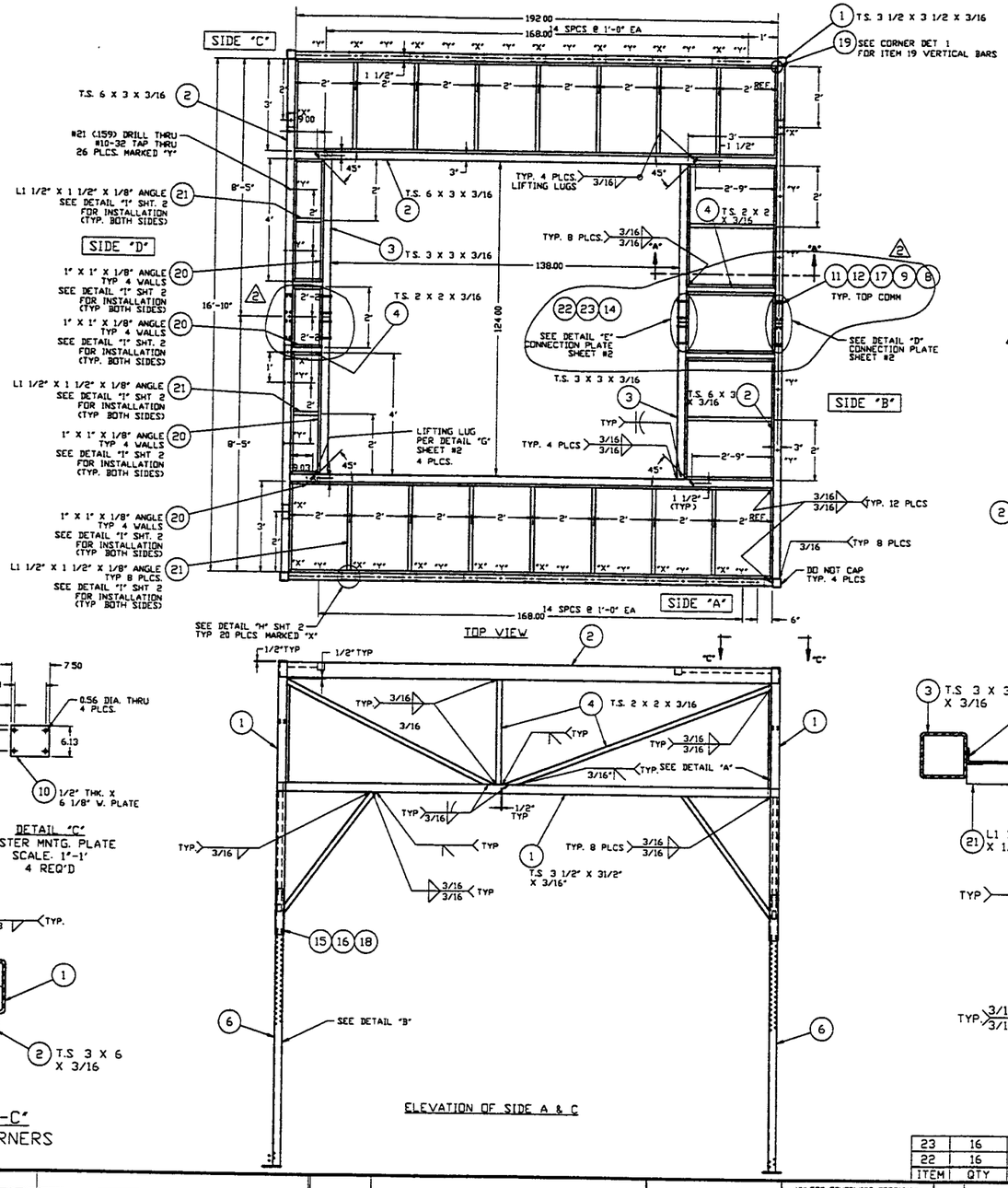

NOTES:
1.) STEEL CONSTRUCTION SHALL CONFORM TO THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL.
2.) WELDING OF STEEL SHALL BE IN ACCORDANCE WITH AWS D1.1
3.) FABRICATOR SHALL SAND BLAST ALL EXPOSED SURFACES IN ACCORDANCE WITH SSPC-SP-6.
4.) STEEL SHALL BE PAINTED WITH WHITE EPOXY POLANE. ALL SURFACES SHALL BE CLEAN AND FREE OF LOOSE SCALE, CLEAN AND PRIME IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
5.) ALUMINUM CONSTRUCTION SHALL CONFORM TO THE ALUMINUM ASSOCIATION SPECIFICATIONS FOR ALUMINUM STRUCTURES.
6.) APPROXIMATE WEIGHT 2900 LBS.
7.) ALL SIDES OF TUBE STEEL CONNECTIONS SHALL BE WELDED USING FILLET WELDS FLARE GROOVE WELDS, OR FULL PENETRATIONS WELDS AS REQUIRED, GRIND OFF SHARP ENDS OF DIAGONAL CUTS, THE SAME AMOUNT AS THE MEMBER THICKNESS

