THE POTOMAC VALLEY S GAUGE SUPPLY COMPANY PRESENTS
A SANDHOUSE BASED ON A NORFOLK SOUTHERN PROTOTYPE

This kit requires you to build four subassemblies and then to combine them into the finished structure. These subassemblies are: (1) Sand bunker, outside braced; (2) Sand tower, corrugated and sheet metal covered; (3) The stairs and catwalk for access to the tower; and (4) The sandspout and its rigging.

Basic construction is to build the structures out of illustration board, cover the resulting structure with the appropriate surfacing materials and details and then attach the stair and sandspout subassemblies. Members of the PVSGA who have built this kit have introduced variation to suit their own pikes, e.g., brick paper around the foundation, corrugated material for the tower roof, wire railings around the catwalk, working sandspout and lights, so feel free to use your artistry.

DIRECTIONS FOR ASSEMBLING SANDHOUSE KIT:

I. Check contents of kit against bill of materials.

II. Cut substructure from illustration board with sharp knife and metal straight edge (#11 blade recommended). Cut corners square.

III. Sand Storage Assembly

1. Glue 1/8" x 1/8" x 2" bracing along the unlettered side of the long edges of SB-3 and SB-4. (4h - 4h)

2. Glue similarly numbered edges together; 1 to 1; 2 to 2, etc. SB-3 and SB-4 are enclosed by SB-1 and 2.
OVERLAPPED

Sand Storage Foundation

The foundation must be extended two thicknesses of illustration board to accommodate the sill for the vertical braces. Glue the long pieces provided (SB-5, 6, 7, and 8) flush to the bottom edge of the front and rear of the sandhouse bunker. Make them flush with edges 1 and 4. They should extend 1/8" beyond edges 2 and 3. Glue the two shorter pieces (SB-9 and 10) along bottom edge of SB-3. The smooth end (SB-4) will abut the sandhouse wall.

IV. Detailing of sand storage section:

1. Cut scribed plank siding as indicated.

2. Glue to match portions of substructure (SB-1 to SB-1 etc.).

3. Cut sill, vartical and diagonal bracing as per drawing.

a. Dimensions of bracing

Vertical	3/32" x 1/8" (yellow/green)
Diagonal	3/32" x 1/16" (yellow/blue)
Sill	3/32" x 3/32" (yellow/yellow)
Cap	3/32" x 1/32" (yellow/red)
Corner Verticals	3/32" x 3/32" (yellow/yellow)

4. Drill #75 hole through vertical bracing on end section for wire "rod" before glueing to scribed siding. Diagonal braces can be drilled after they are in place (see drawing).

5. Locate and drill holes for nut and bolt details and install. Make straps from 3/32" x 1/2" pieces of paper. Impress with ballpoint pen to simulate lag bolts.

6. Glue strap to foundation and vertical members.

7. Install roof (SB-11) with edge A flush to top edge of SB-4. Front and rear overhand should be equal. Adhere roofing paper (tissue) with paint or dope.

(Red/Yellow) 8. Install hatch coaming of 1/32" x 3/32" protruding from roof 1/32".

9. Make lift-off hatch cover from scribed planking. Planking will show on underside of cover. Use 1/32" x 1/16" stock for frame. Frame should fit around coaming. Adhere roofing paper with paint or dope. Make grab irons from wire and install for lifting hatch.

10. Foundation was poured concrete. It could be finished with brick paper or stone to suit modeller. For concrete effect, cover with tissue paper; adhere with grey paint or dope.

V. Drying house and tower:

(Br/Br) 1. Glue 1/8" x 1/8" x 1" internal bracing on unlettered side of edges 8, 5, 6, and 7 and of H-3 and 4. On H-3 and 4, place bracing at upper corners of house section and 1/8" from bottom edge. Install 1/8" x 1/8" x 1" pieces on side 11 of H-3 and 9 and 10 of H-6.

2. Assemble H-1 and H-3 along edge 5. H-1 overlaps H-3.

3. Assemble H-1 and H-4 along edge 6. H-1 overlaps H-4.

(Br/Br) 4. Install 1/8" x 1/8" x 1" bracing on smooth side of floor made of scribed planking. Glue plank floor in place between H-1, 3 and 4 at level of door sill in H-1.

