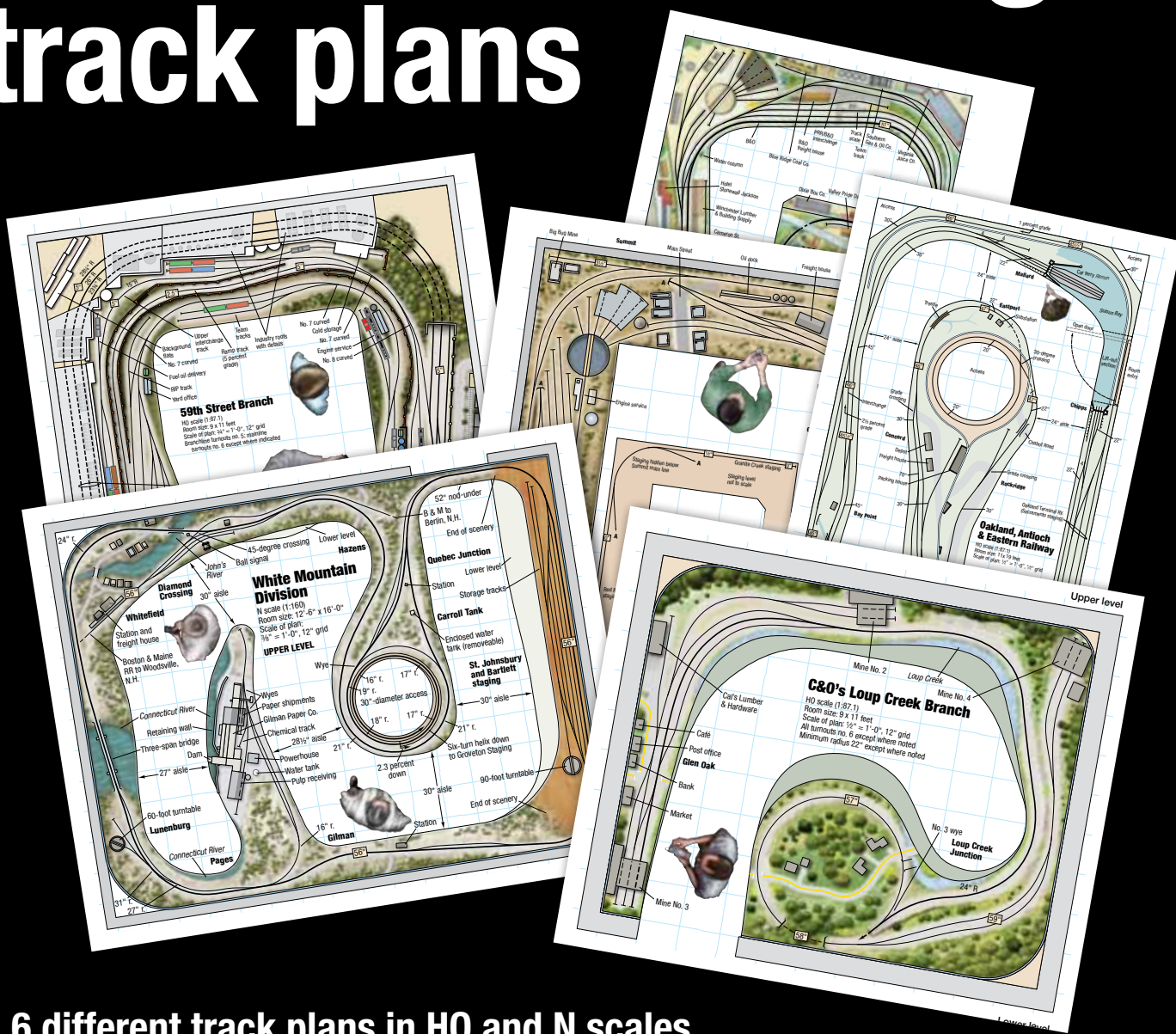


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Inspiration for Stan Sweatt's 9 x 11-layout plan came from photos of the Milwaukee Road's Beer Line in Milwaukee, Wis. Wallace W. Abbey photo

Urban switching on the 59th Street Branch

This freelanced track plan was *Model Railroader's* first-prize winner in 2007

By Stan Sweatt

When I set out to design my 59th Street Branch layout, I chose one of my favorite themes: congested urban industrial branch lines set in the eastern United States during the 1950s. In this case, the line snakes through canyons of tall, brick industrial buildings and is operated by the Erie RR. The premise behind the railroad is that it handles so much traffic that its rails are constantly choked with cars, and the narrow right-of-way leaves little room for the Erie to expand anything.

