

SUPPLEMENTAL INFORMATION FOR NMRA CONTEST JUDGING FORM

OCKHAM RAZOR FACTORY

REPAIR SHED



PART ONE: Construction Technique

A. Project Objective

The program objective was to construct a small work/repair shed that would sit in front of Ockham's Razor Factory main building. The goals were to use a different

construction method (board on board over visible open frame) and to provide a visual counterbalance to the evolving “work emergency” scene evolving on the diorama in front of the main building.

B. Original Plan

The plan was developed on graph paper to fit the size of the space that was available on the diorama. Goals: not too large to overpower main building, not so small that it would not look prototypically inaccurate. In other words, I wanted space for wall shelving on three walls and some work room in the middle.

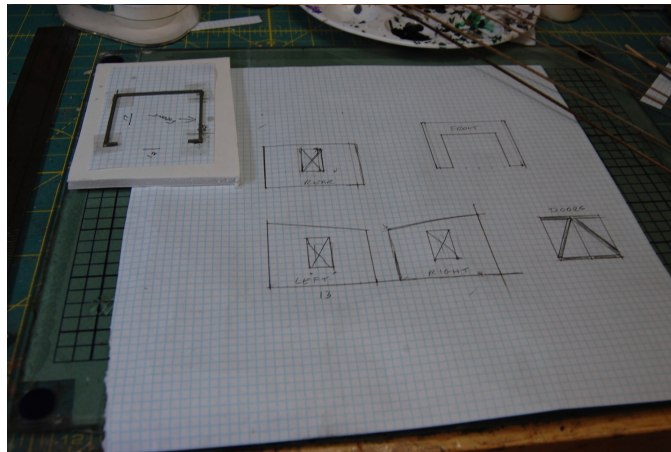
C. Construction techniques

- Hand drawn plans

The plans were hand drawn on graph paper.

Plan considerations: Sloping roof, wide front doors open to show interior.

Removable roof to show interior.



- Plastic

Evergreen styrene shapes used for hinges.

Northeastern Scale windows.

Resin castings from Sierra West

Prieser figures.

Styrene pipe for stove vent interior and exterior and plating.

Evergreen styrene used for metal base on stove.

- Metal

Seriously small strands of wire for door handles.

Metal castings from BEST.

- Wood

Stripwood from Northeastern Scale Lumber.

- Cardstock/Paper

Vellum paper for tar roofing.

Card stock for signs.

Thin paper for newspapers.

D. Construction narrative

1. Construction Sequence

Drew the plan.

Created wall templates.

Built foundation.

Stained all the wood.

Made wall framework.

Boarded over the framework.

Added trim pieces.

Reversed the walls, added additional weathering before detailing.

Added windows.

Made the floor.

Researched, printed and added signage.

Constructed workbench attached to wall.

Painted castings.

Attached additional castings to wall.

Placed free standing castings on floor.

Fitted the walls into two pieces.

Glued floor fittings in place.

Attached the walls.

Built doors.

Built roof.

Final weathering.

2. Foundation

The foundation was originally a concern for me. I settled on creating a concrete appearance foundation out of basswood that would be just smaller than the building itself to represent prototypical overhang. It is not really visible, but it is what keeps the building (and the wood) off the ground.

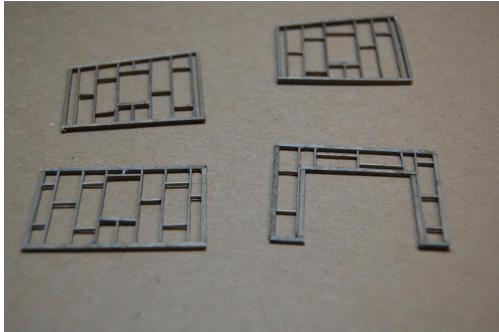
3. Walls

Walls were constructed board by board over a structural framework attached to the graph paper template using 3M transfer tape or double sided scotch tape. The template was held to the work surface using drafting tape.