6. Glue H-2 in place to complete walls. Be sure structure is square.

7. Glue into position remaining two sides of tower.

8. Install corrugated siding on house section. Be very careful. Edges must be mitered for best appearance. Note that piece (H-4) does not have square corners.

9. Cut 3/8" strips of paper to simulate siding on tower. Glue in place beginning a lowest course which should slightly overlap corrugated side. Each superior course overlaps inferior.

10. Trim tower edges with 1/16" x 1/16" angle. Trim must leave space for roof at bottom edge.

11. Line upper door aperture with 1/32" x 3/32" stock. (R/Y)

12. Sliding door is made from corrugated siding. Install door channel with groove side up and out. Door hanger is made from 1/32" x 1/16" scrap. Bend pin so that head simulates roller. Glue shaft to back of door hanger. Pin may be stuck in top edge of door.

13. Finish foundation to match foundation of sand storage bin.

14. Paint corrugated siding and tower flat aluminum. Weather.

15. Prepaint and install cast door and windows.

16. Cover roofs with paper and install. Lower roof fascia is 1/32" x 1/8". Prepaint. Tower roof has 1/32" x 3/32" fascia. Hatch on tower is small square of illustration board covered with roofing paper.

17. Glue thumb tack top to top of ventilator. Paint ventilator and install.

18. Install ladders as illustrated.

19. Install flue assembly on rear of house as illustrated. Trim wood block to shape. Drill 1/8" hole in rear of drying house for upper pipe. Use 1/8" piece of dowel for upper pipe. Soda straw is the vertical pipe.

VI. CATWALK AND STEPS:

1. Build frame using 1/32" x 1/8" stock using undersurface of catwalk floor for dimensions. Frame should be flush on building side and 1/16" from outer edge (railing side). Floor should slightly overlap frame at ends. Brace transversely with 1/32" x 1/8" stock at locations for vertical railing posts.

2. Build steps using card stock for risers. Make treads of 1/32" x 3/16" material. Install transverse brace at upper end of stairs to provide glueing surface for attachment to catwalk frame.

3. Assemble railing according to drawing. Vertical posts are 1/16" x 1/16". Railings are 1/32" x 1/16". Do not forget to make inner rail for stairway.

4. Assemble catwalk, stairs and railings. Paint all but surface to be glued to building. Attach to building in location shown. Install and paint the diagonal bracing under catwalk.

VII. SANDSPOUT ASSEMBLY

1. Cut a 1/2" x 5/8" piece from a scrap of scribed planking for a base for the sandspout and rigging. Scribed surface will be glued to tower.

2. Glue 1/2" piece of 1/16" angle stock on to base above rain hood to serve as the base for the horizontal A-frame for support of the spout.

3. Make the rain hood as illustrated using paper or 1/32" stripwood. Glue to base leaving room below (1/8") for sandspout.

4. The A-frame may be made from 1/16" angle or 1/16" x 1/16" stock 7/8" in length. Glue one end to ends of base and together at the other end.

5. The vertical spout arresting piece may be made from 1/32" x 5/32" stripwood 5/16" in length. Glue to peak of A-frame.

6. Shape cylinder at small end of sandspout into curve by sanding and whittling. Cut off base of sandspout so that spout is 1 5/8" long. Glue large end to base and tapered portion to the vertical arresting piece.

7. Simulate lines and counterweight with thread and piece of 1/8" dowel. Use eyerings provided.

8. Paint. Glue subassembly to tower side as illustrated.

VIII. LIGHTING

The small conical pieces of plastic are to serve as reflectors. Thread on pin. Pinhead is to simulate light. Bend shaft and stick into tower at places illustrated.