ITEM	QTY	DESCRIPTION
21	47 FT	ANGLE, 1 1/2" X 1 1/2" X 1/8", A36
20	160 FT	ANGLE, 1" X 1" X 1/8", A36
19	28 FT	FLAT BAR, 1" W X 1/8" THK, A36
18	16	3/8"-16 X 4 1/2" LG. HEX HEAD BOLT, A-307
17	16	1/2"-13 X 8 1/2" LG THREADED ROD
16	16	3/8" FLAT WASHER
15	16	3/8"-16 HEX NUT
14	8	5/8"-11 X 3 1/2" LG. HEX HEAD BOLT, A-307
13	8	5/8"-11 X 4 1/2" LG. HEX HEAD BOLT, A-307
12	32	1/2" FLAT WASHER
11	32	1/2"-13 HEX NUT
10	2.5 FT	PLATE, 1/2" THK. X 6 1/8" W, ALUMINUM, 6061-T6
9	16	1/2" LOCK WASHER
8	7 FT.	PLATE, 1/4" THK. X 3" W, A36
7	12 FT	PLATE, 1/4" THK. X 2 3/4" W, A36
6	36.2 FT	TUBE, 3" X 3" X 3/16" W.T, ALUMINUM, 6061-T6
5	2 FT	PLATE, 1/2" THK. X 2" W, A36
4	215 FT	TUBE STEEL, 2" X 2" X 3/16" W.T, A500 GR.B
3	23 FT	TUBE STEEL, 3" X 3" X 3/16" W.T, A500 GR.B
2	108 FT	TUBE STEEL, 6" X 3" X 3/16" W.T, A500 GR.B
1	100 FT	TUBE STEEL, 3 1/2" X 3 1/2" X 3/16" W.T, A500 GR.B
23	16	5/8" HEX NUT
22	16	5/8" FLAT WASHER

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DWG NO	DESCRIPTION	DWG NO	DESCRIPTION

REFERENCE DRAWINGS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ± 1/1
ANGULAR:MACH ± 30' BEND ± 2°
TWO PLACE DECIMAL ± 0.03
THREE PLACE DECIMAL ±
FINISHED SURFACE RMS
BREAK CORNERS 1/8 OUT.
REMOVE ALL BURRS

DO NOT SCALE THIS DRAWING
USED ON:
NEXT ASS'Y: V0494135

REV	DESCRIPTION					ISSUE DESCRIPTION
				CHKD	DRWN	DATE	DEQ#
2	REISSUED FOR FABRICATION AS NOTED	REB	RDC	REC	PV	5/27/97	0489
1	REISSUED FOR FABRICATION AS NOTED	REB	RDC	REC	REC	5/7/97	0482
0	ISSUED FOR FABRICATION	PEF	RDC	REC	PV	4/11/97	0448

PROCESS SYSTEMS INTERNATIONAL INC.
20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA

