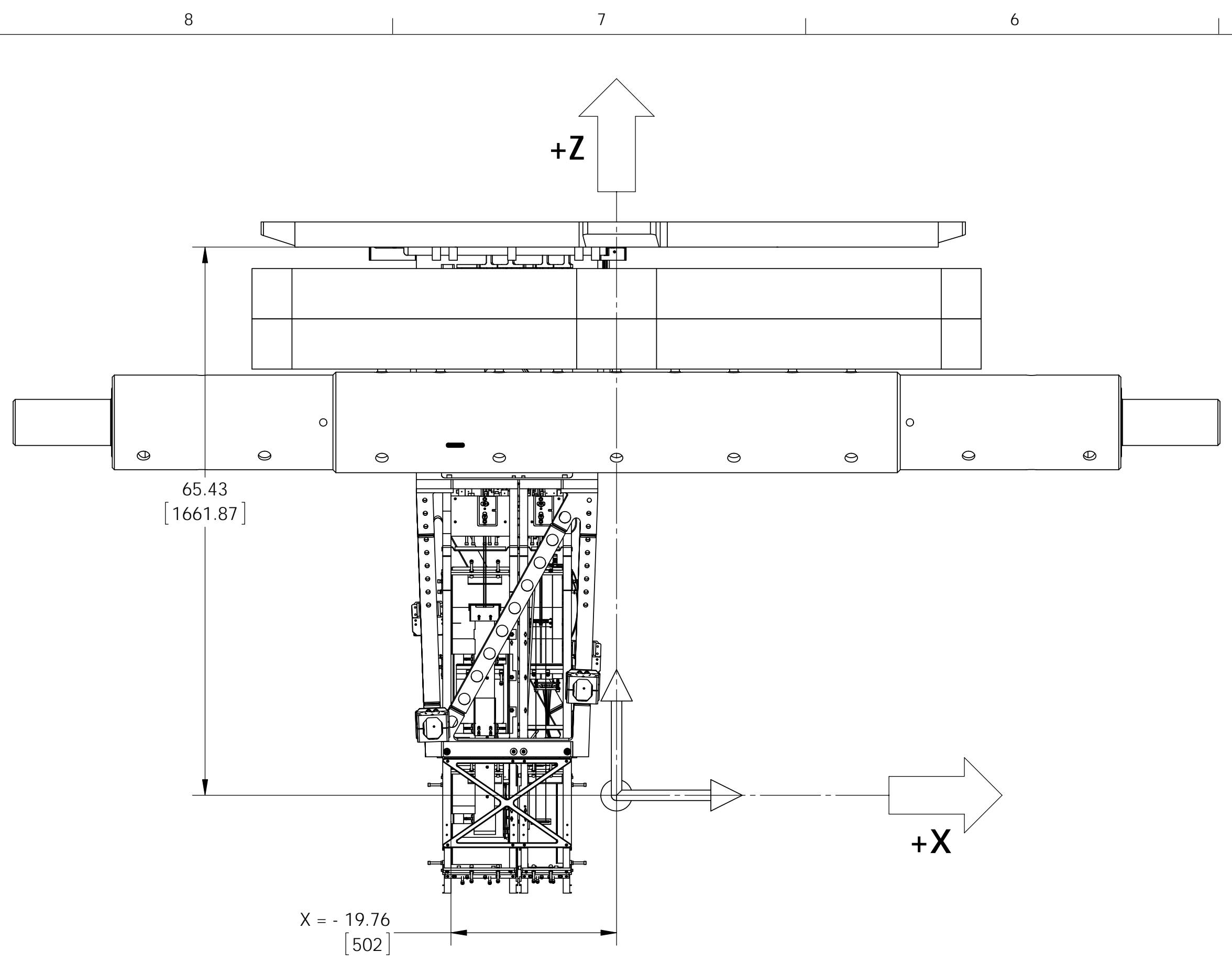


**DETAIL "B"  
SCALE 1:3**

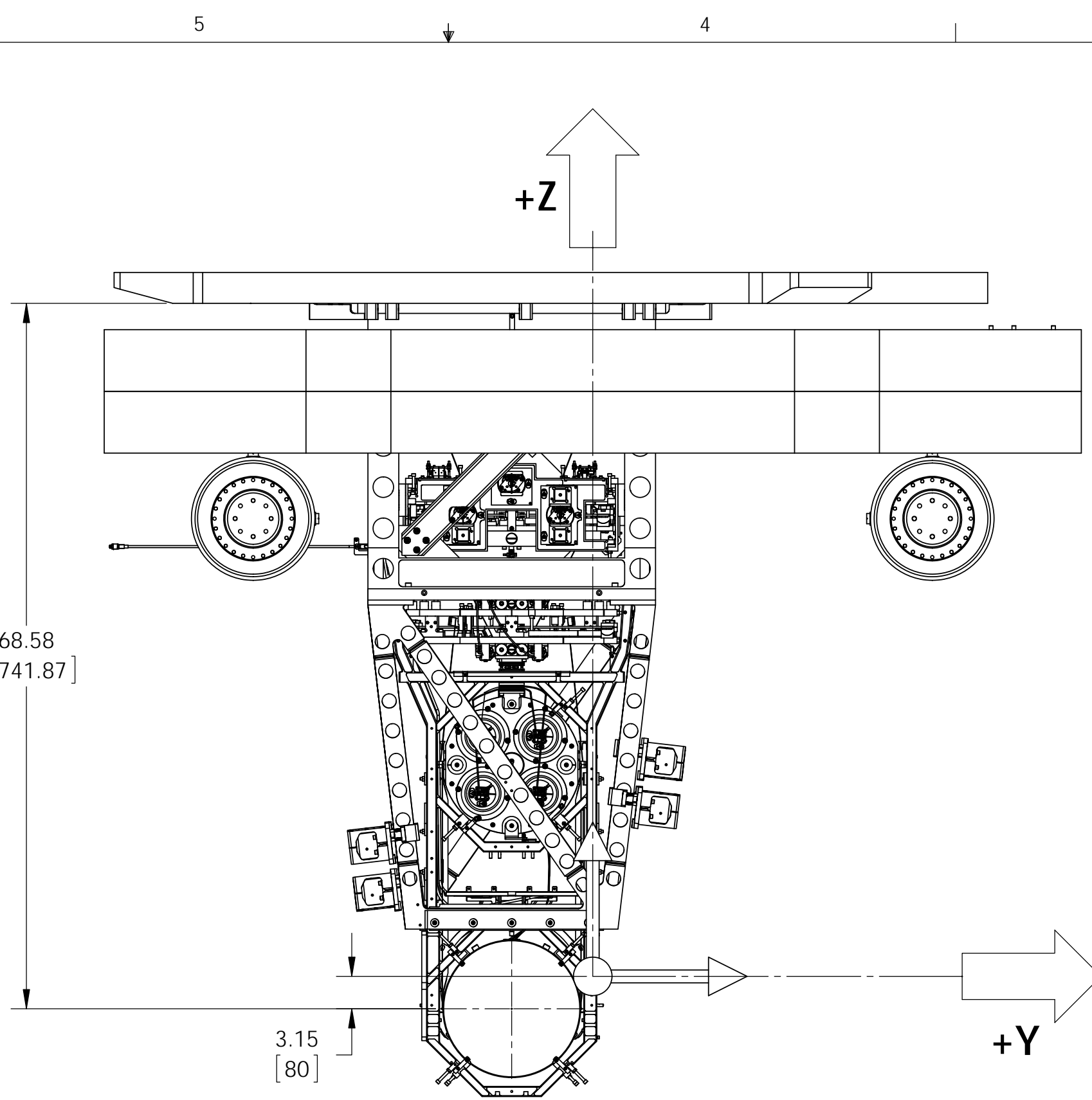
**BOTTOM VIEW (LOOKING UP)  
 D0901516 OPTICAL TABLE SHOWN FOR QUAD  
 AND DOG CLAMPS LOCATION & ORIENTATION ONLY.  
 (VIBRATION ABSORBERS REMOVED FOR CLARITY)**

<b>LIGO</b> CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE DWG. NO.	REV.
D D0901153	v2
SCALE: 1:16	PROJECTION:
SHEET 3 OF 4	