Design inspiration

The main inspiration for my plan came from a story published in the April 1955 issue of *Model Trains* (a former Kalmbach publication) about the Milwaukee Road's Beer Line in Milwaukee, Wis. The line served several of the city's breweries and featured some great urban canyon scenery.

One of the Beer Line's many details was a ramp track. As shown in the

Wallace W. Abbey photo above, it gave the Milwaukee Road access to businesses below its hillside branch line. The ramp track had several switchbacks, making for some interesting operating moves to get cars where they needed to be spotted. I included both this feature and a brewery in my 59th Street plan.

I named the brewery on the track plan after Ballantine Brewing to reflect my New Jersey modeling interests. The original brewery was founded in 1840 in Newark, N.J., and was once the fourth largest in the United States. Ballantine lasted until the early 1970s, and today Ballantine Ale is made and distributed by another company.

On the plan, Ballantine Brewing occupies one corner of the layout. It has a fleet of colorful reefers and requires a wide variety of freight cars. Inbound loads include tankcars of syrup and fuel oil; refrigerator cars of hops; boxcars of malt, grain, bottles, packaging materials, plant supplies,

▶ Track plan at a glance

Name: 59th Street Branch
Scale: HO (1:87.1)
Size: 9 x 11 feet
Prototype: Erie RR
Era: 1950s
Style: around the walls
Mainline run: 40 feet
Minimum radius: 23" except where marked
Minimum turnouts: no. 6 on main line, no. 5 on branch
Maximum grade: 5 percent on ramp track
Height: builder's eye level

and occasional loads of machinery. Of course, outbound car loads include reefers of bottled beer, but there could also be boxcars of spent grain and hoppers or gondolas of broken glass, called cullet.

