

## Workshop tips

# Detailing model railroad scenes



- Add realistic details to a station platform
- Make a grade crossing with signals and signs
- Model convincing city streets
- Build a small town along a backdrop

# How to detail your station scenes

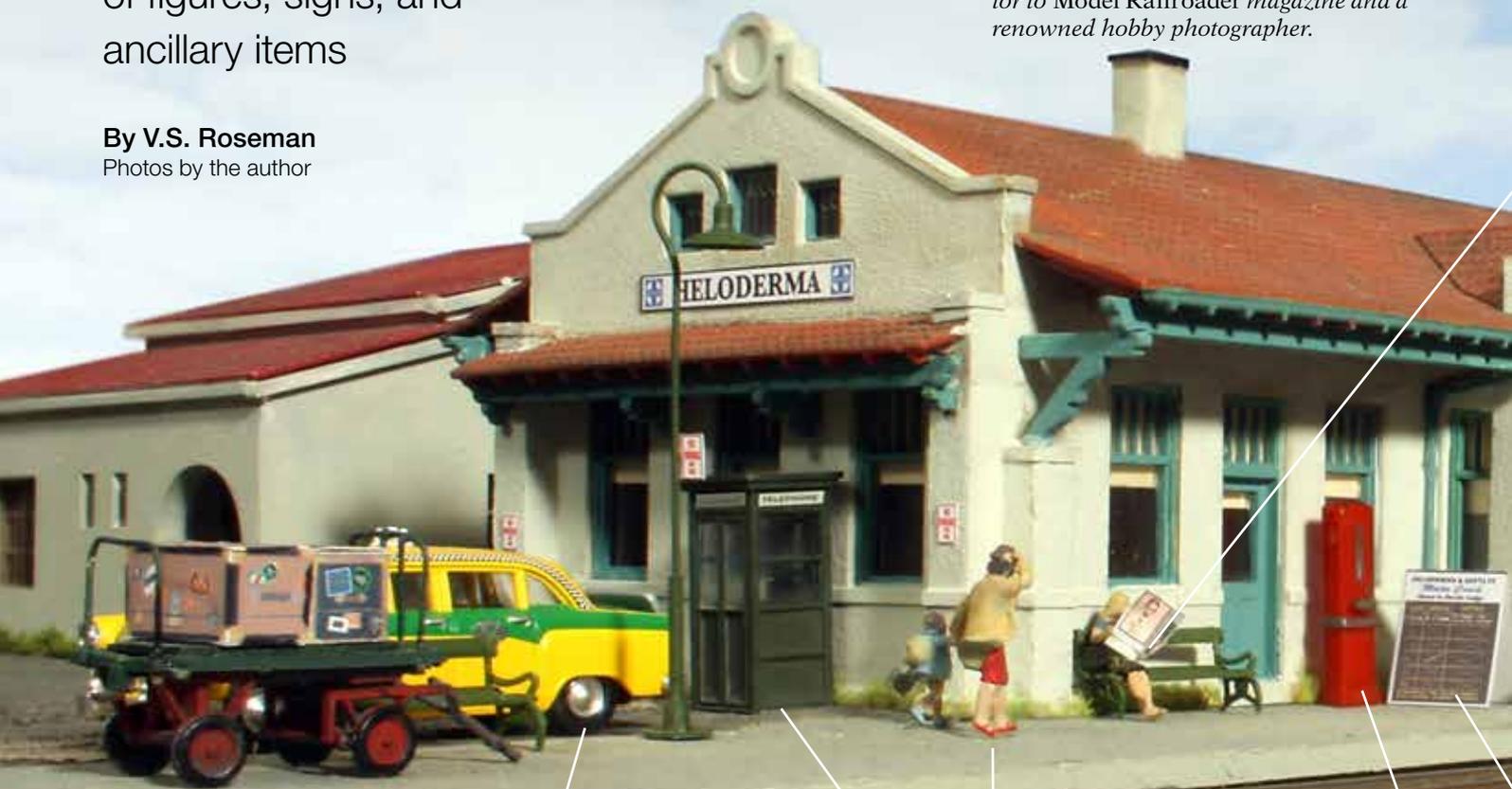
A guide to realistic placement of figures, signs, and ancillary items

By V.S. Roseman  
Photos by the author

Passenger stations add interest to a model railroad, and nearly every layout can potentially include one. There are many commercial kits that make modeling stations easy, but to create an authentic scene the project requires more effort than simply placing a depot and platform next to the tracks. To model a station as a central location of activity in a city or town on your layout, you'll want to include period-appropriate figures, signs, and posters, along with many other key details.

The following photographs and callouts demonstrate how I've added these details to compose several realistic passenger station scenes. [MR](#)

*V.S. Roseman is a frequent contributor to Model Railroader magazine and a renowned hobby photographer.*



**Candy machine,**  
Peco no. LK21

**Athern no. ATH26371 Checker A8 taxi** awaits passengers from the arriving train. Classic Metal Works and Sylvan Scale Models also offer HO scale taxis. Additional cab options, including those in maroon or black fleet colors, are available in O and N scales too.

I painted this **Bachmann no. 44209 phone booth** olive green and added computer-printed signs. Bachmann and Life-Like booths are available in sets of HO and O scale railroad details. Phone shelters with side panels are also available in N, HO, and O scales.

**Figures posed in motion**, like this woman and child walking toward the train, are useful for representing action along the platform. Figures in extreme poses tend to appear artificial. Use figures in more subtle poses so it isn't so obvious they aren't really moving.

# Platform figures

This HO scale (1:87.1) Walthers Cornerstone Series no. 933-2920 mission-style depot, patterned after a Santa Fe prototype, serves as the gateway to the fictitious community of Heloderma, N.M. Although the arriving single-coach local train doesn't draw as much attention as the celebrated *Chief*, the selection and arrangement of figures and details on the station platform help establish a sense of anticipation.

Other ideas for placing figures include a cab driver standing next to his taxi, a station agent standing on the platform, and passengers exiting from waiting room doors.

A **baggage room attendant standing with a cart** filled with sacks and boxes denotes the arrival of a train. Note that a load of mail or express freight often has one or more handlers nearby.

A few **Preiser or Woodland Scenics figures seated** on a bench or standing on the platform with luggage suggest that a train will be arriving soon.