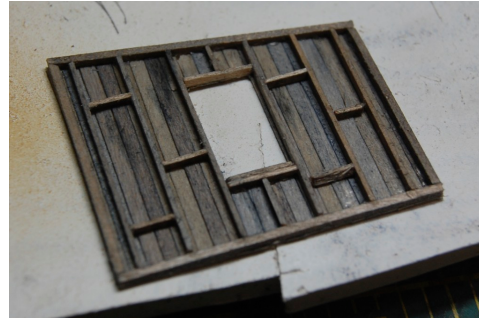
All wood was cut to approximate vertical length prior to staining. A variety of Hunterline stains were used to ensure visual variety in the staining. The boards were then mixed together randomly and pulled out of a box to try to ensure the lack of a specific boarding pattern.

The windows were given full framing. The frames sit on a larger footing board at the bottom. Studs are 2x4. Once all the framework was completed for the four walls and allowed to dry, they were removed from the grid and placed upside down on the same grid, allowing me to use the existing marks to line up the exterior boarding (similar to the process for the loading docks on the main building).

Here are the finished wall frames

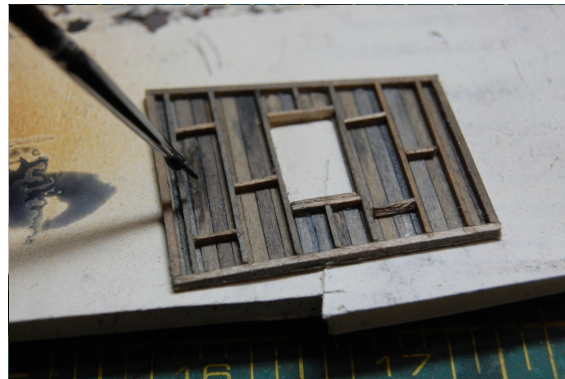


After exterior boards applied



Once the boards were dry I used additional localized staining with alcohol and india ink to represent localized weathering. I also used dry brushed Bragdon powders for the same purpose.

Spot staining interior (oil spills, etc.)

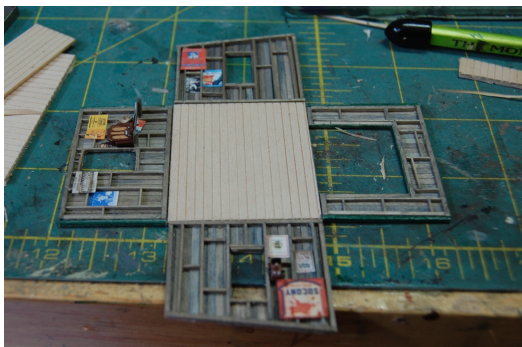


I then stained and dry brushed the exterior trim, using a darker green color to contrast with the main building.

The interior detail work on the walls will be described below.

Once the interiors were finished I fitted the four walls together, installed the windows, placed the walls in a “pressed duck” fashion to ensure uniformity and then attached in two sections to the floor.

The pressed duck



Corner fitting (w/castings for fit)



Then each of the sections were added together, making the complete structure.

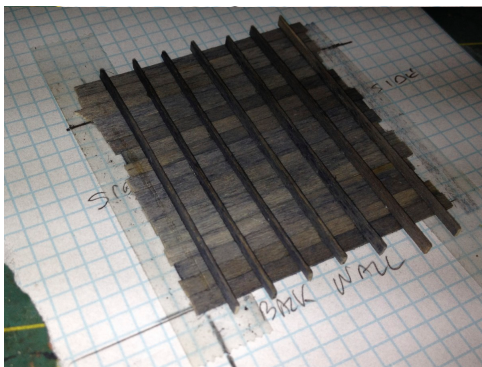


4. Roofing

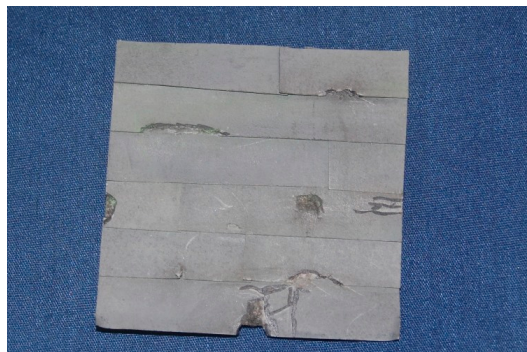
The roof was designed to be easily removable. This meant stability with prototype accuracy. I decided to do a board on board roof, covered with tar paper on the top and rafters underneath to give stability and provide prototype appearance.

