

## HOW TO INSTALL SCREEN CLOTH ON A FLAT SCREEN FRAME

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Reference: Screen Engineering Drawing 4600-864

For a successful installation, screen cloth having wire diameter less than .030" must be stretched taut over the area of the frame. The cloth should be about 2 in. longer in both dimensions than the nominal outside dimensions of the frame. You need a supply of about 100 -3/16" x 3/8" grip large flange 3/4" x 1/16" stainless rivets, Cherry CCL-66 or equivalent, a 3/16" drill, rivet puller, and two pairs of wide-nose pliers (nose about 2" wide-sort of looks like a hammerhead shark), and the 1" x 1/8" stainless steel clamp strips that go on the two 48 in. edges parallel to flow. If you can't find the wide-nose pliers, you can make them by welding 3/4" x 1/4" bars, 2" long, at right angles to the jaws of a vise-grip plier.

To start, lay the screen cloth out on a flat surface, and manually work out any "bubbles" or wrinkles as completely as possible. Then, line up the screen cloth over the frame with the long edge flush with the outer edge of the frame member -6 shown on drawing 4600-864, and parallel to, but 1-1/4" in, from the outer edge of the frame member -3. Place a 1" x 1/8" clamp bar flush with the edge of the screen cloth on the 48" dimension (-3), and drill a new 3/16" dia. hole through the clamp bar and the -3 frame member. Install a rivet. Now go across the long dimension and drill a hole through the other clamp bar. Grasp the edge of the screen cloth with the wide-nose pliers at that corner, and pull it taut, holding the tension while installing a rivet on that corner. Place one of the banding strips with its rubber cushion over this tight edge, and install several rivets, at 3" centers, to make sure the screen remains taut on that edge.

The next step is to stretch the screen in the other direction, along one of the two 48 in. edges, under the 1" x 1/8" clamp bar that has been attached at one end. Pull the cloth taut with the wide-nose pliers, line up the edge of the cloth with the clamp bar parallel to the member -3, and while holding tension with the pliers, drill a hole in the other end of the clamp bar and install the rivet. Complete the attachment on these two sides by installing rivets at approximately 3" centers. It is important to maintain the minimum 1-1/4" distance between the 48" side, -3, and the edge of the screen cloth.

Next, the screen is attached to the long side, -6, opposite to the attached side. The screen will be protected with the clamping strip and silicone rubber cushion, the same as already done on the opposite side. First, go to the corner diagonally opposite from the intersection of the two adjacent attached sides, and pull the screen taut. Install a rivet through the clamping strip on that side. Then, working from the corner with the previously attached 48" side member -3, use the pliers to pull the screen taut across the 48" dimension, progressively at 3" increments, while installing rivets on 3" centers and

maintaining the tension at each increment. Finally, position the 1" x 1/8" clamp bar along the 48 in. side member, holding the 1-1/4" clearance dimension from the edge of the member to the clamp bar. Pull tension incrementally as you install rivets on 3" centers.