To support the plant's needs for iced refrigerator cars, there's an ice

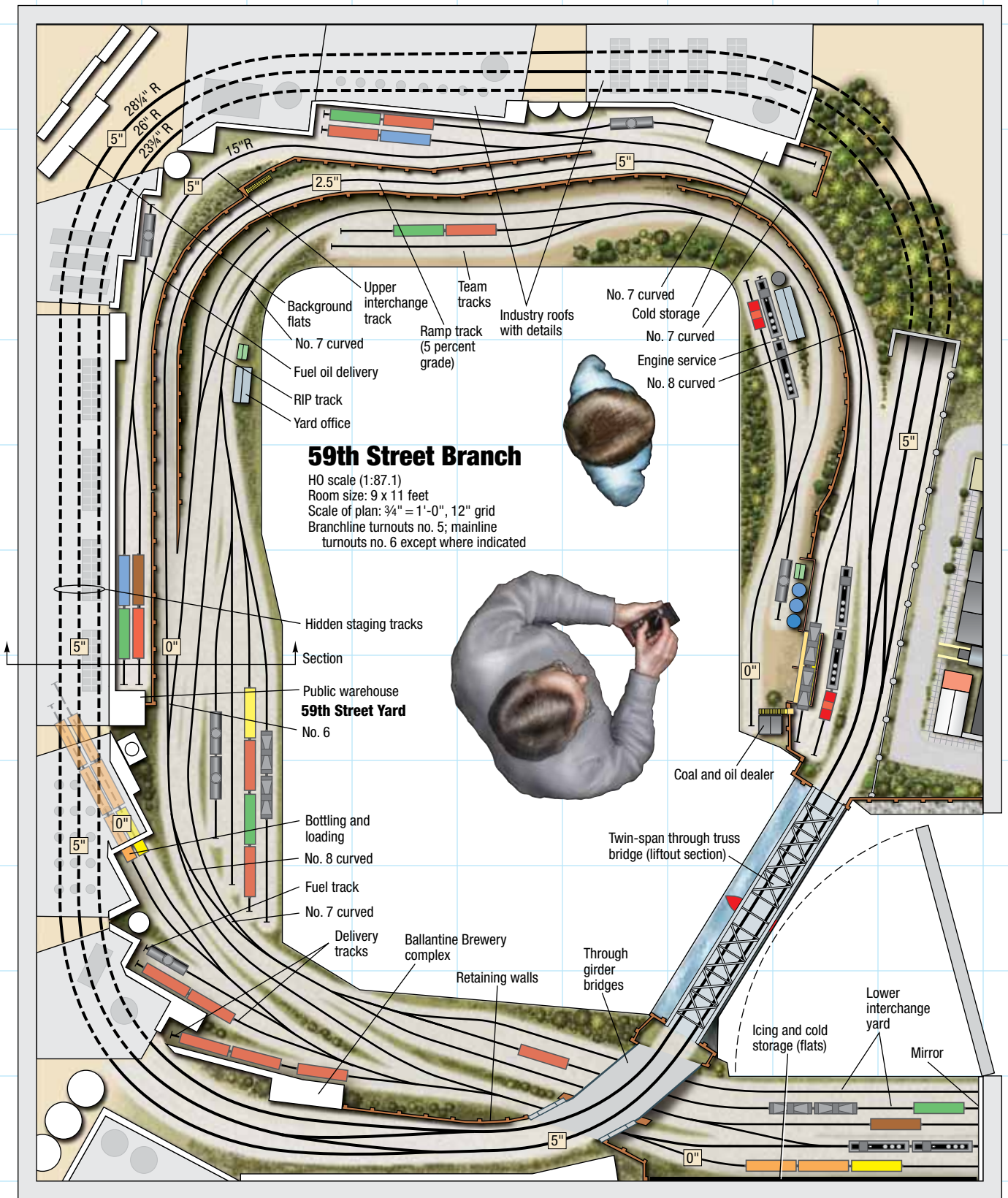


Illustration by Roen Kelly and Stan Sweatt

company located behind the lower interchange yard. Crews can be kept busy shuttling iced reefers to the brewery and spotting new cars to be cooled at the ice dock. I've also added a RIP (repair in place) track across from the yard office to have a place

for light repairs on refrigerator cars. Besides the brewery, other large industries on the layout include a printing plant and a large public storage warehouse. There's also a cold storage company, team dealer, and an engine service track.

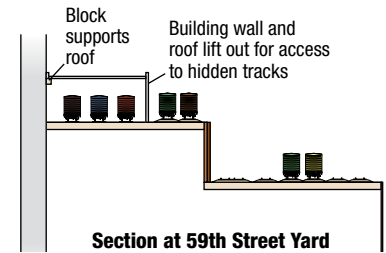
Mainline traffic

Most of the upper-level main line runs under the roofs of the branch's major industrial buildings. When used as hidden staging, each of the three tracks can hold 35 (40-foot) cars with double-headed locomotives and a



Though the photo was taken along the Cuyahoga River in Cleveland, Ohio, this scene could be very similar to one on Stan's Erie plan. Herbert H. Harwood Jr. photo

Hidden staging



The staging tracks are hidden by building flats with roofs and rooftop detail. For rigidity, the wall and roof sections could be built as a complete piece. The roofs could then connect to the backdrop using cabinet magnetic latches. – S.S.

Operations on 59th Street

Traffic patterns on the 59th Street Branch can be as simple or complex as you wish to make them. The layout's total car capacity is almost 200 revenue cars. I'd recommend using a car forwarding system with car cards and waybills, but you could use car forwarding computer software instead.

The lower interchange yard is where cars are moved on and off the layout from storage boxes or shelves below the benchwork. The upper interchange track (which doubles as the upper industrial lead) has a 14-car capacity.

Cars picked up from the branch are collected from the upper interchange track and put into an eastbound freight. To keep them from reappearing on the branch too soon, you could trade those cars with cars from the westbound freight. Later you can switch the set of cars back into an eastbound freight and eventually return them to the branch for new destinations. Since the upper interchange track can hold a block that's roughly half the length of a 30-car staged train, you should be able to keep the interchange pickups in motion on the main line for some time until they return to the branch.

To make motive power changes on the main for freight trains, you can use the third staging track as a runaround track. The locomotives would run light down the branch to the lower interchange track to be exchanged with off-layout motive power.