Wood was stained in the same fashion as with the walls. The tar paper was made by spray painting vellum paper, cutting into strips, and then staining with weathering mix. Some of the paper was lifted to show the wood underneath and tar lines added with valejo paint. Thanks to Jimmy Simmons for how to use vellum on the roof.

The roof assembled on grid paper



Completed roof with tar paper



5. Interior

There are two parts of the interior: wall decorations and detail castings. The intent was to show a busy, not very snug, repair facility heated by a pot belly stove in the

winter, but mostly used for storage and hanging out. After the blank walls were finished the windows were installed and the interior fully planned. I wanted to have a work bench in the far right corner that would include a radio, coffee, posters, calendars and pinups. (See section on conformity for full list). The front left would have another work bench and a telephone in use. The far left corner would have the stove, stovepipe, and more signs. The near right would be storage. The middle would be highlighted with a worker pushing a cart full of tools.

The work benches were attached to the walls before they were assembled. The posters were also attached. I added beer or soda cans, a full mug of beer, a spilled coffee cup, a radio, the 1938 Red Sox radio network (with Fred Hoey, your announcer on the Colonial Network, which also apparently broadcast Bruins games). I also added single empty bottles and some period newspapers to the mix.

Once the wall pieces were outfitted, I could fit in the remaining details: the workers, the cart, and the storage cabinet.



The free standing items (worker on the phone, cart, worker in middle, stove) were glued in place before the walls were assembled. Then the two right angle wall sections were attached to complete the interior.

6. Doors

The doors were done in the same board on board fashion as the rest of the building. I added trim and framing dry brushed with dark green to highlight the walls and match the exterior trim. The door handles were made out of individual strands of electrical wire pulled from a stranded length of leftover wire, and bent into shape using pliers. Multiple attempts had to be made to make consistent sized handles

The hinges were made out of a styrene I girder and a styrene tube, painted black and copper respectively.



7. **Windows**

Windows were Northeastern Scale standard windows, with provided glazing used to make them see through. They were primed gray, then sponged green to reflect peeling paint. The window glazing was dirtied with weathering wash, dirt was applied to the sills, and some of the panes broken or cracked.

They were placed into the pre-made window openings and then framed around the back to disguise their plastic forms.

E. Materials Used

Northeastern scale lumber, various sizes.

Northeastern Scale Lumber windows and glazing.

Evergreen sheet styrene.

Card stock.

Evergreen styrene forms.

Sierra West details.

Prismacolor Markers.

Paints, stains and washes.

Delta Ceramcoat Paints.

Valejo acrylics.

Hunterline stains.

Homemade alcohol ink stains.

Winton oil paints.

Red and Gray spray automotive primer.

Citadel metallic paints.

Glues

CA: medium dry with zip kicker as necessary.

Elmer's white glue.

Future Floor wax.

Formula 560 canopy glue.

Tape

Double sided Scotch tape.
Transfer tape (3M, purchased from framing store).

PART TWO: DETAILS

Details are listed in two areas: signage, and fittings and details.

1. **Signage.** As noted in conformity, all signs are rigorously fall 1938. I list them from the front, going left around the building, then around from the left front wall inside. They include:
 - a. **¹NRA (National Recovery Administration) poster**, found on almost every business and factory in the 1930's.
 - b. **Faded 1936 Franklin Roosevelt poster** saying "Carry On with Roosevelt". (I had Alf Landon's as well, but they would not be on this type of factory).
 - c. **A poster advertising "Larry Clinton and His Orchestra"** that had happened in August. The orchestra performed at dances from 1938 through 1942. There is a GREAT version of "Heart and Soul" available on the internet.
 - d. Back wall intentionally left blank.
 - e. Final wall: **ATT strike poster**. Late 20's, early 30's.
 - f. **Socony oil poster** on left interior wall. The winged horse came from Magnolia Petroleum as a merger acquisition. Socony was the actual corporate name for Mobil for many years.
 - g. **"Regal Shoes" scorecard**. Price, 5 cents.
 - h. **Astounding Science Fiction from September 1938** on the telephone table. Edited by John Campbell, with a story by L. Ron Hubbard. Price, 20 cents.
 - i. Back wall: **"Get a Lift with a Camel" pinup poster**.
 - j. **Boston Bruins 1938 team picture**.