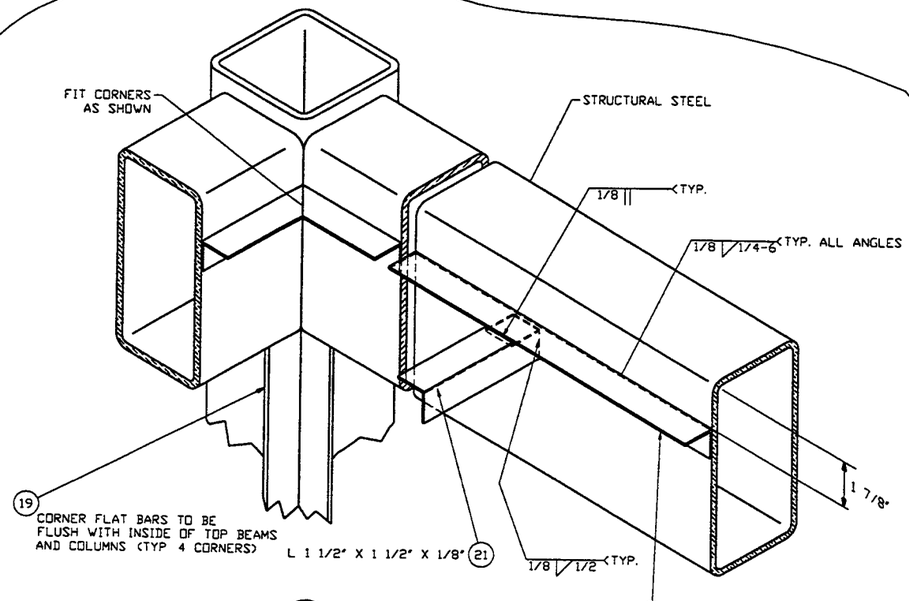
BSC CLEAN ROOM WELDMENT
BSC STYLE NO. 2

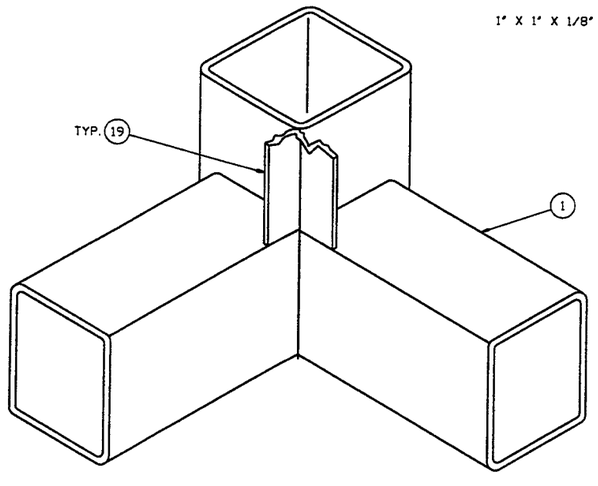
LIGO VACUUM EQUIPMENT

CAD FILE	SIZE	DWG NO.	REV.
4138S1	D	V049-4-138	2
SCALE 1"=2"		SHEET 1 OF 2	

May 27, 1997 - 153305

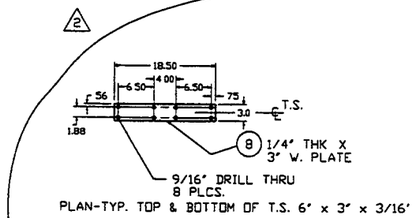
LIGO-D970436-02-V





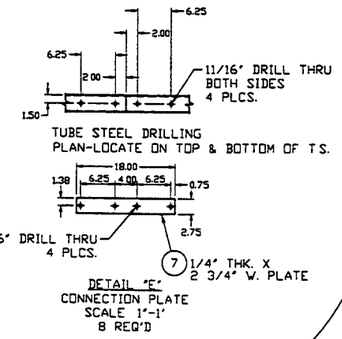
DETAIL "I"
TYPICAL CORNER CEILING GRID SYSTEM INSTALLATION

NOTES:
1.) CLAMP ANGLE TO STRUCTURAL MEMBERS AS SHOWN. WELD IN PLACE AS SHOWN.
2.) LOCATE FLAT BAR & CUT TO LENGTH. DIMENSIONS ARE TAKEN TO CENTER OF FLAT BAR CLAMP FLAT BAR TO ANGLE & WELD IN PLACE.



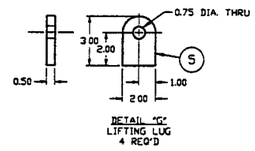
PLAN-TYP. TOP & BOTTOM OF T.S. 6" x 3" x 3/16"

DETAIL "D"
CONNECTION PLATE
SCALE: 1"-1"
4 REQ'D
TUBE STEEL DRILLING

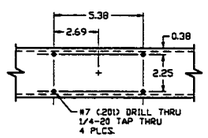


TUBE STEEL DRILLING
PLAN-LOCATE ON TOP & BOTTOM OF T.S.

DETAIL "E"
CONNECTION PLATE
SCALE 1"-1"
8 REQ'D



DETAIL "G"
LIFTING LUG
4 REQ'D



DETAIL "H"
HOLE ARRANGEMENT

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BSC CLEAN ROOM STRUCTURE WELDMENT
BEAM SPLITTER CHAMBER
STYLE NO 2
LIGO VACUUM EQUIPMENT

CAD FILE	SIZE	DWG. NO.	REV
4138S2	D	V049-4-138	2
SCALE 1"=2"		SHEET 2 OF 2	

May 27, 1997 - 15:38:51