I think the layout would be an interesting one to build and operate. It could offer a lot of modeling opportunities, yet because of its small size, it would be easy to maintain. And, despite its compact nature, operations on the railroad would let you share it with friends. – S.S.

caboose. The visible portion of the main line emerges from this area as triple-track that squeezes down to double to get over the water on a through-truss bridge. Before the main line ducks out of sight again, it returns to triple track.

Because the bridge is at the room's entrance, it's one of the focal points of the layout. Herbert H. Harwood Jr.'s photo on this page of the bridge over the Cuyahoga River could serve as a good starting point. You could also make the bridge as a lift-out or swing-span section, making it easier to for operators to enter the room.

On the main line, you can let the trains roll, enjoying the sight of long eastbound and westbound freights crossing the bridge. This feature is also good for display running, allowing you to operate a train in both directions without having to pay much attention.

The main line could provide an opportunity to model a working signal system, too. Installing signals on the main to protect the bridge crossing, control the double-to-triple track interlockings, and protect the branch interchange are all appropriate. You could use signals to indicate the status of the hidden staging tracks, as well.

Scenic details

The design relies upon structures to give the urban canyon effect of buildings towering all around you. With that in mind, for the best visual impact, the layout should be built at roughly eye-level or higher (the dimension for which depends upon your own height).

As shown in the illustration above, the roofs on the buildings act as a bridge from the structure fronts to the backdrop, lending rigidity to the structure walls. The roofs, building walls, or both are removable to provide access to the staging tracks they conceal. I've also drawn the buildings with gaps in the roofs to allow for monitoring (by standing on a small step stool) of the trains that are running underneath.

To finish the city's appearance, you could add a printed city skyline background and some low-relief flats and smokestacks to the backdrop.

Another scenic element I've included is a small mirror set behind the lower interchange yard. With the ice company flat along the wall, the mirror will make the lower yard and ice dock look much larger. You could also place small mirrors in the gaps between the other industrial buildings to help give the illusion of depth.

In addition to industrial canyons, the layout offers a few other scenic options. To the right of the entry door is a city neighborhood scene that could be detailed with many points of interest. The tunnel portal by the branch junction is also different, as it's surrounded by small hills. You could cover those hills with summer or autumn trees to give the layout an East Coast feel. Both of these areas provide the layout with some scenic variety. MR

A mid-size HO track plan for the operator

This twice-around design fits many different prototypes

By Jerry Boudreaux



Jerry Boudreaux's Red Rock Northern plan could be adapted to many prototype railroads and eras. One possibility would be steam on the Sierra RR in the 1950s. Peter Hahn photo

My Red Rock Northern is a twice-around track plan that can be easily adapted to a number of different prototype railroads and eras. I purposely kept the setting for the railroad and types of businesses it would serve fairly generic for the sake of versatility.

One prototype railroad the design could serve well would be the Sierra RR of California's mother lode country. If set before 1956, the railroad can have an assortment of small 4-6-0, 2-8-0, and 2-8-2 steam locomotives. If after, you can run 4-axle diesel road switchers.

One key to success will be in the equipment you choose. Compact layouts seem bigger if you use small equipment, so 40- and 50-foot freight cars and 60-foot passenger cars work well on the layout's 24"-radius curves.

The curves and grades are gentle enough that you could also change scales. You could build the layout as an HO_{n3}, On₃, On_{2½}, or Sn₃ railroad, making for an even larger number of possible modeling themes.

Interesting design features

My track plan uses several design features to make the layout seem bigger. One of the unique aspects is that the engine terminal that separates Red Rock from Granite Creek actually serves both of the towns. The turntable is the connection, letting operators turn locomotives at both ends of the railroad without eating up precious real estate for two turntables and roundhouses.

Though it's designed to operate as a point-to-point railroad, the twice-around main line is continuous with a connection behind the roundhouse. This sneak-around track serves as the lead for two hidden staging tracks tucked under the highest part of the layout (one in each direction). These tracks provide off-railroad entrances and destinations, making operating more interesting.