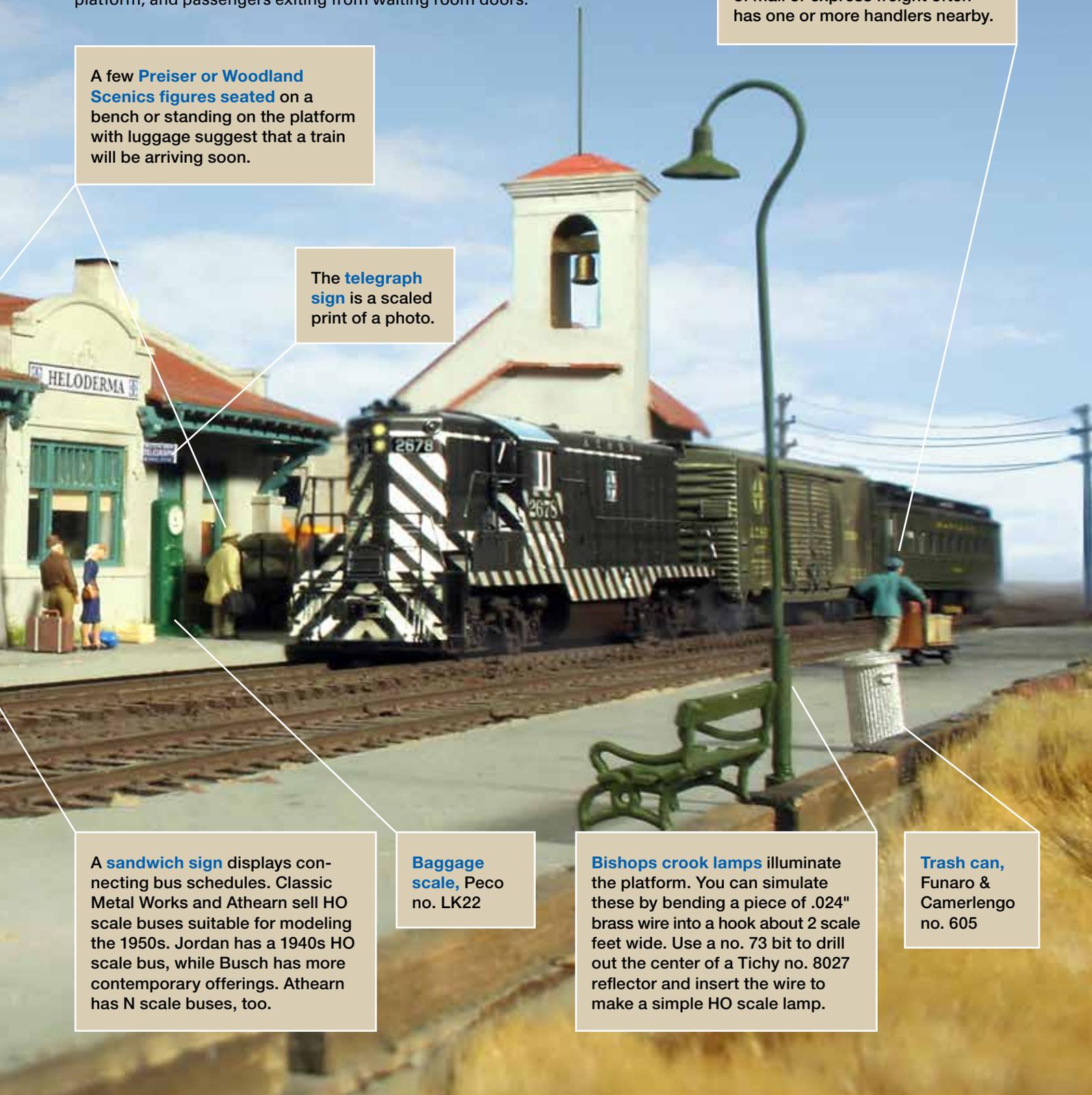
The **telegraph sign** is a scaled print of a photo.

A **sandwich sign** displays connecting bus schedules. Classic Metal Works and Athearn sell HO scale buses suitable for modeling the 1950s. Jordan has a 1940s HO scale bus, while Busch has more contemporary offerings. Athearn has N scale buses, too.

**Baggage scale**, Peco no. LK22

**Bishops crook lamps** illuminate the platform. You can simulate these by bending a piece of .024" brass wire into a hook about 2 scale feet wide. Use a no. 73 bit to drill out the center of a Tichy no. 8027 reflector and insert the wire to make a simple HO scale lamp.

**Trash can**, Funaro & Camerlengo no. 605



# Station and platform details

I built my O scale (1:48) Hunterdon Junction commuter station to resemble a depot typically found in the eastern United States. The choice of trim colors, the placement of platform canopies, the type of advertising posters, and other station details can help define a particular period or setting for your station.

To make contemporary posters, photograph real ads displayed at train or bus stations. Reduce prints of these posters to scale using a color copier or computer image-processing software. Vintage posters are available in old magazines or through online sources. Several model railroad suppliers, such as Blair Line, JL Innovative Design, and others, offer printed sheets of posters in various scales.

Advertising posters on platform posts, fences, and station walls promote both local and national businesses and products. Posters are hung in frames, which today can be tan, silver or black. In the past, frames were wood and often painted maroon, dark green, or a color to match the station trim. I tend to make my advertising space 3 x 6 scale feet.

Make an O scale wooden lamp-post using .125" square styrene cut to 1 $\frac{3}{4}$ " high. Attach a wire lamp arm near the top of the post. Glue a button to the wire to represent an O scale shade.



Railroads generally picked uniform color schemes for their structures, including stations, sheds, and interlocking towers. For example, the Lehigh Valley RR painted stations gray, Reading Co. used tan and cream, and Central RR of New Jersey used medium and light green on its structures.



Railroads gain extra revenue by selling space on station platforms for advertisements like these.



Tall posters, mounted vertically in aluminum, stainless steel, or black metal frames, are displayed on modern station platforms.



Make your own station signs with the aid of word processing or graphics software on a home computer. You can also scan photos of more elaborate signs and reproduce them using a printer. The signs I make are typically 12" tall with 6" letters. Some small station signs are posted on fences or lampposts.

A station canopy will make your station appear larger without actually using much space. These canopies don't even need to match the station, as they were often added years after the original structures.