5/16 + 4 = 13/16

The Potomac Valley S. Gauge Supply Company

BILL OF MATERIALS

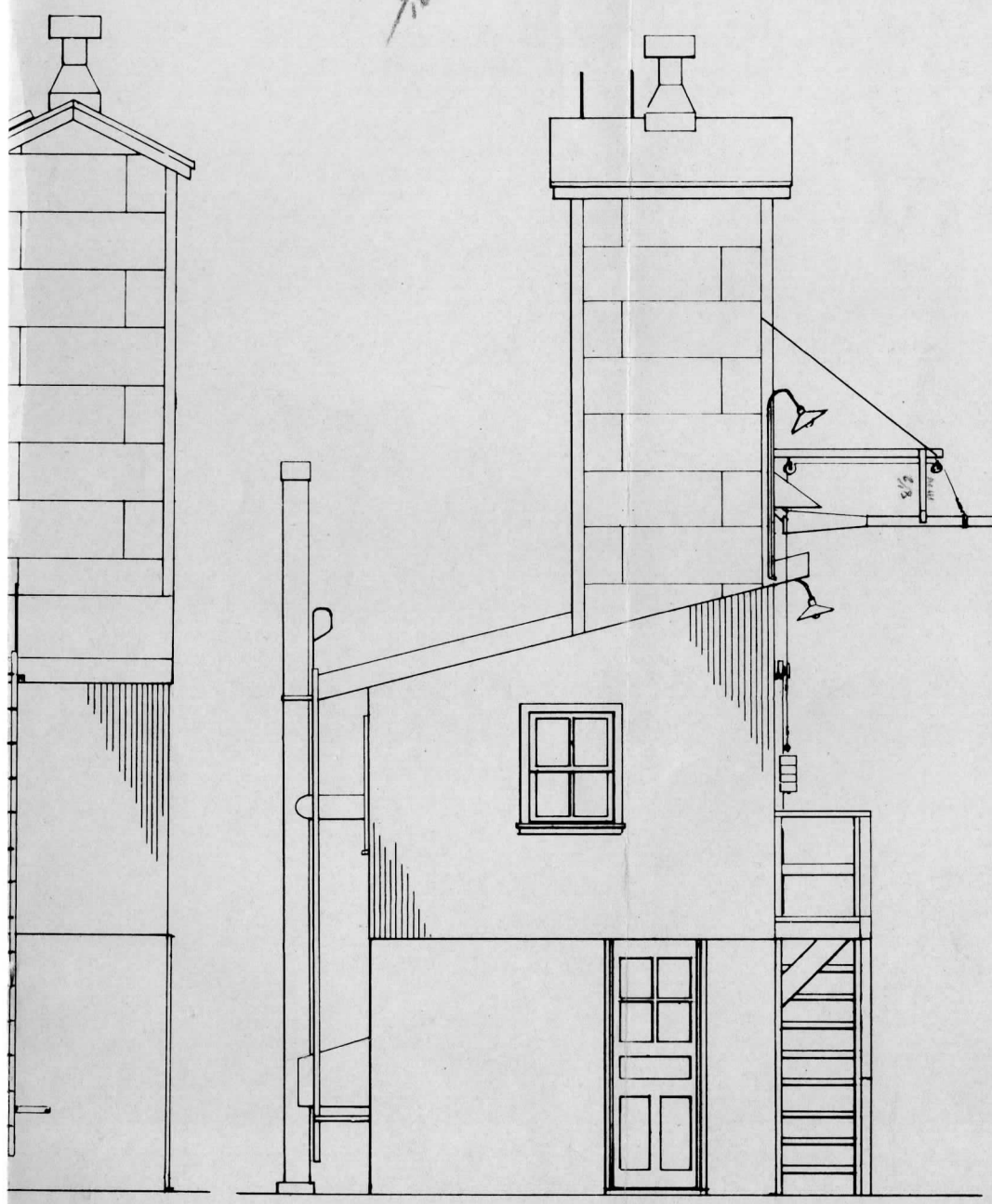
4 pieces of illustration board (templated)
1 piece of corrugated siding (templated)
1 piece of planked siding (templated)
1 ventilator
1 sandspout
1 thumbtack
4 pins
2 windows
1 door
1 plastic soda straw
1 piece of tissue paper
1 piece of ladder stock
1 piece of .20 gauge wire
1 block of wood 1/2 x 3/4 x 1/2 inch
1 stair risers (template)
1 1/8" dowel
1 sprue of nuts and bolts
2 reflectors
10 paper strips 3/8" wide
4 wire "eyes"

Northeastern Stripwood as follows (6" pieces)