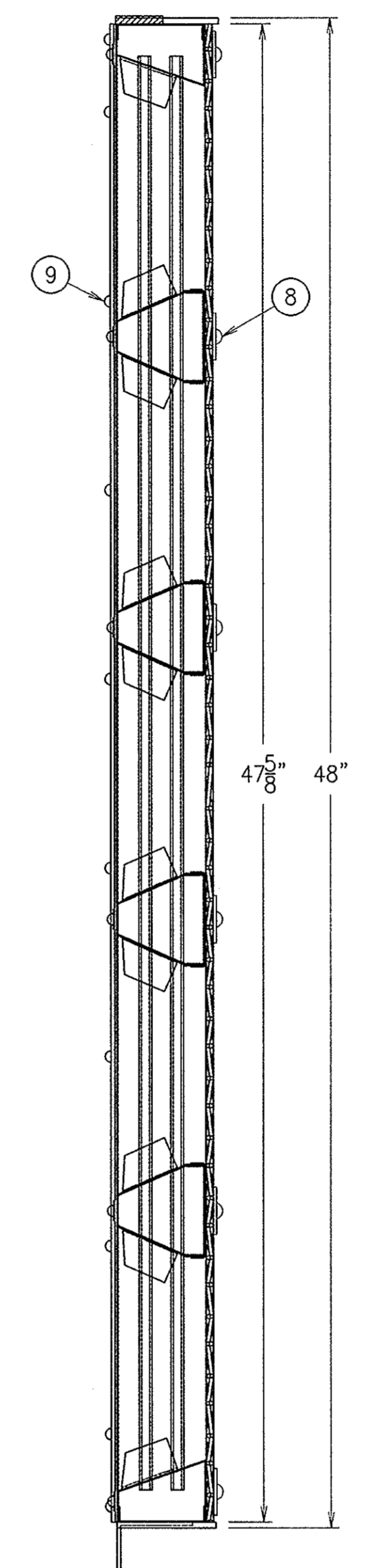
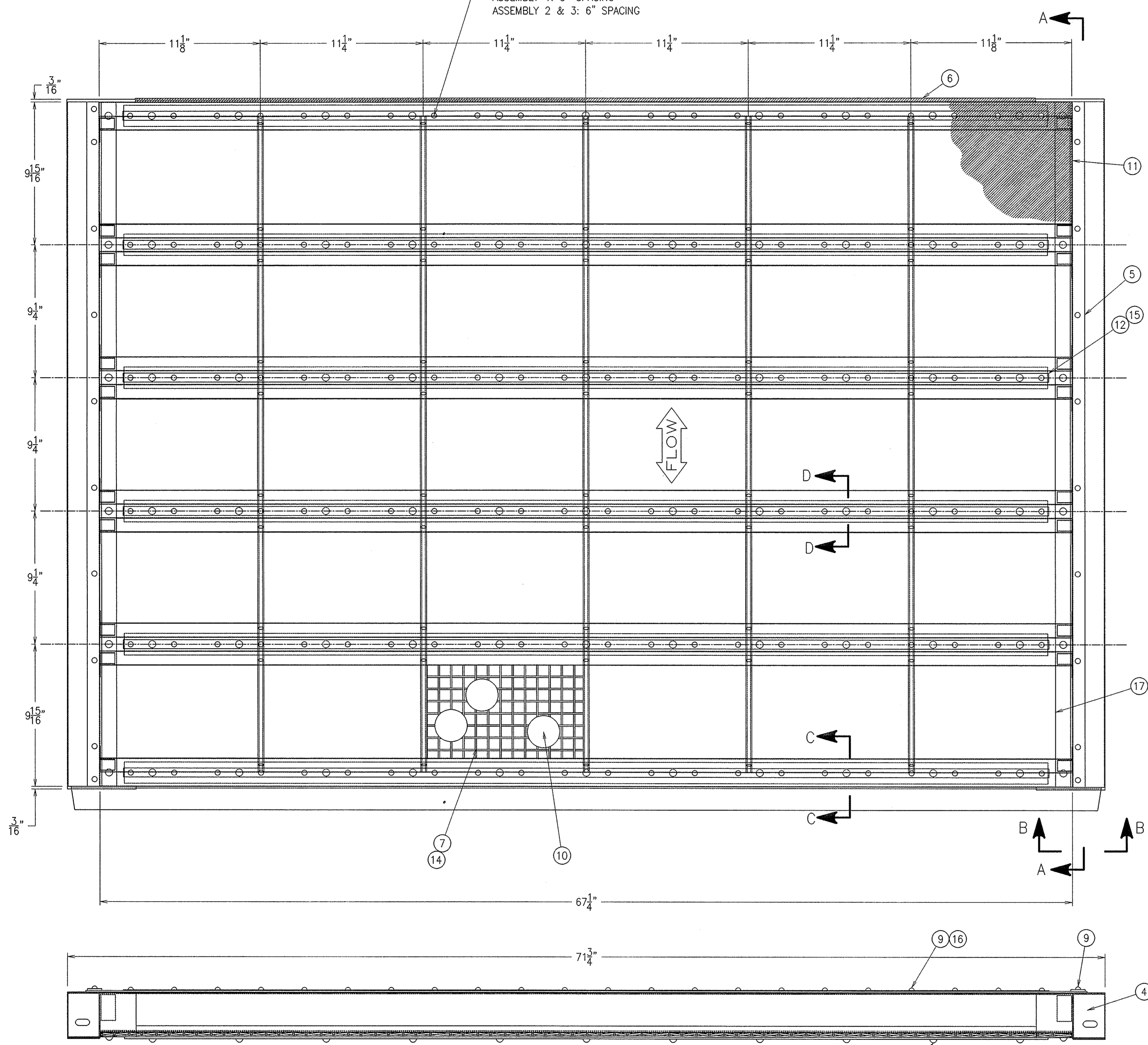
#### **HOW TO MOUNT SCREEN CLOTH ON TEXAS SHAKER BALL RACKS**