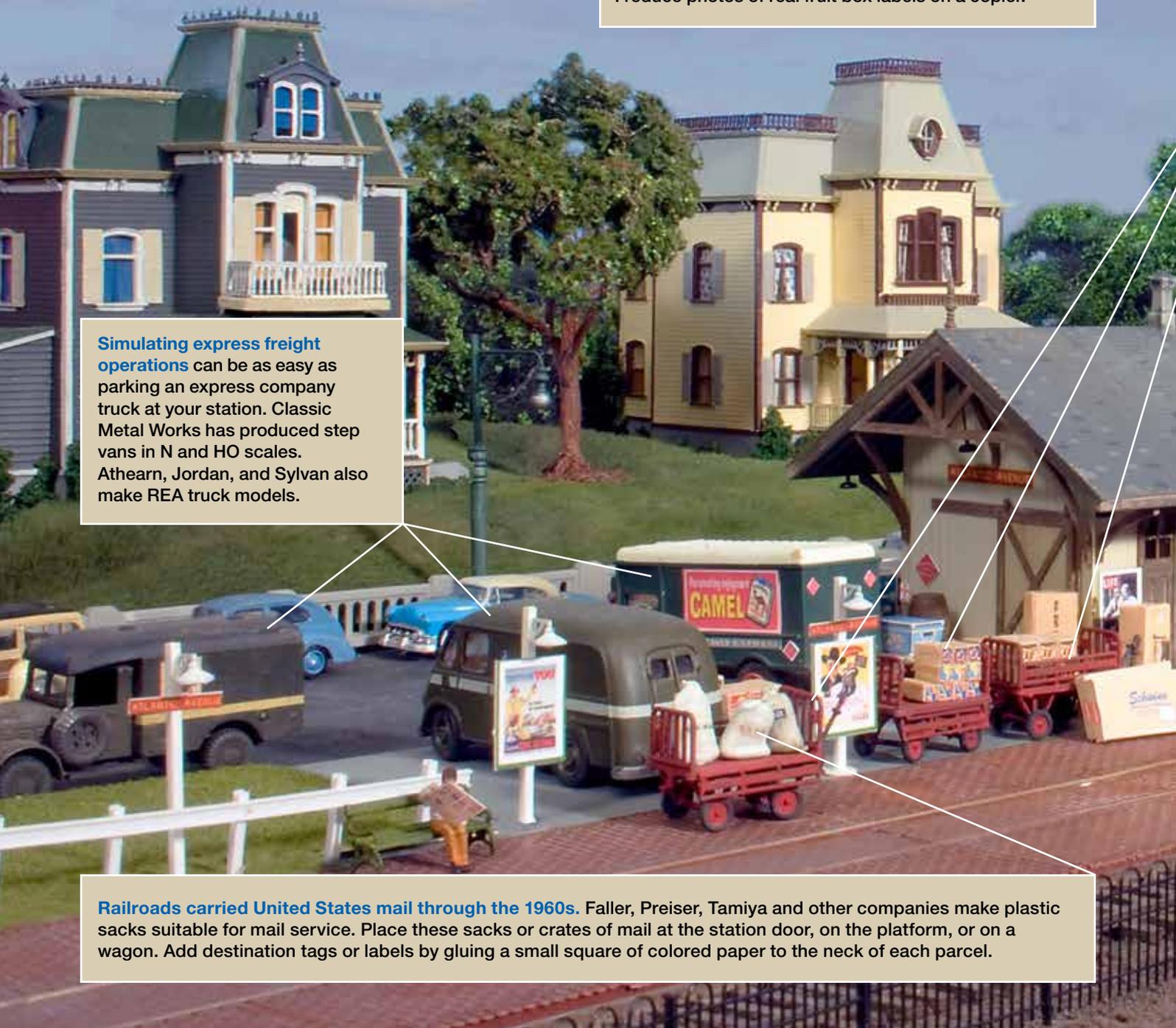
# Mail and freight at the station

Here I've used an Atlas HO scale structure of Maywood Station to model my Atlantic Avenue station. This busy suburban stop features numerous passengers and parcels bound for Atlantic City. Although the business of moving people was important to many railroads, handling mail and express freight often represented a more significant source of revenue. This scene highlights many of the details associated with moving and storing freight about the station and platform.



Until the 1960s, perishable fruit was often shipped by express. I cut box forms from balsa or basswood sticks and glue labels on the ends. To make these labels, I reduce photos of real fruit box labels on a copier.

Simulating express freight operations can be as easy as parking an express company truck at your station. Classic Metal Works has produced step vans in N and HO scales. Athearn, Jordan, and Sylvan also make REA truck models.



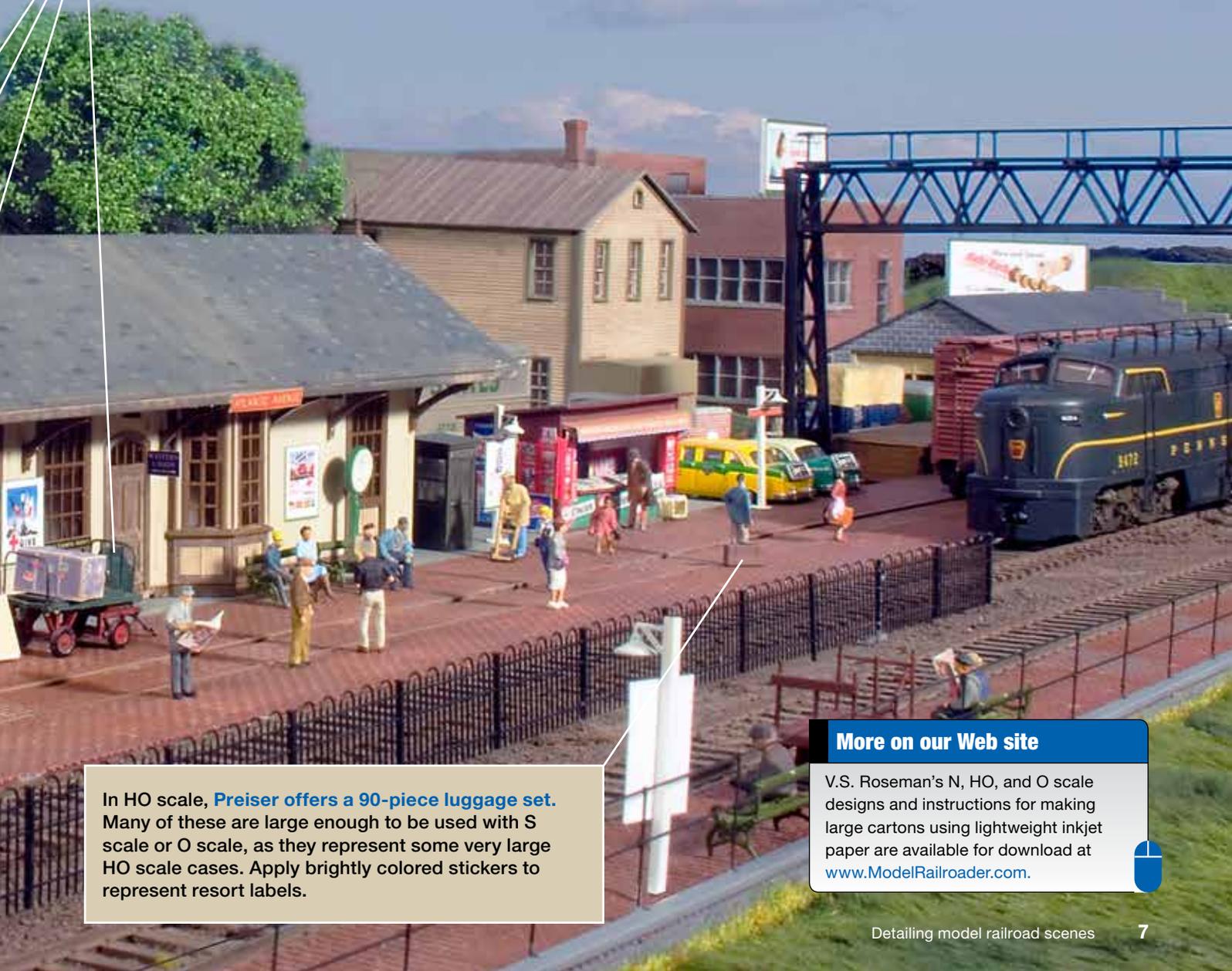
Railroads carried United States mail through the 1960s. Fallar, Preiser, Tamiya and other companies make plastic sacks suitable for mail service. Place these sacks or crates of mail at the station door, on the platform, or on a wagon. Add destination tags or labels by gluing a small square of colored paper to the neck of each parcel.