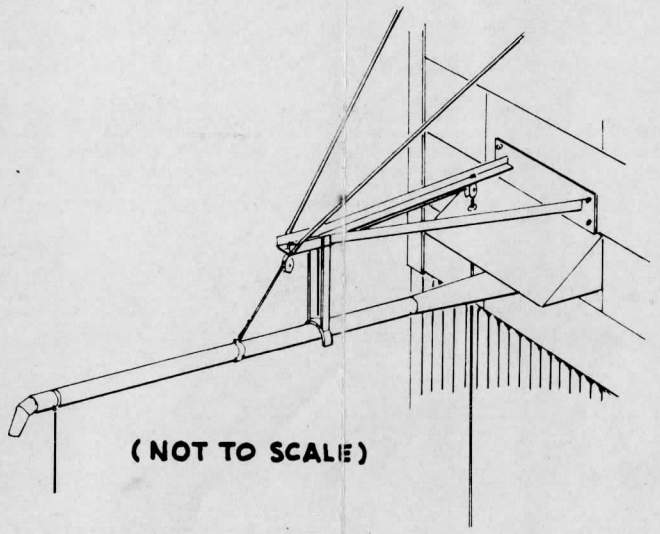
5 pieces 1/32 x 1/16
2 pieces 1/32 x 3/32
4 pieces 1/32 x 1/8
1 piece 1/32 x 5/32
1 piece 1/32 x 1/4
2 pieces 1/16 x 1/16
3 pieces 1/16 x 3/32
5 pieces 1/8 x 3/32
2 pieces 1/8 x 1/8
3 pieces 3/32 x 3/32
2 pieces 1/16" angle
1 2" piece of overhead door channel

Smaller pieces of wood are color coded to help identification

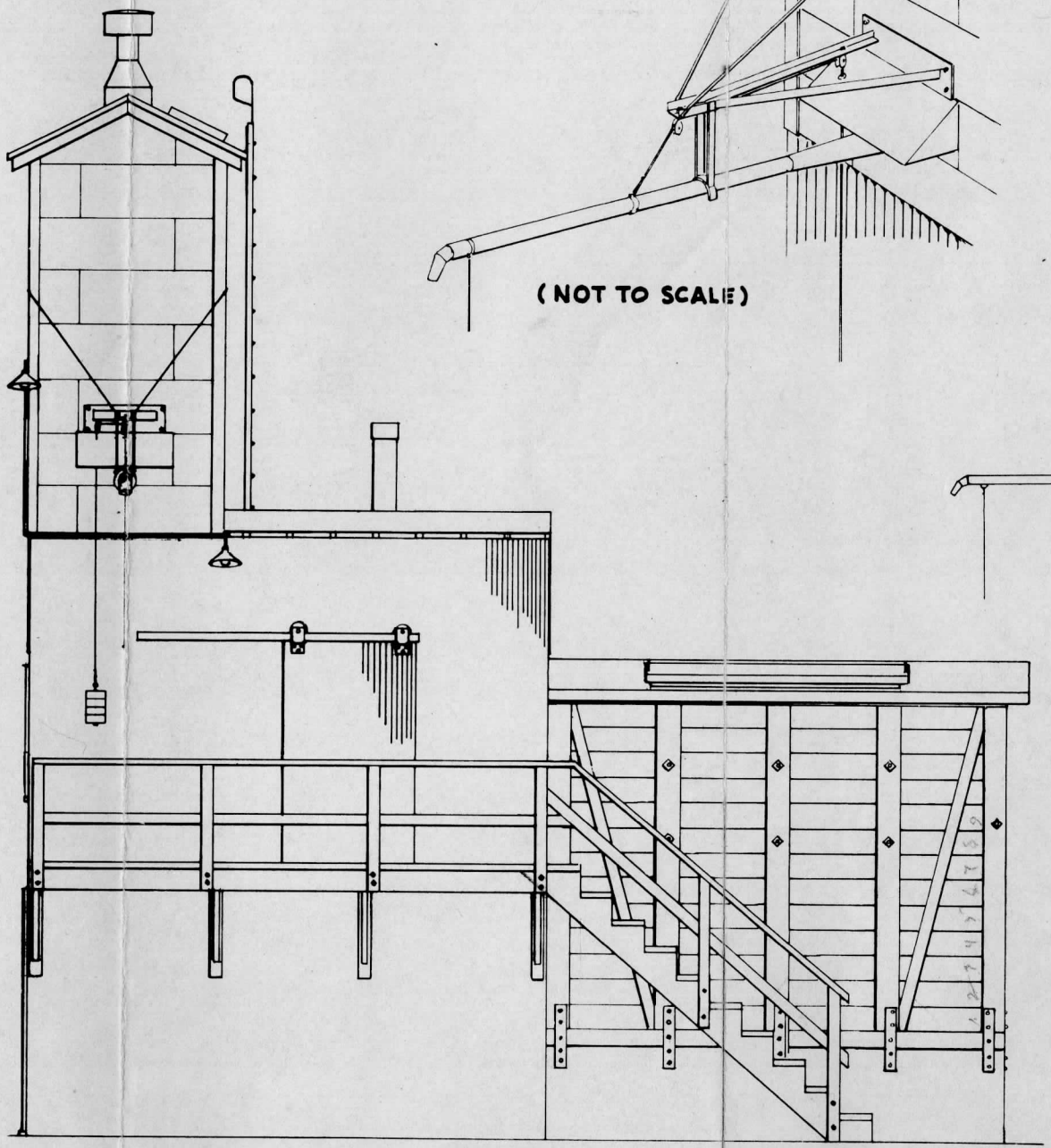
Red -- 1/32
Blue -- 1/16
Yellow -- 3/32
Green -- 1/8