When the cloth installation is complete, there will be an overhang of about two inches on one long side, and about 2" past the edge of the clamp bar on one short side. This is most conveniently removed with a disk grinder. The edge under the clamp bar on the short side must be flush with the outer edge of the bar.

Heavier screens with wire diameter greater than about .030" can't be tensioned, and are merely laid flat on the rack and riveted, spacing the rivets on about 6" centers. If necessary to prevent flutter, the CCL-66 rivets, on 6" centers can be used to secure the screen cloth to one or more transverse ribs.

SYM	REVISION	DR	CK	DATE	MICROFILMED
A	NUMEROUS REVISIONS TO RIVETS	YL	JLD	07-11-02	
B	ADDED -17&CHGD 66-3/4 TO 63-7/8" ON-13	YL	JLD	09-11-02	

NOTE:  
ASSEMBLY 1: 3" SPACING  
ASSEMBLY 2 & 3: 6" SPACING



SECTION A-A

2	2	2	17	316SSSH-20GA	HEM	316SSSH-20GA X 2-5/8" X 47-1/4"	2.7
-	-	66	16	CCL-66	POP RIVET, 3/16" (S.S.)	3/8" GRIP	-
6	6	-	15	-	RED SILICON RUBBER	3/4" X 1/16" X 64"	-
1	-	-	14	-14	3/4" CO. X 12GA WIRE UNDERMESH	47-5/8" X 67-1/4"	21.8
6	6	6	13	316SSB-1/8X1	BOTTOM CLAMP BAR	316SSB-1/8" X 1" X 63-7/8"	14.2
6	6	-	12	-	5/8" S.S. BAND IT	5/8" X 64"	-
1	1	1	11	REF. LOGSHEET	SCREEN CLOTH	47-5/8" X 69-1/4"	-
1	1	1	10	REF. LOGSHEET	ANTI-BLINDING BALL	-	-
152	152	20	9	CCP-66	POP RIVET, 3/16" (S.S.)	3/8" GRIP	-
78	78	78	8	CCP-88	POP RIVET, 1/4" (S.S.)	1/2" GRIP	-
-	1	1	7	-7	1" CO. X 10GA WIRE UNDERMESH	47-5/8" X 67-1/4"	26.2
1	1	1	6	-6	NOMEX	1-1/2" X 63" X 1/4"	-
2	2	2	5	316SSB-1/8X1	TOP CLAMP BAR	316SSB-1/8" X 1" X 47-5/8"	3.4
1	1	1	4	D4600-865-2	ASSEMBLY (FRAME ONLY)	-	105.9
-	-	3	-3	-	ASSEMBLY (3/4" CO. X 12GA UM W/ BAND IT)	WEIGHT: 145.3#	-
-	-	2	-2	-	ASSEMBLY (1" CO. X 10GA UM W/ BAND IT)	WEIGHT: 149.7#	-
1	1	-1	-1	-	ASSEMBLY (1" CO. X 10GA UM W/O BAND IT)	WEIGHT: 149.7#	-

ASSEMBLY  
SCALE: 1/4"=1"