Most railroad stations had one or more four-wheeled express wagons. A great number of these were painted in Railway Express Agency (REA) green with a red underbody and wheels. Other wagons were owned by the railroads and painted in the passenger color scheme or in Pullman Green.

When business warranted it, handlers used a gasoline or battery-powered tractor. Four-wheel wagons are available in plastic kit form from Grandt Line in HO and O scale, and from Jordan in HO scale. Three-wheel tractors and four-wheel modern wagons are available from Kibri.



Refrigerators, mattresses, and other items come in corrugated cardboard boxes, and these are decorated with a logo or letters identifying the contents. Tichy, Preiser, and Merten make scale-sized crates, but shipping cartons are harder to find. Instructions for making a large carton using lightweight inkjet paper are available at [www.ModelRailroader.com](http://www.ModelRailroader.com).



In HO scale, **Preiser offers a 90-piece luggage set**. Many of these are large enough to be used with S scale or O scale, as they represent some very large HO scale cases. Apply brightly colored stickers to represent resort labels.

#### More on our Web site

V.S. Roseman's N, HO, and O scale designs and instructions for making large cartons using lightweight inkjet paper are available for download at [www.ModelRailroader.com](http://www.ModelRailroader.com).



# Add a GRADE CROSSING

By David Popp

**GRADE CROSSINGS** – where a road crosses over the tracks – are a common feature of prototype railroads. In fact, grade crossings are one of the few places where the general public interacts with railroads in North America any more.

Crossings come in an assortment of styles, depending upon the railroad and region of the country, but the basic idea is the same for all of them. The

road meets the railroad right-of-way at grade, and the space between the tracks is filled to just about the level of the railheads to make it possible for road vehicles to cross the tracks. The fill between the rails can be asphalt or dirt, primarily on lesser-trafficked crossings. But on the busier ones, wood planks, rubber mats, or cast-concrete panels are the most common materials used to fill the gap today.

**Building a grade crossing is an easy two- or three-evening project.** Photos by Cody Grivno and David Popp

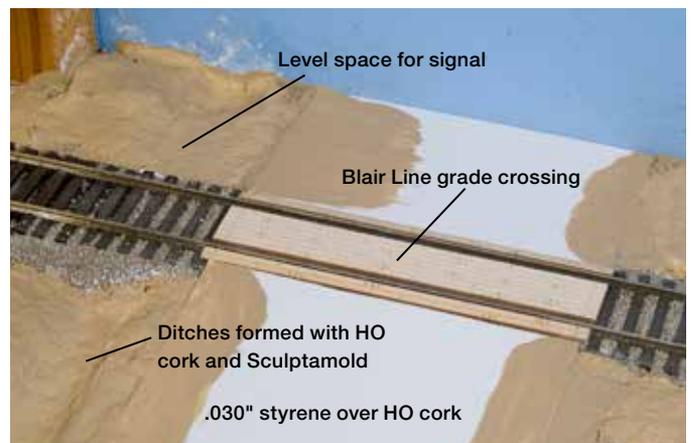
Our HO scale Wisconsin & Southern Troy Branch project railroad required two grade crossings. There are some easy-to-install grade crossing kits from Blair Line, Walthers, and other companies, so I selected one and set to work building crossings. [IMR](#)

## Step 1 APPROACHES

**My first task in building** the grade crossing was to build the roadway approaches. I layered different materials to raise the roadway up to track level.

The roadway is much wider than the actual paved surface because it includes shoulders and ditches as well. For the first layer, I used 4"-wide strips of HO scale cork sheet, matching the height of the cork roadbed we'd used under the track. I cemented the cork to the benchwork's plywood top with latex caulk. While I was at it, I made the ditches by adding strips of HO cork roadbed down each side of the road. I spaced the strips 1" away from the 4" cork road to make the ditches. Once the caulk had set (about 30 minutes), I formed the sloped sides of the ditch with Sculptamold.

Next, I surfaced the roadway with a layer of .030" styrene sheet cut 3<sup>5</sup>/<sub>8</sub>" wide. I cemented the styrene to the cork with latex caulk, leaving an even amount of cork exposed on either side of the road for the shoulders. To form the slope up to the track level, I laid the edge of the styrene on top of the flextrack ties.



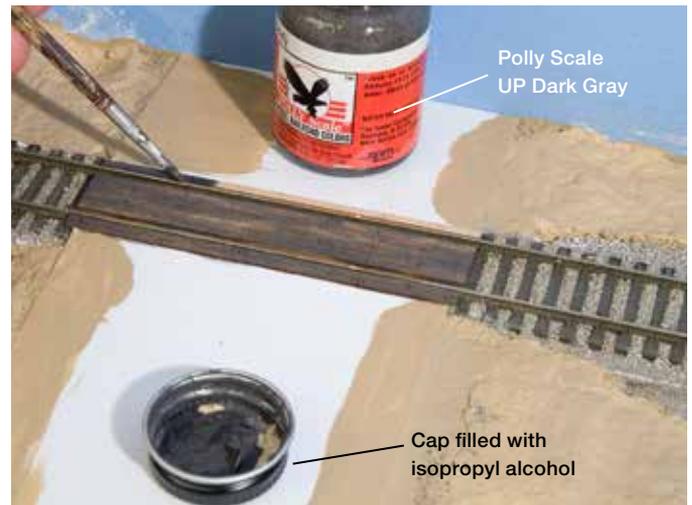
As shown in the photo, I cemented a Blair Line 165 wood grade crossing between the rails with cyanoacrylate adhesive (CA). Before cementing the grade crossing's approach planks on the outside of the rails, I sanded the backs of the wood parts with 220-grit sandpaper so they wouldn't sit above the tops of the rail.