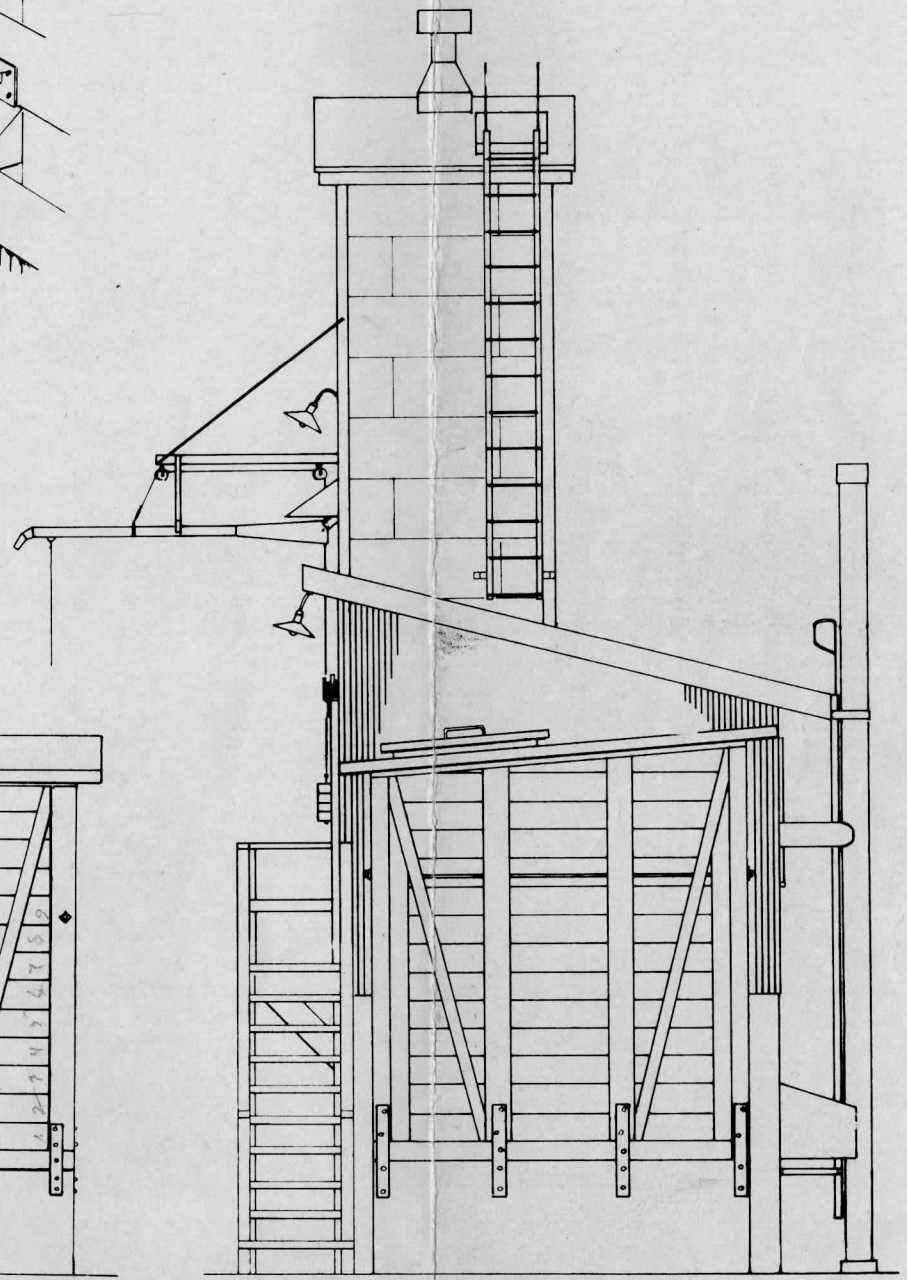
LEFT SIDE