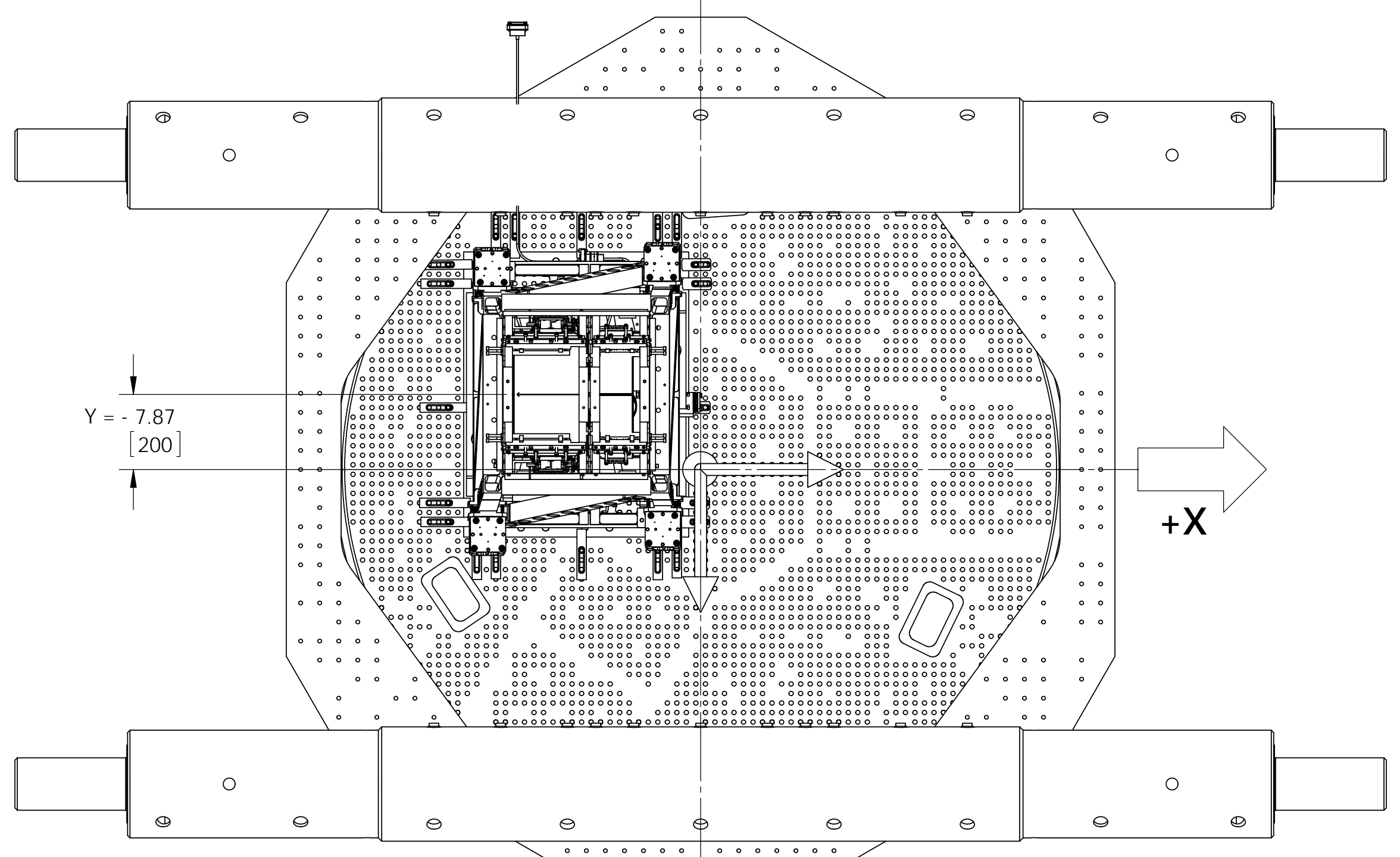
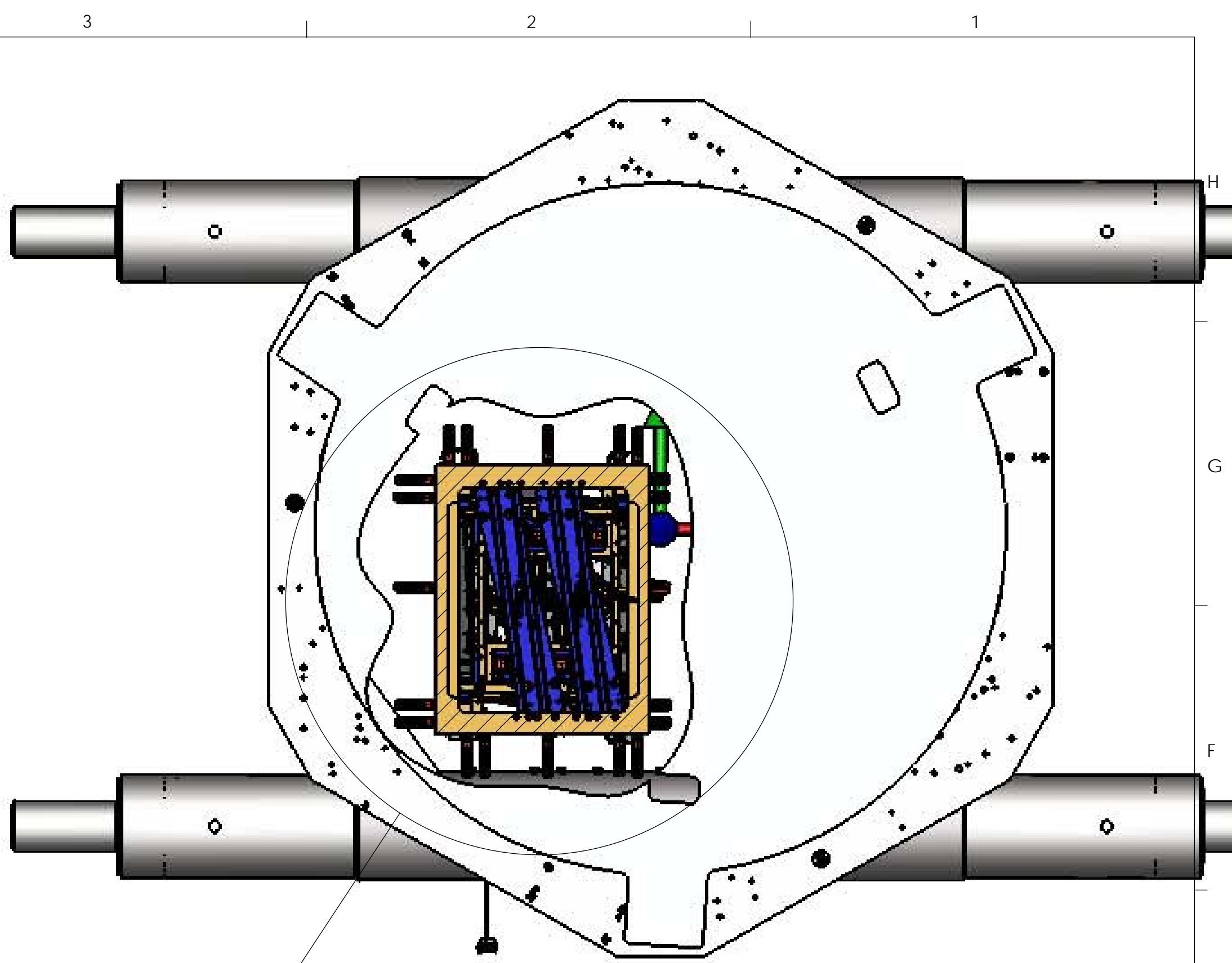
D0901153-ADM-LIGO SUB-BSC3-H1.XYZ Local CS for ETMx PART PDM REV. X-246 DRAWING PDM REV. X-001