## Step 2 PAINTING AND STAINING

Once the Sculptamold and caulk had a day to dry, I proceeded with the next step. First, I painted the surrounding ground and the styrene roadway shoulders (about a 1/2" in from the edges) with flat tan latex paint.

Next, I stained the wood crossing. I made my own stain by putting a few drops of isopropyl alcohol in a paint jar cap. I mixed the alcohol with one brush full of Polly Scale UP Dark Gray and then carefully applied the alcohol stain to the wood grade crossing.

The Blair Line grade crossing kit features laser-cut plank and spike detail. The stain settled into those recesses, making the details stand out. When the stain was dry, I lightly sanded the crossing's surface to make the wood look worn.



## Step 3 PAVING THE ROAD

After the scenery paint was dry to the touch, I applied the road material. I used Busch self-adhesive roadway. This thin foam material is 3 1/8" wide, comes with or without printed pavement markings, and may be laid straight or in gentle curves. It's very easy to work with, and I like the material's realistic asphalt appearance.

With its backing still on, I set the Busch road on top of the styrene and cork roadway to measure its length. I then cut the pieces I needed with a pair of scissors. To apply the road, I started at the grade crossing and worked my way out from there. Since the road material is very flexible, starting at the crossing helped maintain an even edge where the road meets the wood approach planks.

As shown in the top photo at right, I peeled the backing off as I pressed the foam to the styrene. (Avoid the temptation to peel the backing off all at once!) This technique makes the material much easier to handle and keeps wrinkles or stretching to a minimum.

With the road applied, I added Highball Products N Scale Limestone Ballast to the shoulders. (For N scale roads I use silica sand, which is finer yet.) I installed the shoulders by painting a 3/8" strip of white glue (diluted 10 percent with water) along the edge of the road. As shown in the middle photo, I sifted the ballast into the glue with a spoon. I vacuumed up the excess ballast from the road's surface before applying Woodland Scenics Scenic Cement to the shoulders. Be careful not to use too much; the Scenic Cement can soak into the foam road surface and discolor it.

While I was at it, I finished the surrounding scenery. I brushed more diluted white glue on the ditches, then sprinkled on several colors and sizes of ground foam. I used a spoon again to sift the foam onto the glue, starting with the finest material and working to the coarsest. I like the control I get with this method – if I get too much foam on any one spot, I can vacuum it up, yet the white glue still holds the initial layer in place.

Once I had the ground foam down, I soaked it all with Scenic Cement and let the scenery dry over night. The finished foam scenery is shown in the bottom photo.

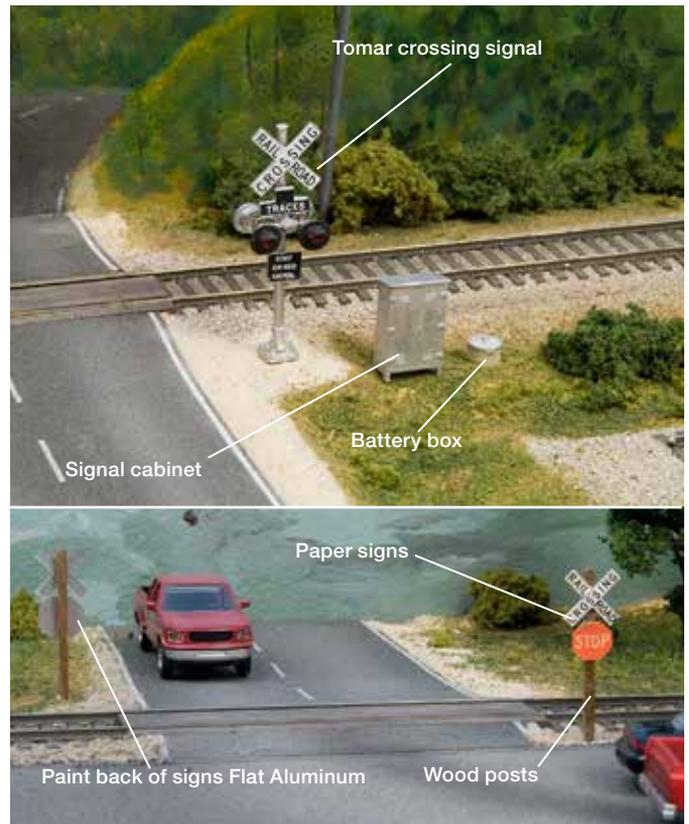


## Step 4 SIGNALING AND DETAILS

With the scenery complete, I added the crossing signals and details. I installed a pair of Tomar Industries no. H-862 crossing signals. These detailed models come fully assembled and can be wired to operate with the addition of a flasher circuit. (Ours, for now, are non-operating.) To install the signals, I drilled  $\frac{1}{8}$ " holes in the scenery, fed the wires through the holes, and set the signals in place on their brass mounting posts. Friction holds them in position.

Grade crossing signals usually have an instrument cabinet and battery box nearby. Digging around in the parts bin in the MR workshop, I came up with metal castings for the cabinet and box. For similar results, you can use a no. 902 cabinet and a no. 910 battery box from Details West. After painting the castings in appropriate colors, I cemented them to the layout with white glue.

As shown in the lower photo, I installed crossbucks with stop signs at the grade crossing in Troy. Several *Model Railroader* staff members have seen this type of grade crossing marker on various back roads along the Wisconsin & Southern, so we thought it would be a good detail to model. The signs are paper mounted to wood posts. I painted the back of the signs Polly Scale Flat Aluminum to represent sheet metal.



## Step 5 SAFETY MARKINGS

Since our WSOR layout is modeled after a modern railroad, we needed to add pavement safety markings to the approaches for the grade crossing. (If you're modeling an earlier era, skip this step.) For this project I used my airbrush and an etched brass template (shown in the photos) made by S&S Hobby Products (distributed by Walthers).

The Federal Highway Administration lists all of its regulations for safety markings on its website at <http://mutcd.fhwa.dot.gov>. Unfortunately for us, our road is too short to place the safety markings at the correct distance from the grade crossing. Doing the next best thing, I simply chose a distance that looked reasonable for the layout.