Another feature is that the two main towns on the line are significantly different. Red Rock is arranged in straight lines and includes a few small industries and a compact

▶▶ Track plan at a glance

Name: Red Rock Northern
Scale: HO (1:87.1)
Size: 9 x 11 feet
Prototype: freelanced short line in rural America
Era: variable
Style: around-the-walls with lift-out section
Mainline run: 68 feet
Minimum radius: 24"
Minimum turnout: no. 5
Maximum grade: 2 percent
Height: 43" to 46½"

classification yard. The tracks through Granite Creek, however, are mostly curved and feature a number of small-industry possibilities, including an oil dock, lumberyard, team track, and a freight house.

One feature both towns have in common is train-length runaround tracks with center crossovers, allowing for shorter runaround moves. The two also have main streets with room for a few structures to add scenic interest.

The layout could keep three people busy during an operating session. One would handle switching at Red Rock. The other two would run the local freights, and the passenger and interchange trains.

Getting started

The Red Rock Northern could be a great layout for old heads and newcomers alike. Its size works well with time-tested layout construction techniques, and track components are commercially available.

If you're in the market for a room-size railroad, the flexible design of the Red Rock Northern has a lot to offer. Why not get started? [MR](#)

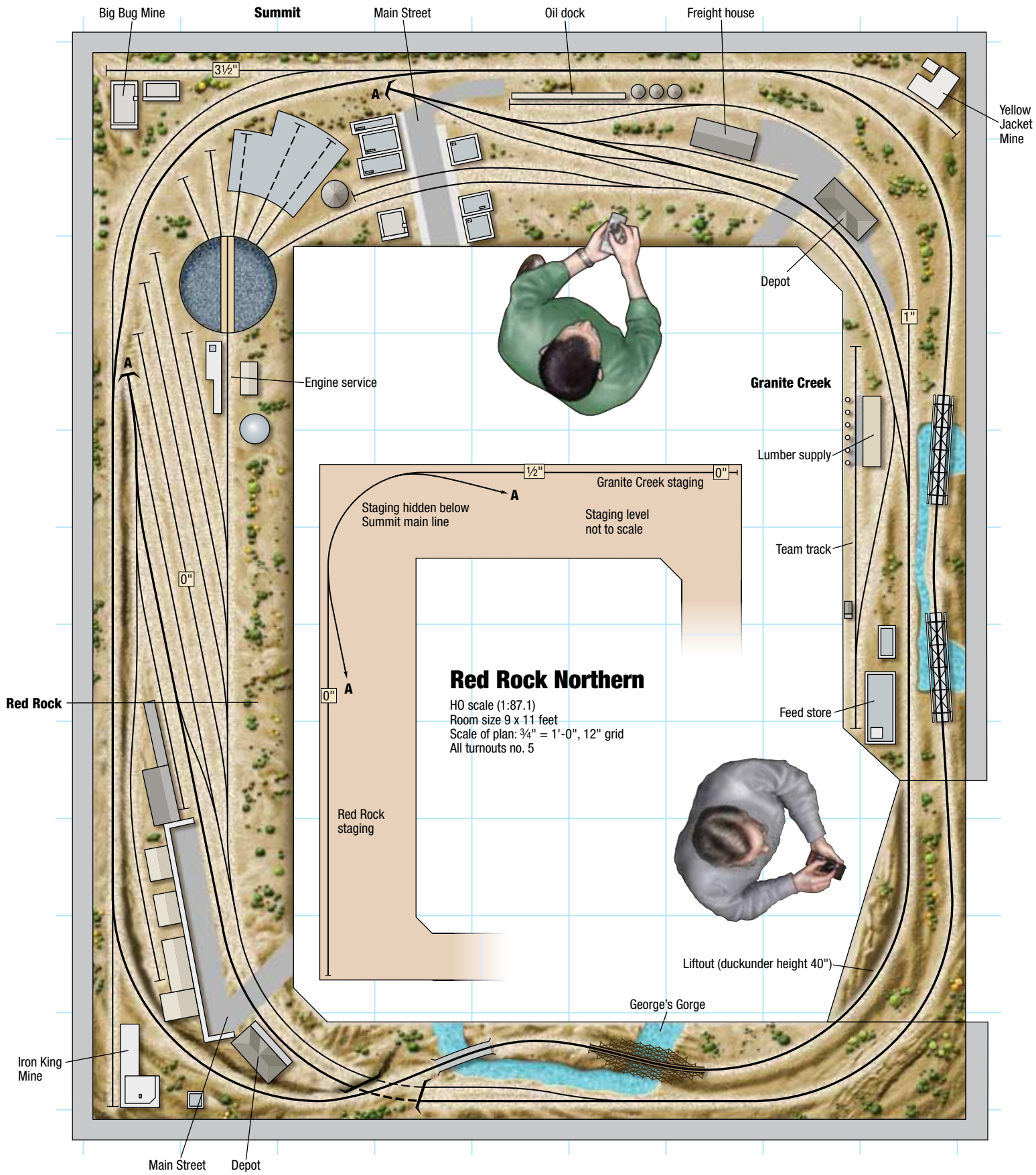
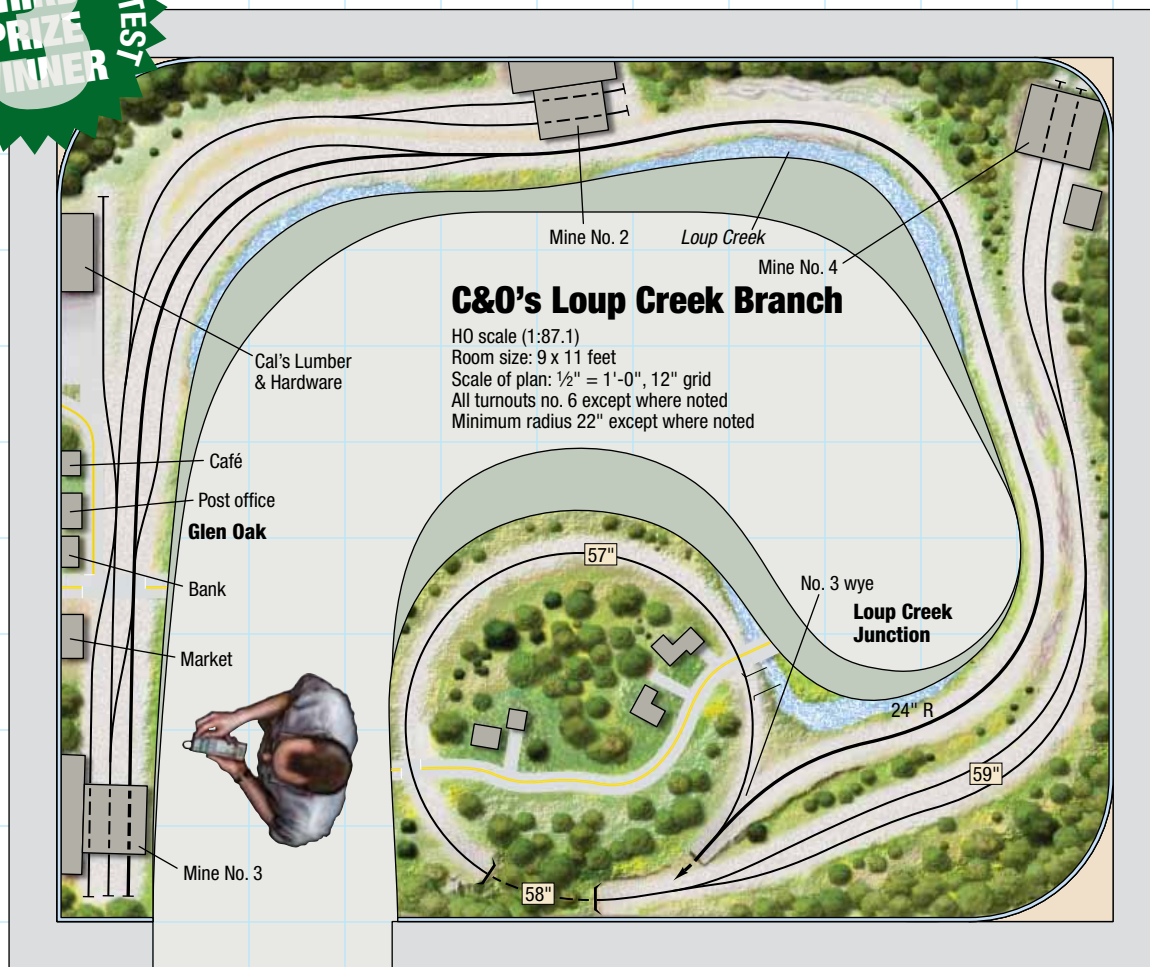


Illustration by Rick Johnson



Upper level



C&O's Loup Creek Branch

A double-deck layout designed for hauling coal is a third-prize winner

By Jeremy Lidbeck

Of the many different coal branches and subdivisions the Chesapeake & Ohio Ry. operated, I chose to design my contest plan around the Loup Creek Branch.