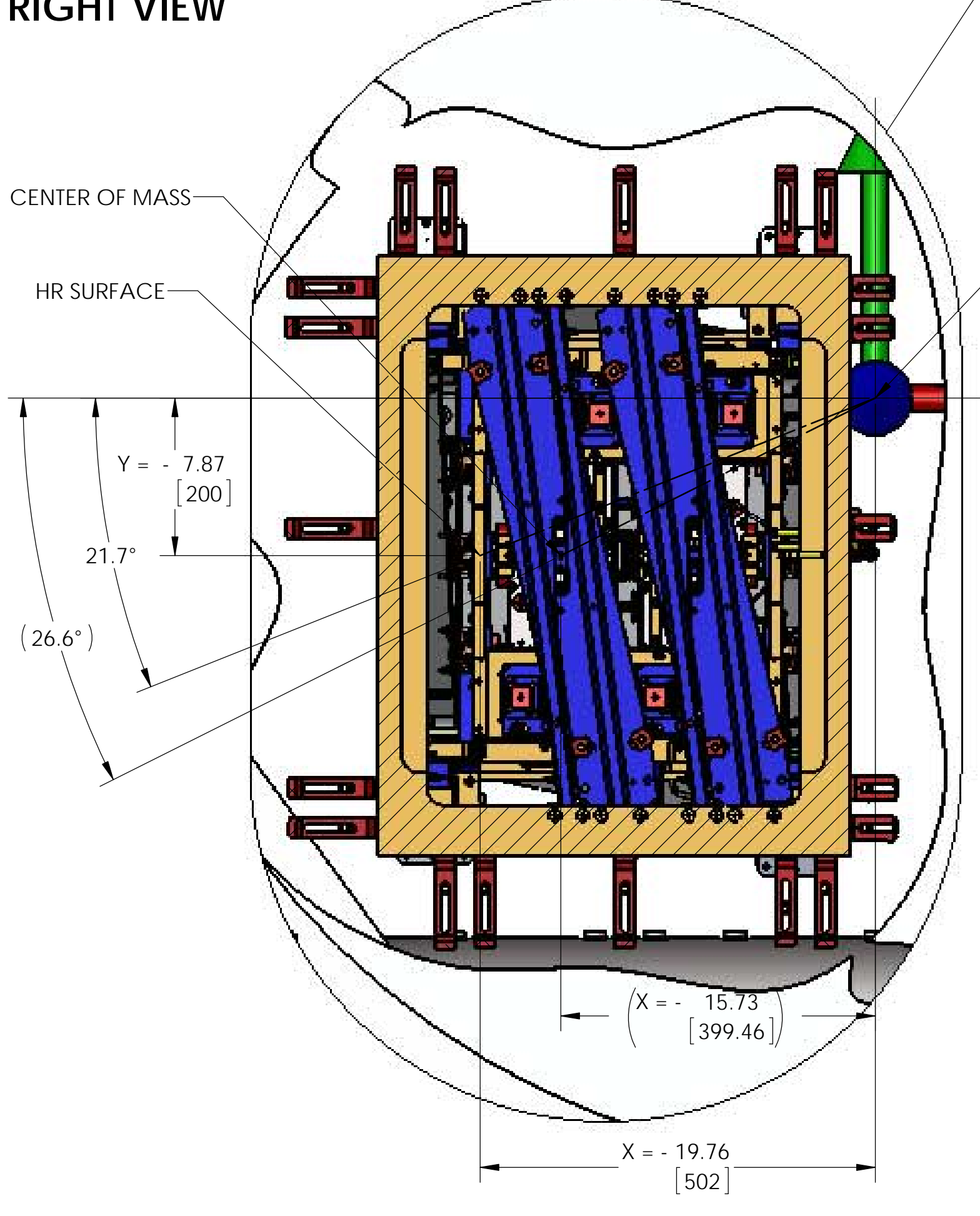
FRONT VIEW



RIGHT VIEW



BOTTOM VIEW  
(LOOKING UP)



DETAIL "C"  
SCALE 1:6

DIMENSIONS IN PARENTHESIS  
(REFERENCE DIMENSIONS)  
ARE FROM CENTER OF MASS

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE	DWG. NO.	REV.
D	D0901153	v2
SCALE: 1:16	PROJECTION:	SHEET 4 OF 4

D0901153.A01.LIGO.SLS.BSC-H1.XYZ Local CS for ETMX. PART PDM REV. X.046. DRAWING PDM REV. X.001