I positioned the template on the roadway, masked the surrounding area with 3M Scotch-Blue painter's tape, and sprayed the pavement with a light coat of Polly Scale Reefer White. It was that easy; however, be careful how you mask the template. I accidentally dusted part of the road with a little white overspray! The error will be easy to correct by spraying the road with a little more thinned acrylic paint.

To make the stop lines in front of the signals, I masked off all of the template except a single line. I then used the single line template to airbrush the stop lines for both signals.

With that, our grade crossings on the WSOR were finished. The complete project for both crossings took approximately 6 hours over three days, but could easily be accomplished in a couple evenings.



# From backdrop to blacktop

Tips and tricks for adding background buildings and small-town streets

By **Gerry Leone** • Photos by the author

I began planning my Bona Vista RR as an HO scale layout set in the rural Upper Midwest, specifically Minnesota and Wisconsin. And because I enjoy wayfreight switching, I knew there would have to be a significant portion of my layout dedicated to online industries. At that point, setting aside space for an entire town – something more than a couple of representative buildings – seemed highly unlikely.

But the more I planned, the more I realized that a layout's corners offer significant real estate that is often times

wasted. Situating a town in these spaces seemed both practical and probable.

To make the town feel large enough, I envisioned several blocks of foreground buildings positioned close to the aisleway, while several less noticeable buildings, and other pieces of urban-like scenery would stand in the background.

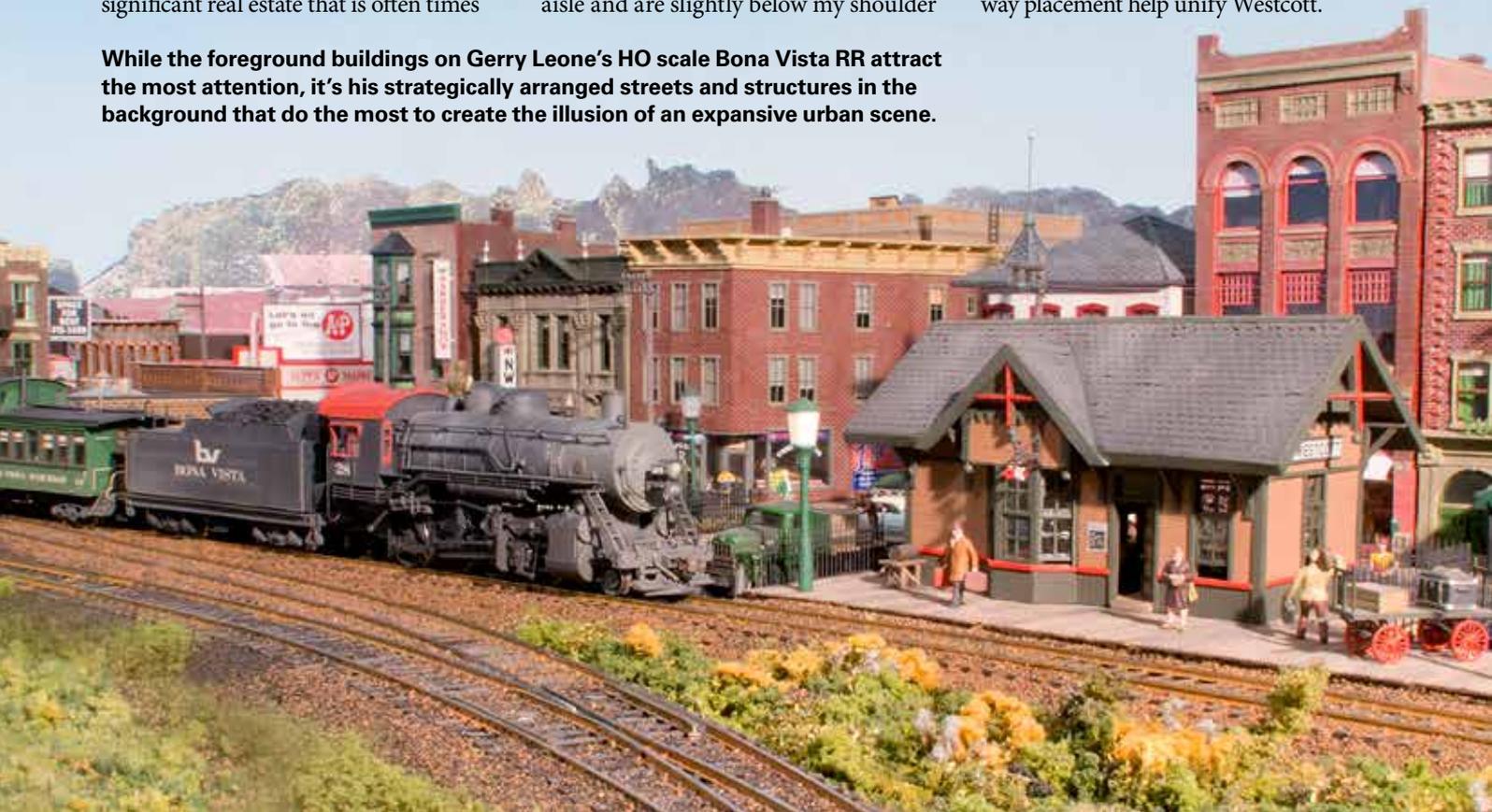
In the March 2013 issue of *Model Railroader*, I described how to plan and build the two main blocks of the town of Westcott to include these foreground structures. They're about 12" from the aisle and are slightly below my shoulder

height. I added a significant amount of detail to these structures, as they would be highly visible and receive the most scrutiny from visitors.

To add even more visual interest to the foreground and still avoid blocking the view to the main buildings, I added a small, low-height town square.

While foreground structures receive the closest scrutiny, it's often the background structures and streets that give the illusion of a larger town. In the pages that follow, I'll share how building and roadway placement help unify Westcott.