The line begins at Thurmond, once a roughneck boomtown and the C&O's second-highest revenue terminal. The tiny town and compact yard, on the C&O's New River main line, are nestled tightly between the river and the gorge bluff – so tight the railroad also once was the main street through town.

Because of its charm, scenery, and twisting track, this part of the C&O lends itself well to a model railroad that will fit in a small bedroom.

A look at the design

I figured a double-deck layout would provide a good running distance, as well as offer more scenery. The lower deck is 40" above the floor, and the upper level is at 56". The staging level is set at 36", looping under the helix.

Finding a way to fit a helix into a layout this small proved difficult. After a few attempts, I came up with a design incorporating a 22"-radius helix without impeding the flow of the layout.

My minimum radius for mainline curves is 22", with 18" the *absolute* minimum. Because the layout uses mostly coal cars and 4-axle locomotives, the equipment won't look out of place.

I included two tracks for hidden staging under the helix. These tracks represent the New River main line as it continues east to Newport News.

I used the 30" doorway as my minimum aisle width, continuing it through most of the plan. Since the layout would be run by one or two operators, that aisle size should be comfortable.

Taking a tour of the layout

Thurmond is the main focal point on the lower level, and the town and rail yard are situated along the banks of the New River. The yard has a small engine terminal used to service the