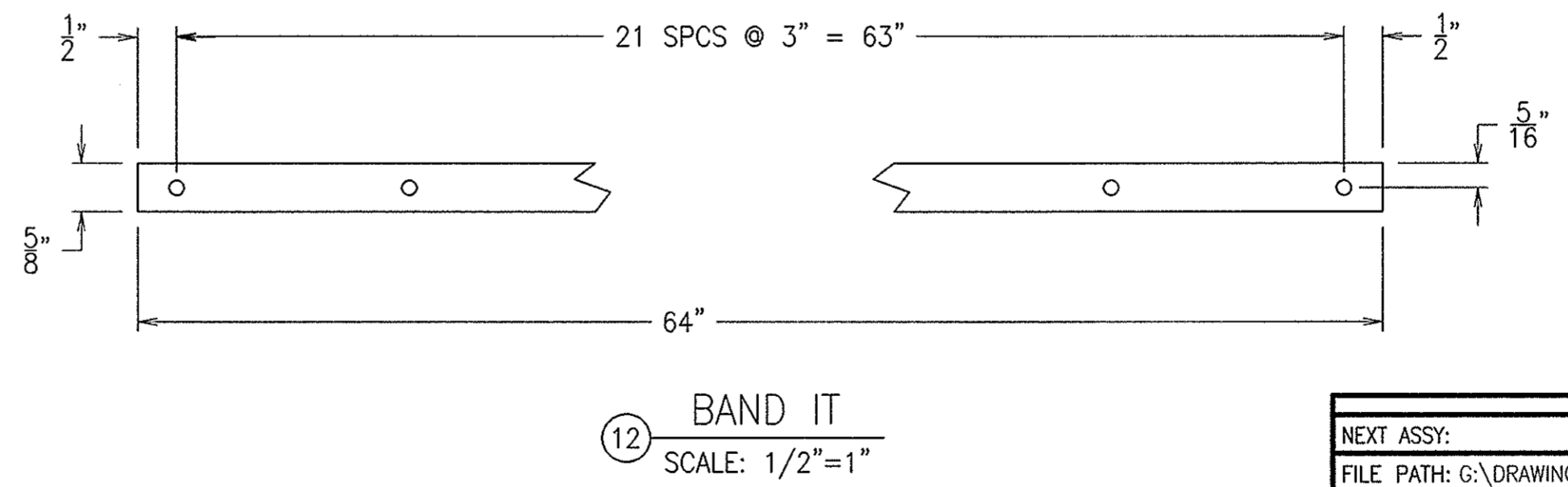
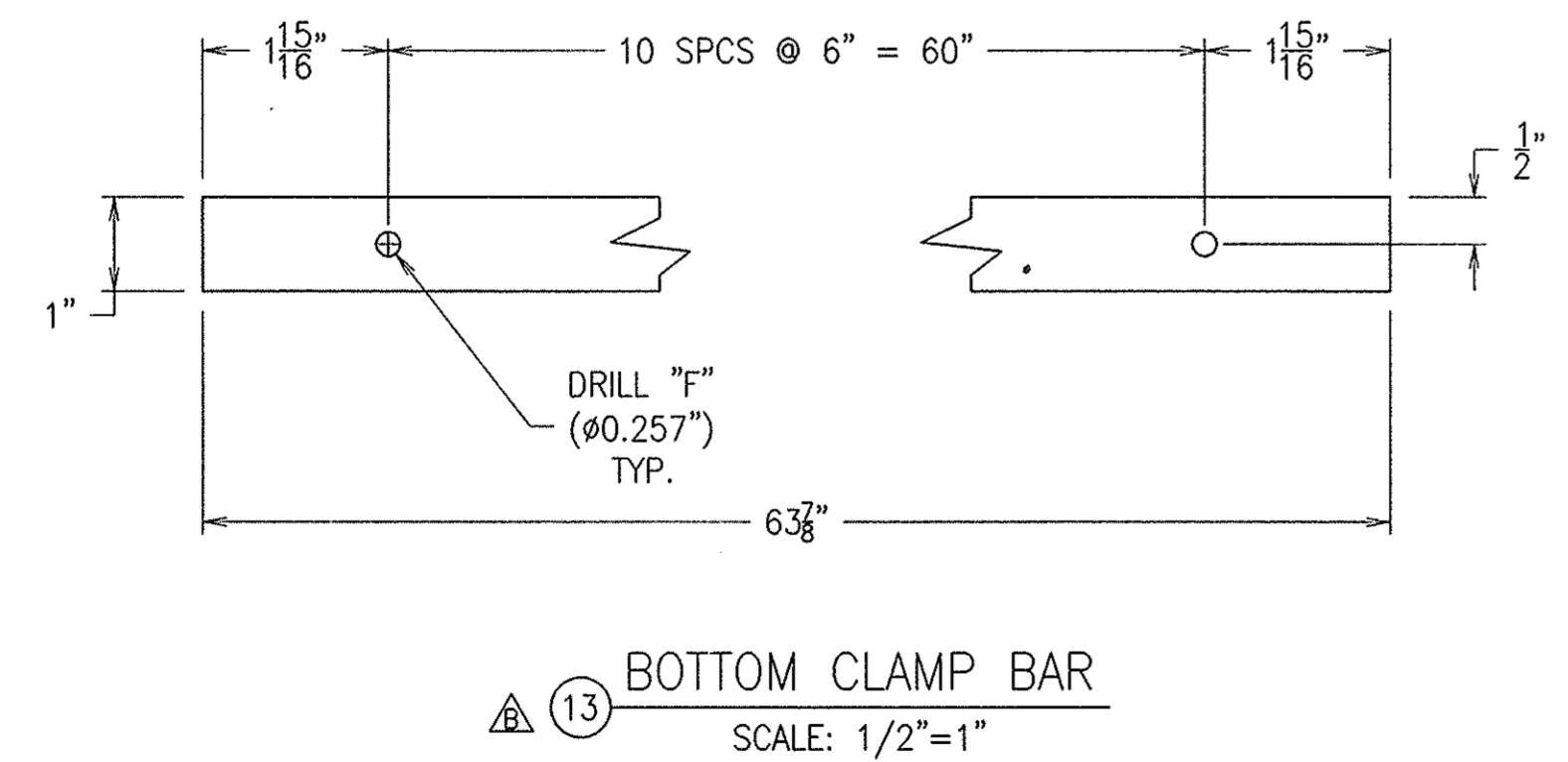
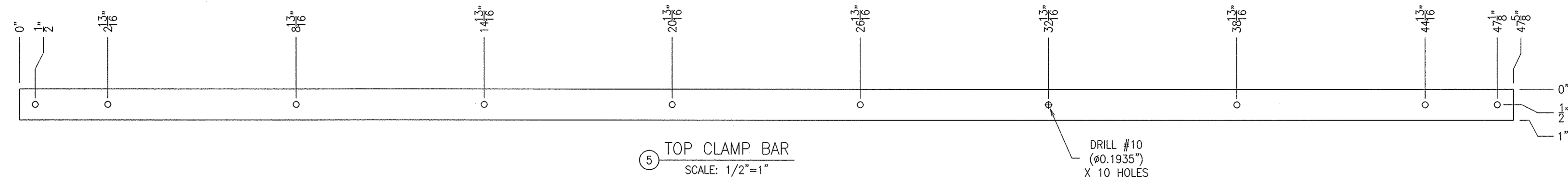
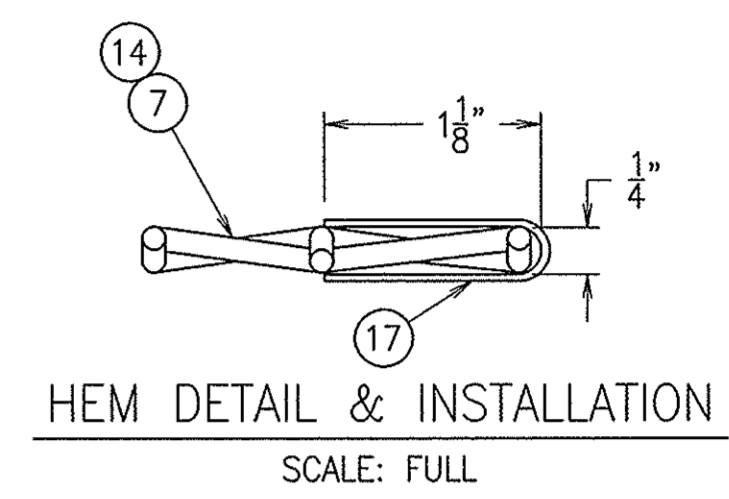