¹ Cannot resist the featured story: "TREASURE ASTEROID" by Manly Wade Wellman, winner of the Edgar Allan Poe award!

- k. **Betty Davis pinup.** Betty starred in “Jezebel” that year.
- l. **Atlantic Electrical Supply Company of Worcester’s pinup calendar** for September 1938.
- m. **Newspaper** with ketchup ad from September 1938 (the color is the ketchup).
- n. **New York Times front page** for September 15, 1938.
- o. Sidewall: **Joe Lewis** poster.
- p. Pinup: **Ski New England** from the New Haven.
- q. **Saony poster for the “Colonial Network”** listing stations broadcasting the Red Sox and Bruins. Your announcer: Fred Hoey².

2. **Fittings and details**

- a. Era appropriate wall phone.
- b. Coal bucket (additional loose coal added to empty bucket).
- c. Pot belly stove.
- d. Foundation stone for stove.
- e. Stove pipe leading out of building.
- f. Coffee pot on the stove.
- g. Era specific radio.
- h. Spilled cup of coffee.
- i. Glass of beer under telephone.
- j. Bottles stored under workshelf.
- k. Loose bottles thrown into wall openings.
- l. Cracked and discolored windows.
- m. Door handles on both sides of main doors.

² 1938 was his last year on radio. He demanded a raise and was fired.

PART THREE: CONFORMITY

1. Structural conformity

Conformity to form and substance of era structures.

Appropriate construction techniques for the era.

Weathered board siding in dull or muted colors.

Visible rafters.

Board on board construction. Because this is more of a shed than a highly maintained workplace, direct board on board was used instead of clapboard or board and batten.

Open interior walls.

Appropriate aging

Peeling sections of paint representing deferred maintenance.

Use of older Bell System strike sign to represent that the building has been unpainted for some time.

Some windows in state of disrepair.

Staining on the floor and walls to represent oil spots.

Aging and moldy outer walls and roof. Some roof sections missing.

2. Visual conformity.

I use the term visual conformity to refer to the ability of the model to transmit to the viewer the era it represents. This is primarily done through details and signage. I consider signage to be crucial to conformity: Looking at the model you should see what a person walking around in that era would have seen around them. I strive to make all the signage and debris prototype accurate for my time period: mid-September 1938 in southern New England. As noted in the detail section, all signs, newspapers, posters, and magazines are specific to September 1938. Prints of all signs in larger sizes are included at the end.

PART FOUR: FINISH AND LETTERING

A number of the finish and lettering techniques are described in full in the construction narrative. The objective in each case was to create layers of coloring by using multiple thin washes and alternating techniques. For the purpose of this section a summary is as follows:

All wood was stained prior to painting where painting was necessary.

Stains were also applied after painting where appropriate.

Roof material was stained to dull down the colors.

Weathering powders throughout were used both as a dry brushing technique and as thin and sludgy coloring using different dilutions of alcohol.

Detail castings, metal parts and styrene were all primed with spray automotive primer, either gray or red as appropriate.

PART FIVE: SCRATCH BUILT

As noted in the construction narrative, the entire structure was scratch built using board on board techniques from hand drawn plans. All patterns for the floor, the roof, the walls and the doors were drawn on graph paper and then used as templates for the actual construction.

Detail parts were either fabricated, modified, or given more detail to ensure prototypical accuracy. Specific examples:

The bench on the back wall was built from stripwood.

The door handles and hinges were scratchbuilt.

the stove pipe and vent were scratchbuilt.

The roof was made from stripwood and vellum.