**While the foreground buildings on Gerry Leone's HO scale Bona Vista RR attract the most attention, it's his strategically arranged streets and structures in the background that do the most to create the illusion of an expansive urban scene.**



## BUILDING IN THE BACKGROUND

**Between the curved backdrop** and the two up-front blocks of Westcott, there's a maximum of about 18" of space – just enough room to give viewers the impression there's another entire street

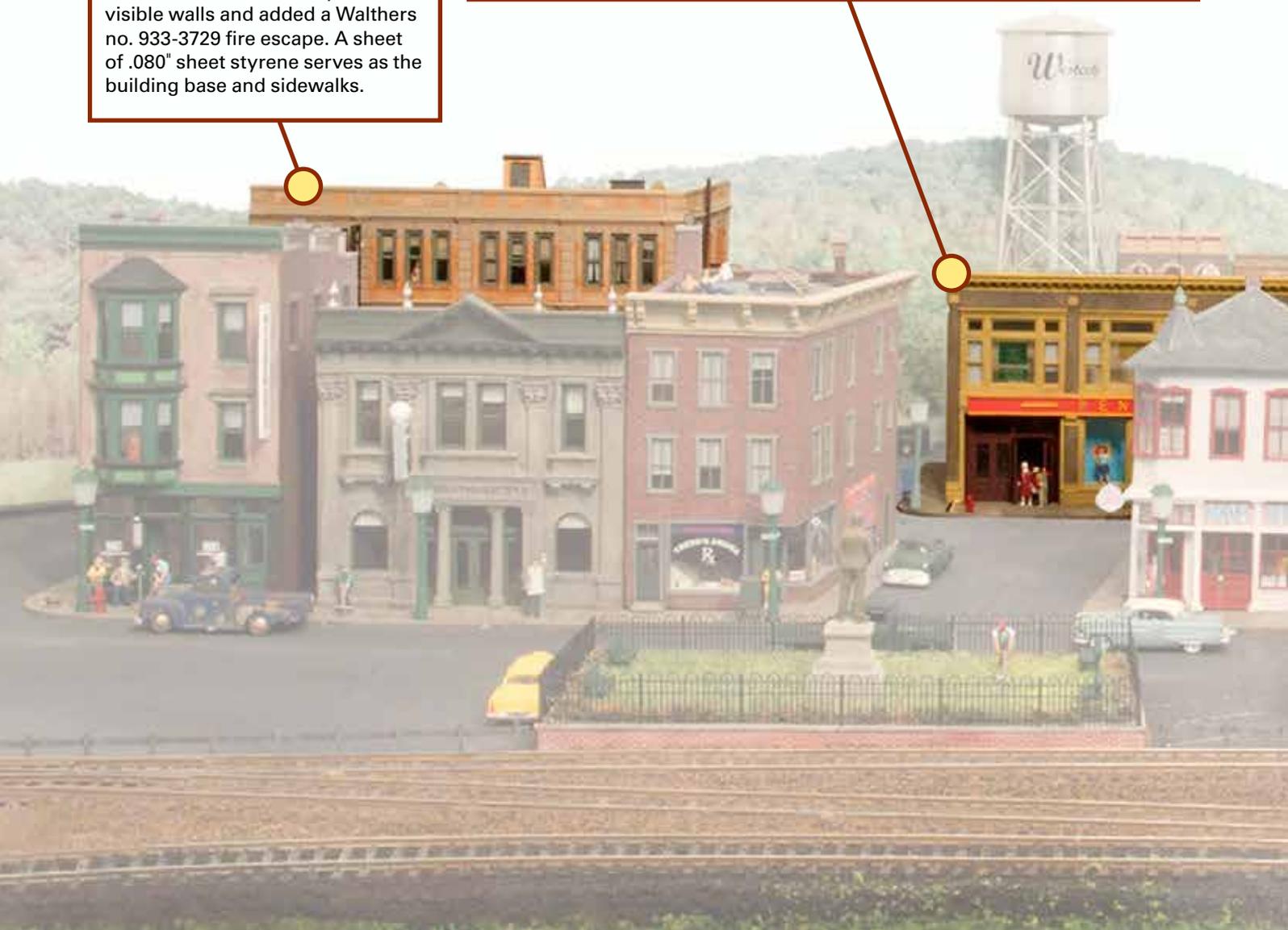
lined with businesses. These storefronts need only be tall enough to be seen, yet, because Westcott represents a small town, couldn't be larger than three or four stories tall.

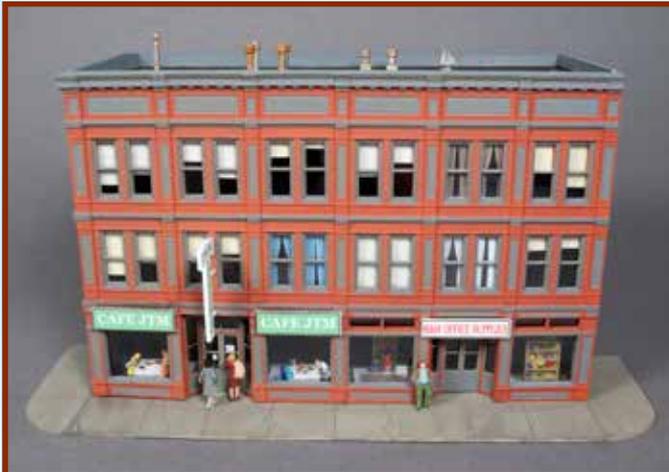
By staggering the position of these background structures, I disguised the abrupt joint between the ground and the backdrop. No street runs directly from the front edge to the backdrop.



**For the triangular space** along the curved backdrop, I modified a Bachmann Spectrum Department Store kit by cutting a story out of the facade. I finished only two visible walls and added a Walthers no. 933-3729 fire escape. A sheet of .080" sheet styrene serves as the building base and sidewalks.

**I modified a Bachmann Spectrum Variety Store** HO scale kit to fill the center of the secondary block and effectively hide the bottom edge of the backdrop. The original structure was too tall, so I eliminated an entire story and added a new roof trimmed with strips of styrene. Next I added short-length side walls, as neither side would be visible from the aisle. To improve the structure's curb appeal, I added a variety of roof vents, modeled the Ben Franklin sign using three-dimensional lettering from Slater's Plastikard, installed pre-decorated acetate window glazing from City Classics, and placed numerous details along the sidewalk.





**I filled the third** of three secondary blocks with a Design Preservation Models' M.T. Arms Hotel facade. I modeled this structure without side walls. I added a full roof, made from .060" thick sheet styrene I detailed with vents and styrene strips. Finally, I added styrene braces to prevent the roof from sagging.

**On this side** of town, I added the massive Osgood Brewer, the Walthers Milwaukee Beer & Ale Brewery kit under different ownership. I created a set of decals to decorate the walls and added a water tank left over from a Walthers Imperial Food Products kit. I weath-ered the tank with real rust powder suspended in alcohol. To simulate vines growing up the brick, I applied a thin trail of white glue to the walls before added a pinch of Woodland Scenics fine ground foam. To bring the loading doors closer to the railroad siding, I used basswood strips to assemble a loading dock, complete with kegs made by J.L. Innovative Design.