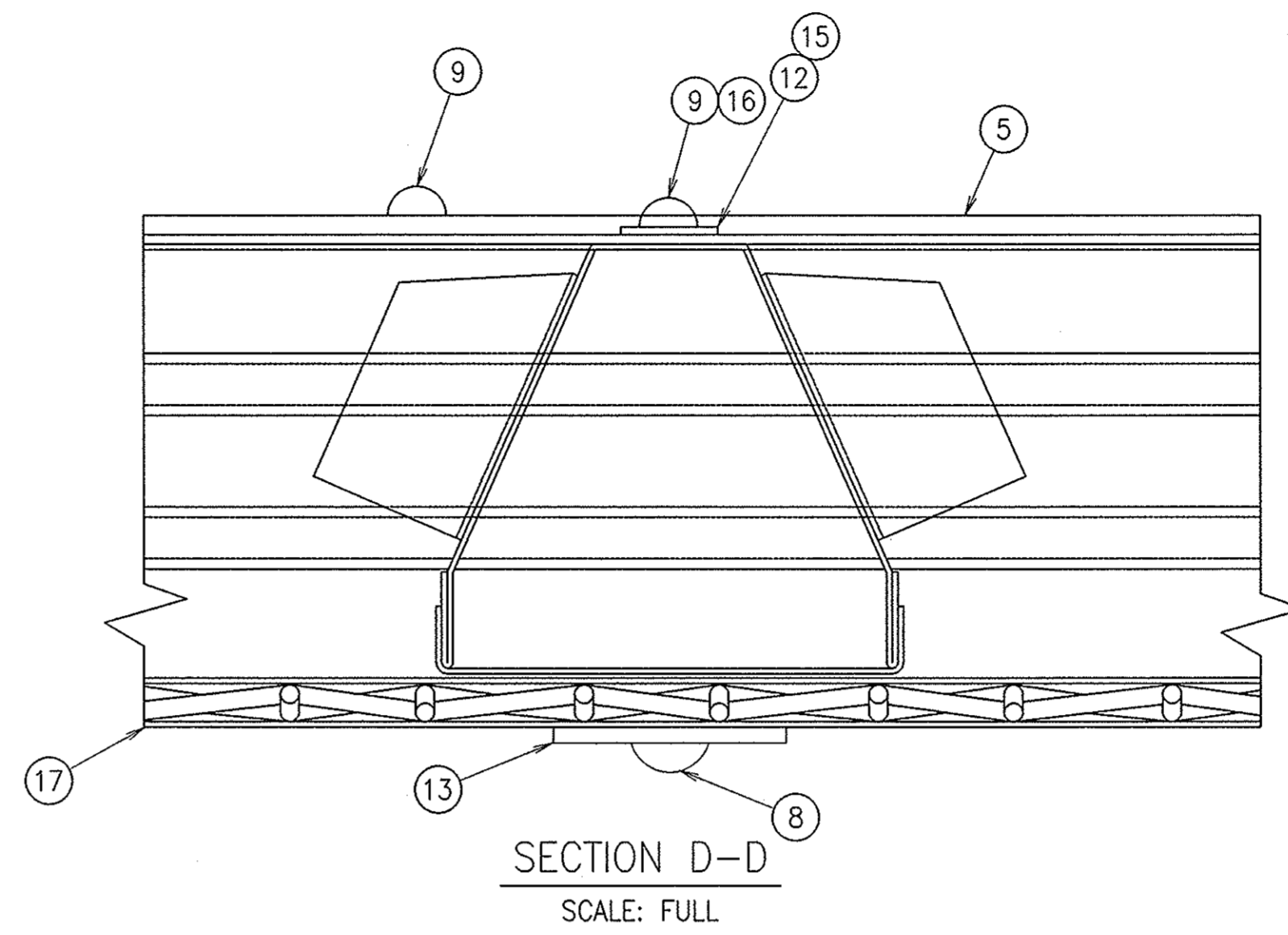
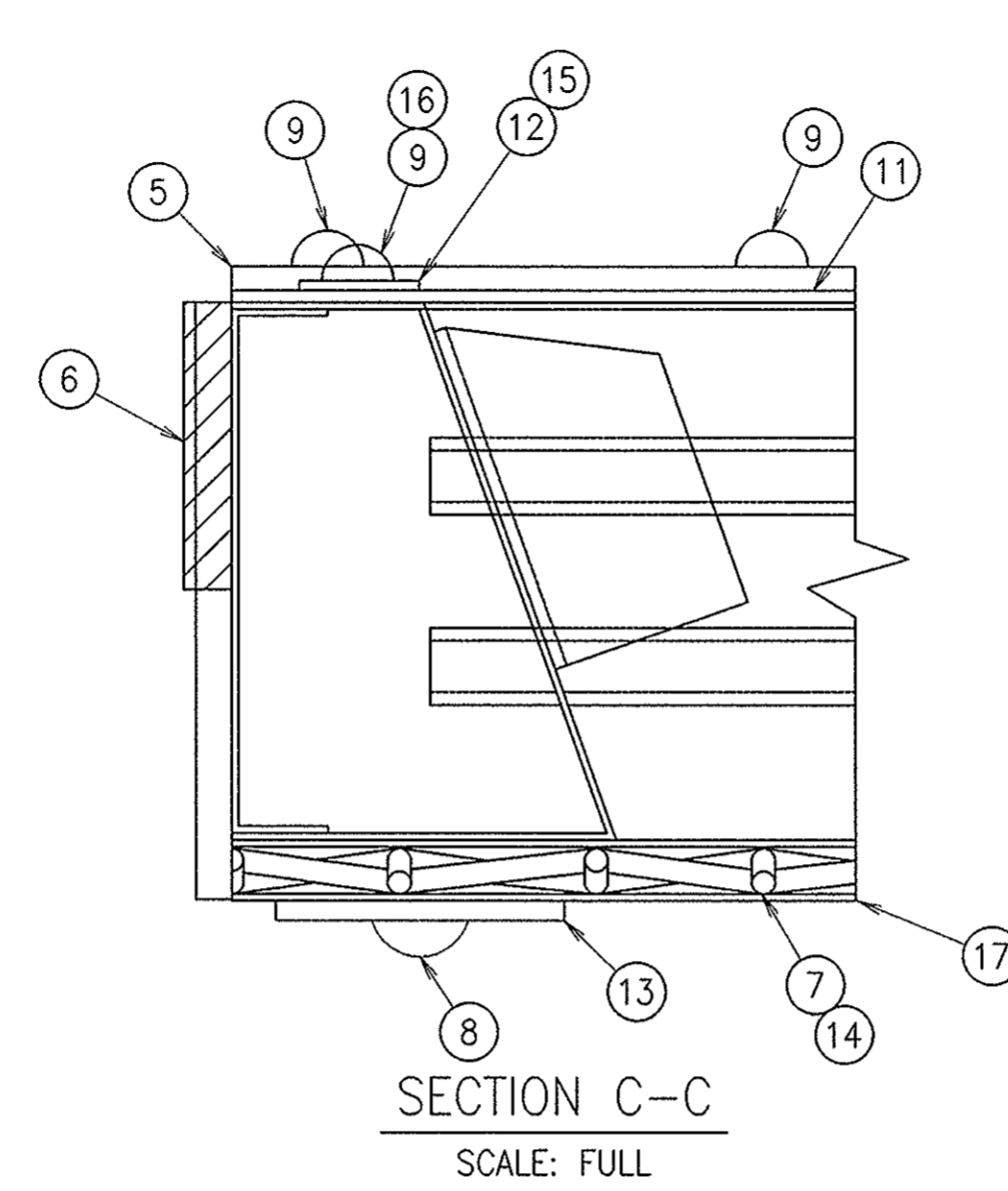
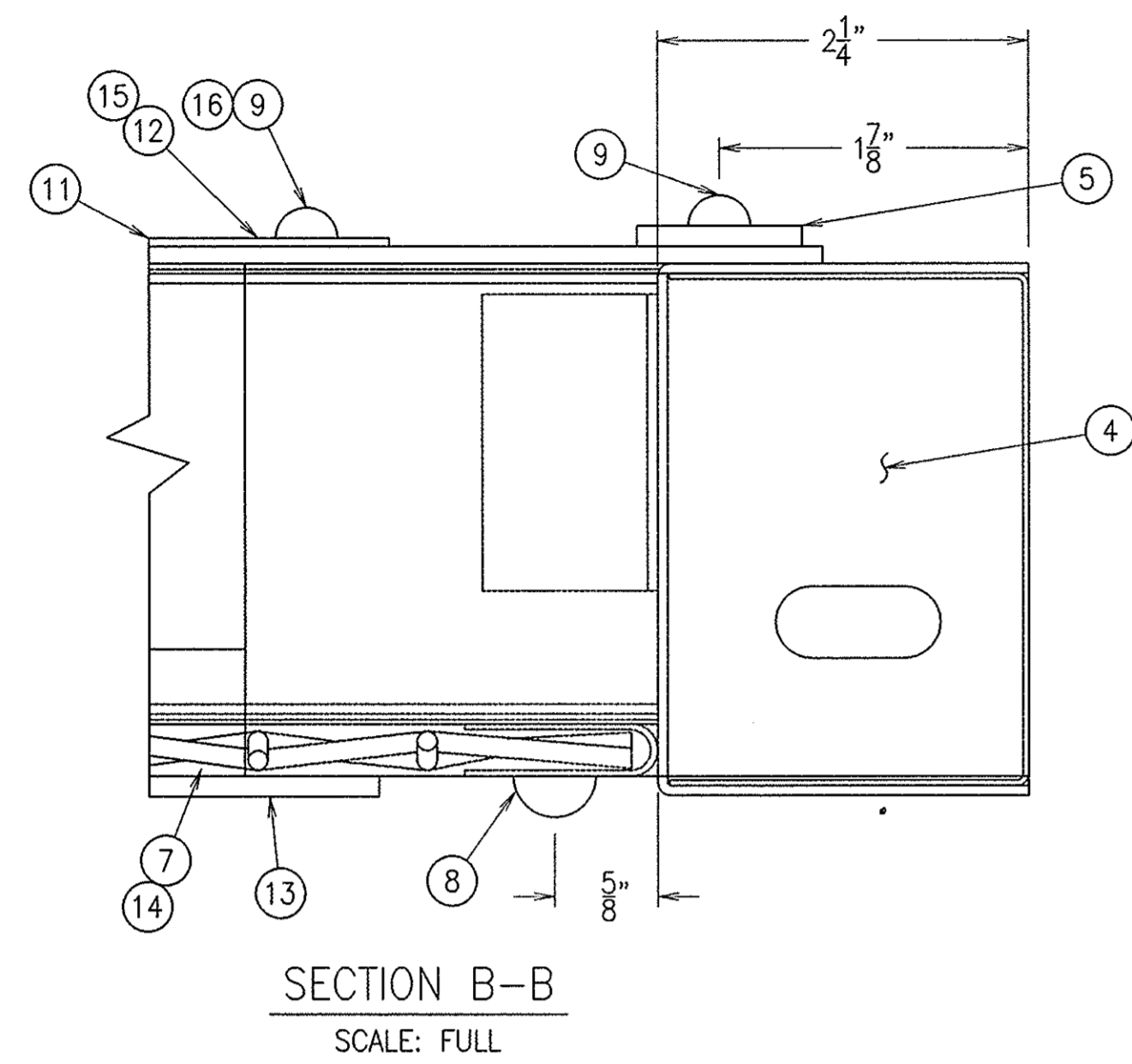
QC BALL DECK ASSEMBLY  
FOR 6' WIDE X 4' LONG  
STAINLESS STEEL- DISCHARGE

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SYM	REVISION	DR	CK	DATE	MICROFILMED
-	REFER TO REVISION ON PAGE 1	-	-	-	-



TOLERANCES: FRACTIONS: 1/16, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1.00 UNLESS OTHERWISE SPECIFIED		DATE: 05-21-02
NEXT ASSY:	PROJ ENG:	DRAWN BY: YL
FILE PATH: G:\DRAWINGS\A.J. SACKETT\100414\TS-0201\4600-86	CHECKED BY: JLD	
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