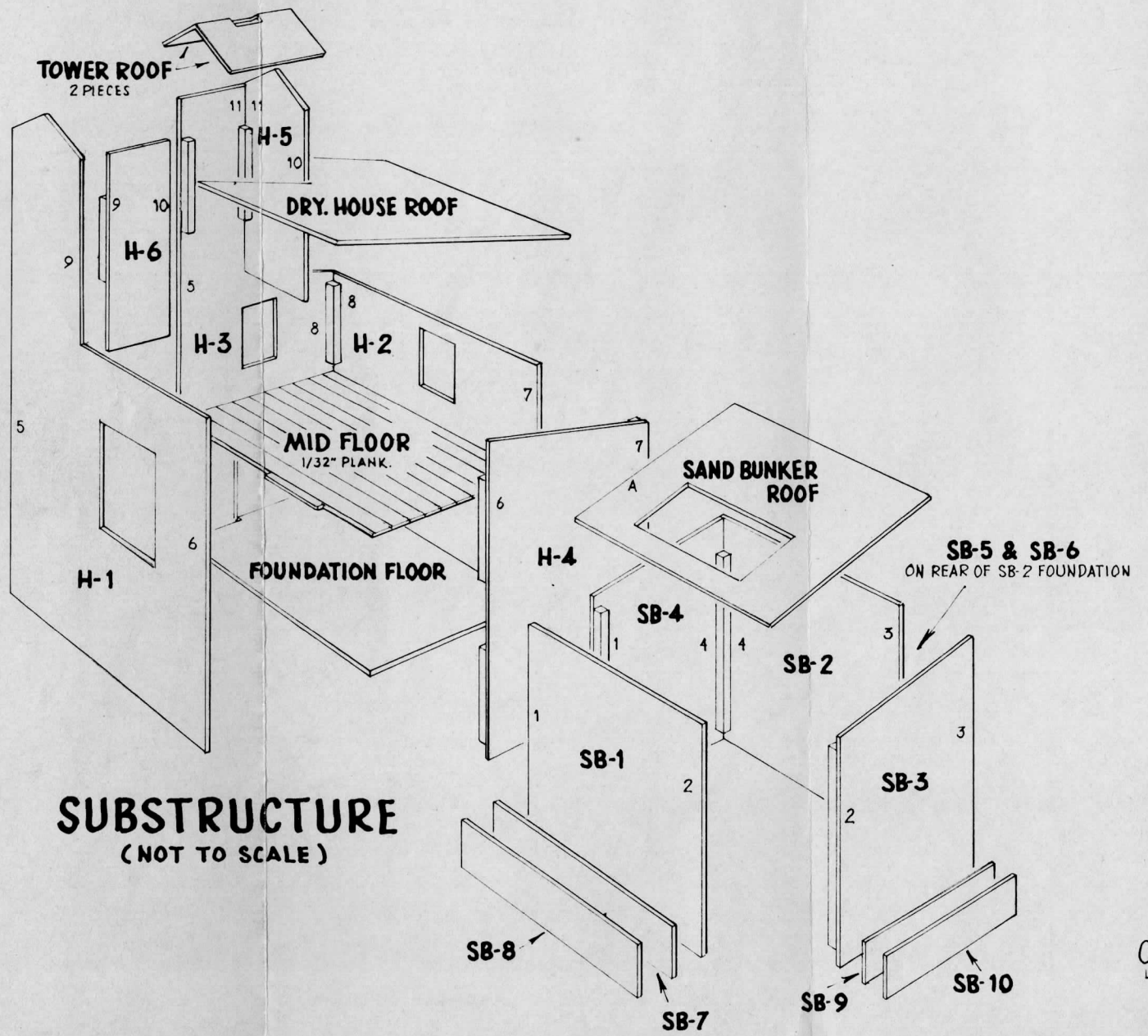
(NOT TO SCALE)