# TAKIN' IT TO THE STREETS

**After completing the background** buildings, I installed the paved streets of Westcott. But rather than constructing these roads on the layout, I decided to build a complete base for the city using a

single piece of .080" thick sheet styrene. This approach allowed me to work while comfortably seated at my workbench. By searching the Internet, I found a local vendor selling 4 x 8-foot sheets of styrene.

**To build the base** for Westcott, I first cleared the layout surface for the city. I then arranged several sheets of copier paper, taped together, to create a template for the city base. After tracing the curve of the backdrop onto the paper, I used the template to transfer and cut the base from a large piece of styrene. I found that using a utility knife to make a full cut though the material worked best.

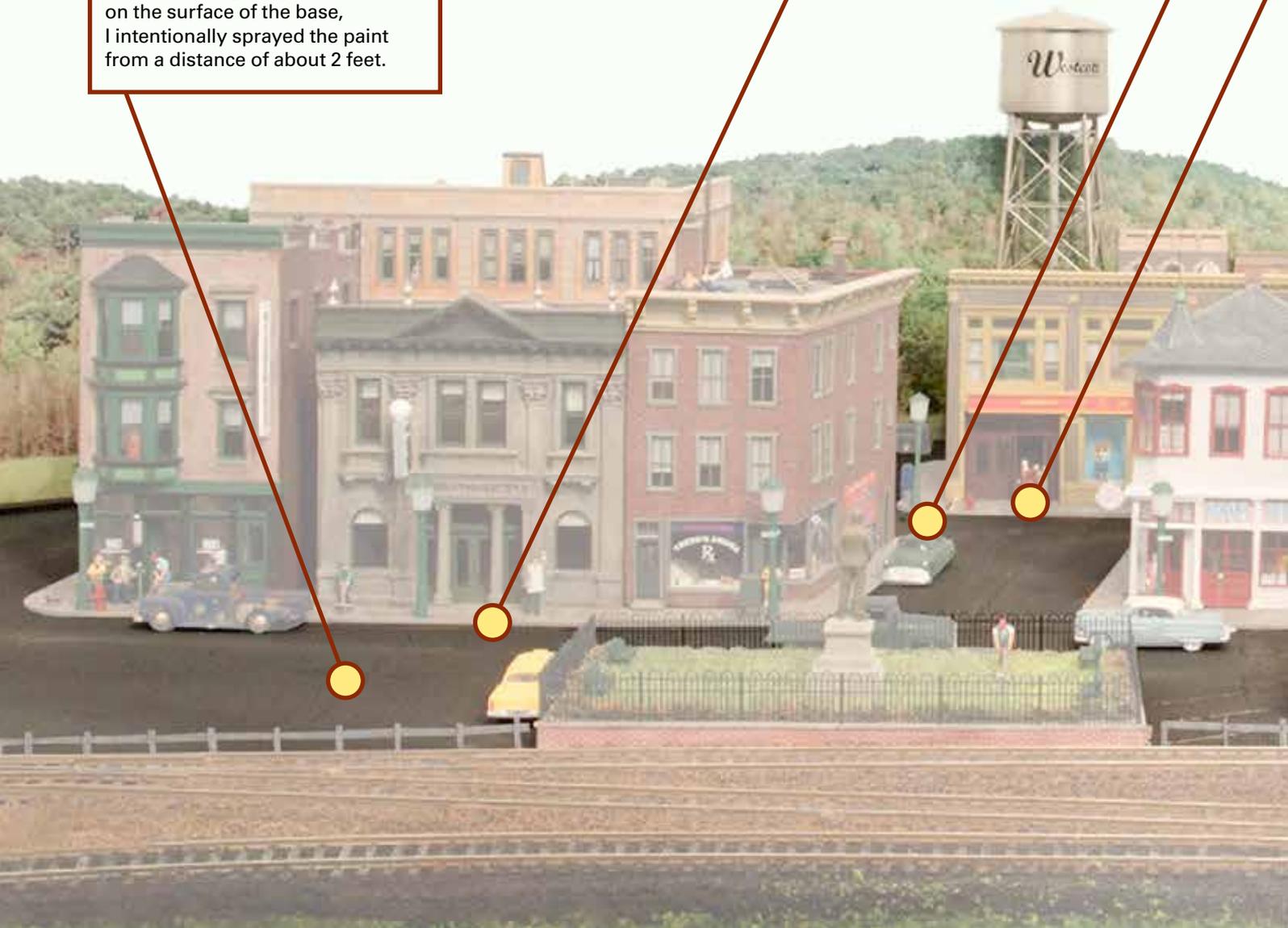
After trimming the base to fit, I used a spray can of gray primer to paint the entire styrene sheet. To create a slightly gritty texture on the surface of the base, I intentionally sprayed the paint from a distance of about 2 feet.



**Next, I determined** the position of the city blocks. I wanted to keep the buildings stable, yet removable, so I glued 1/4" strips of styrene to the town base. I then cut corresponding notches along the areas of the block hidden from view.



**To add realistic weathering** effects along the painted pavement, I used Bragdon Enterprises' black weathering chalk. First, I used a soft brush to smear the chalk onto the surface. I then used my finger to work the chalk into the painted surface. In areas where the chalk was too heavy, I used a can of compressed air to blow away the excess. Finally, I applied several light coats of Testor's Dullcote to seal the chalk weathering.





**I made manhole covers** by using a 1/4" leather punch to pop holes into the .080" styrene streets, taking care to save the inserts. I used the jaws of my bench vise to press a cross-hatched pattern into these inserts. After painting the holes with a black marker, I used a small brush to lightly dust the covers with Polly Scale CP Gray.



**For an additional layer** of roadway weathering, I loaded my airbrush with diluted isopropyl alcohol (70 percent) and directed the spray along the center of the streets. As the alcohol dried, it reacted with the previously applied Dullcote finish to realistically simulate areas that are typically devoid of oil spills and tire rubber.



**To detail the streets**, I used a fine-tipped marker to add cracks and patches. I also used a pipette to apply a few drips of highly diluted Polly Scale Oily Black or Polly Scale Rust to simulate spills. And finally, I added crosswalk and parking lines by applying 1/8" wide strips of white decal paper and weathering them with black chalk.

**After completing the streets** and positioning the structures, I returned the entire town base to the layout. But even before I had the town settled into place, it appeared that the scene was already lacking something. To solve the issue, I added a photographic printout of real trees to the curved, hardboard backdrop. For additional interest, I placed a Korber water tower behind the secondary block. Finally, I installed Design Preservation Models building fronts directly against the backdrop, to give the impression of yet another block of buildings. [MR](#)