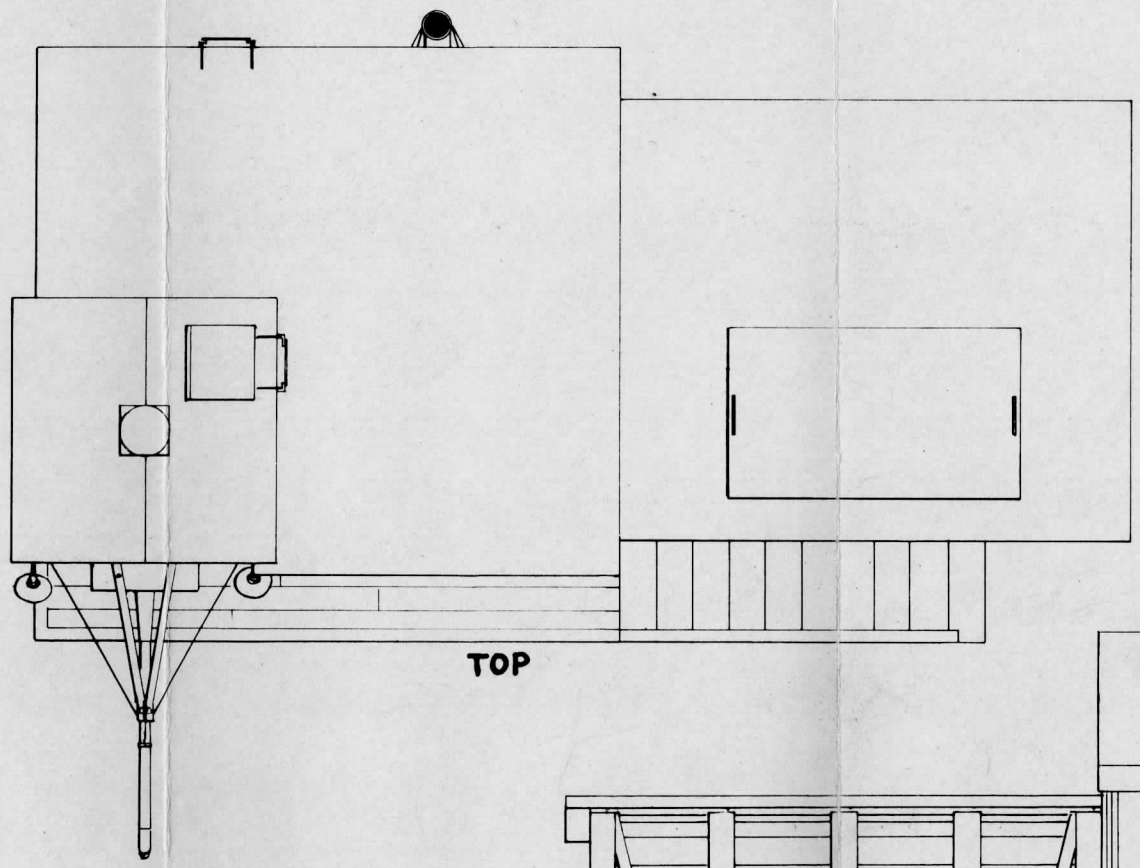
FRONT

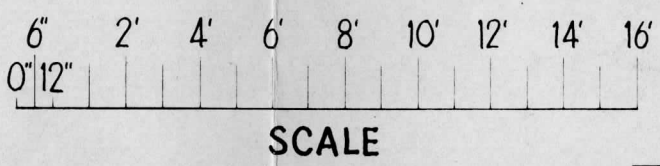


RIGHT SIDE

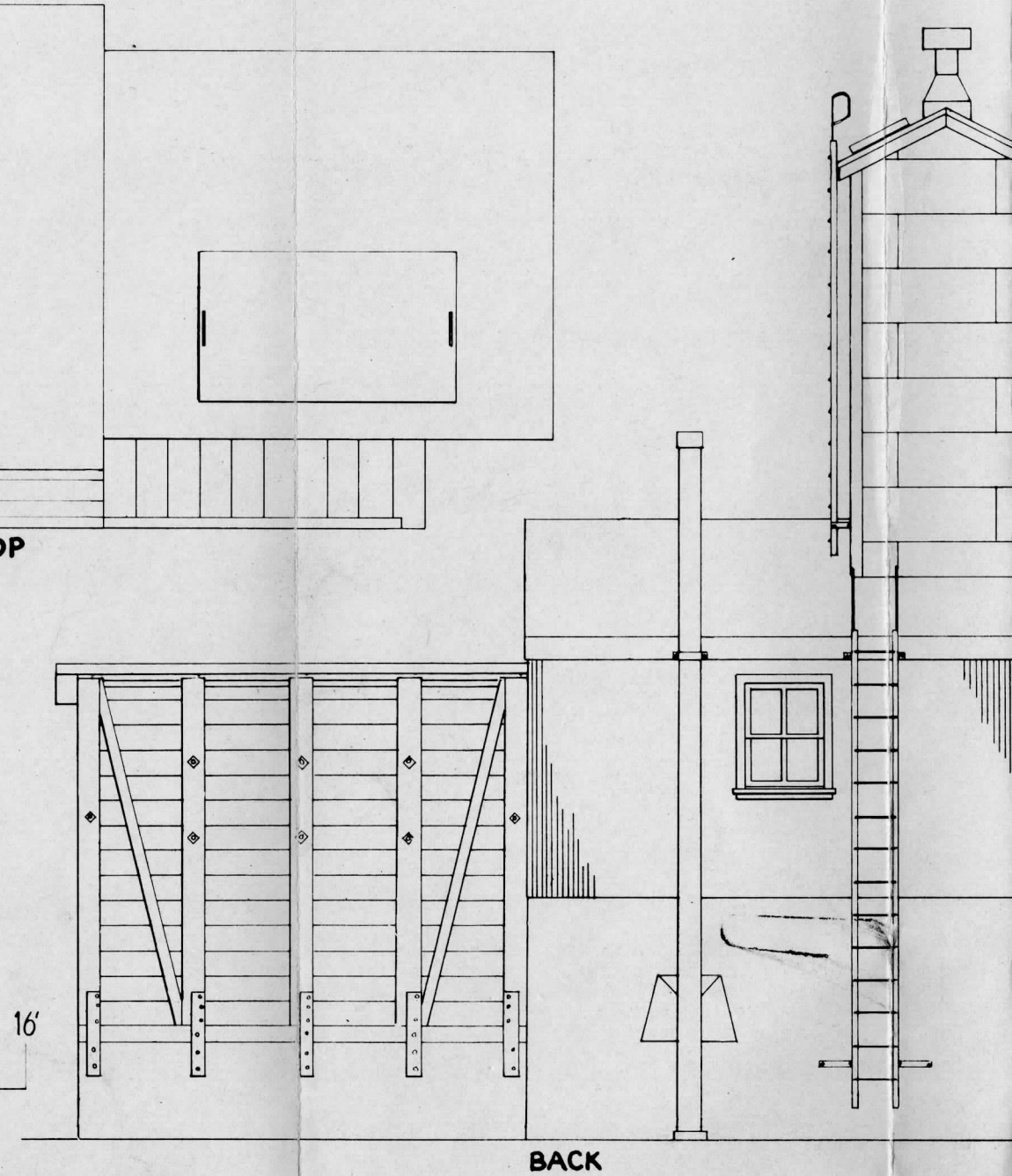


SUBSTRUCTURE
(NOT TO SCALE)





SCALE



BACK