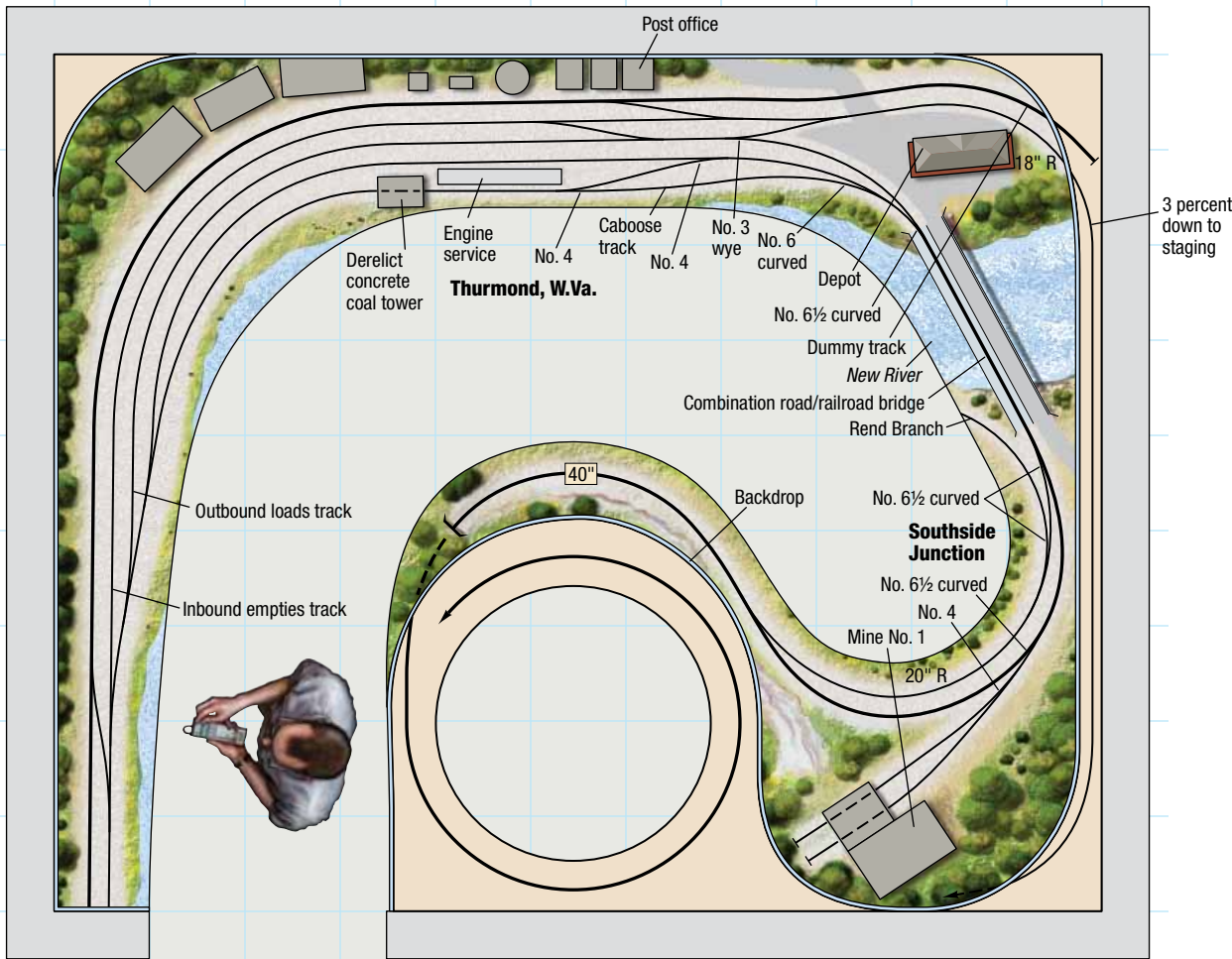
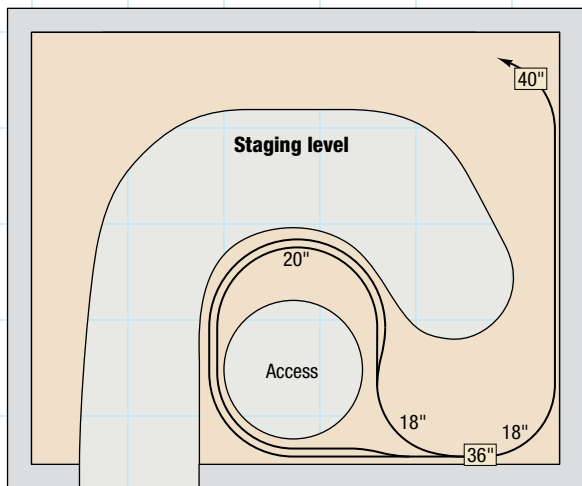


Illustration by Rick Johnson



▶▶ **Track plan at a glance**

Name: Loup Creek Branch
Scale: HO (1:87.1)
Size: 9 x 11 feet
Prototype: Chesapeake & Ohio
Era: 1970s
Style: multilevel walk-in
Mainline run: 95 feet
Minimum radii: 22" main line, 18" staging, sidings, and spurs
Minimum turnout: no. 6 main line, no. 4 spurs
Maximum grade: 3 percent
Height: 36" to 59"

branch power and road locomotives off of the mainline trains. The depot and the surrounding foliage hide the mainline's exit through the backdrop to the lower staging tracks.

The Loup Creek Branch leaves Thurmond at the east end of the yard. At Southside Junction, the line merges with the Rend Branch, represented by a track leading off the front of the layout.

Because of space limitations, from this point on my version of the Loup Creek Branch is freelanced, influenced by the prototype.

The branch follows its namesake creek to the town of Glen Oak. This is a remote center of commerce, with a post office, cafe, bank, and market, all nestled along the tracks. Along with two mines, the town also has a spur at Cal's

Lumberyard & Hardware. This offers the opportunity to run cars of lumber or tractors every so often, breaking up the constant flow of hoppers.

Depending upon how you stage the trains and set up the operating schedule, the Loup Creek Branch could keep a couple people busy for several hours each session, making it a great operating layout for a small space. **MR**



Local freight no. 377, with a milk car for passenger train no. 163, pulls into Quebec Junction in August 1957. The junction is at the top of the helix on John Koukol's plan. Photo by Bill Gale, courtesy of the 470 Railroad Club collection

A double-deck New England track plan in N scale

This 12 x 16-foot walk-in layout represents Maine Central in the White Mountains of New Hampshire

By John Koukol Jr.

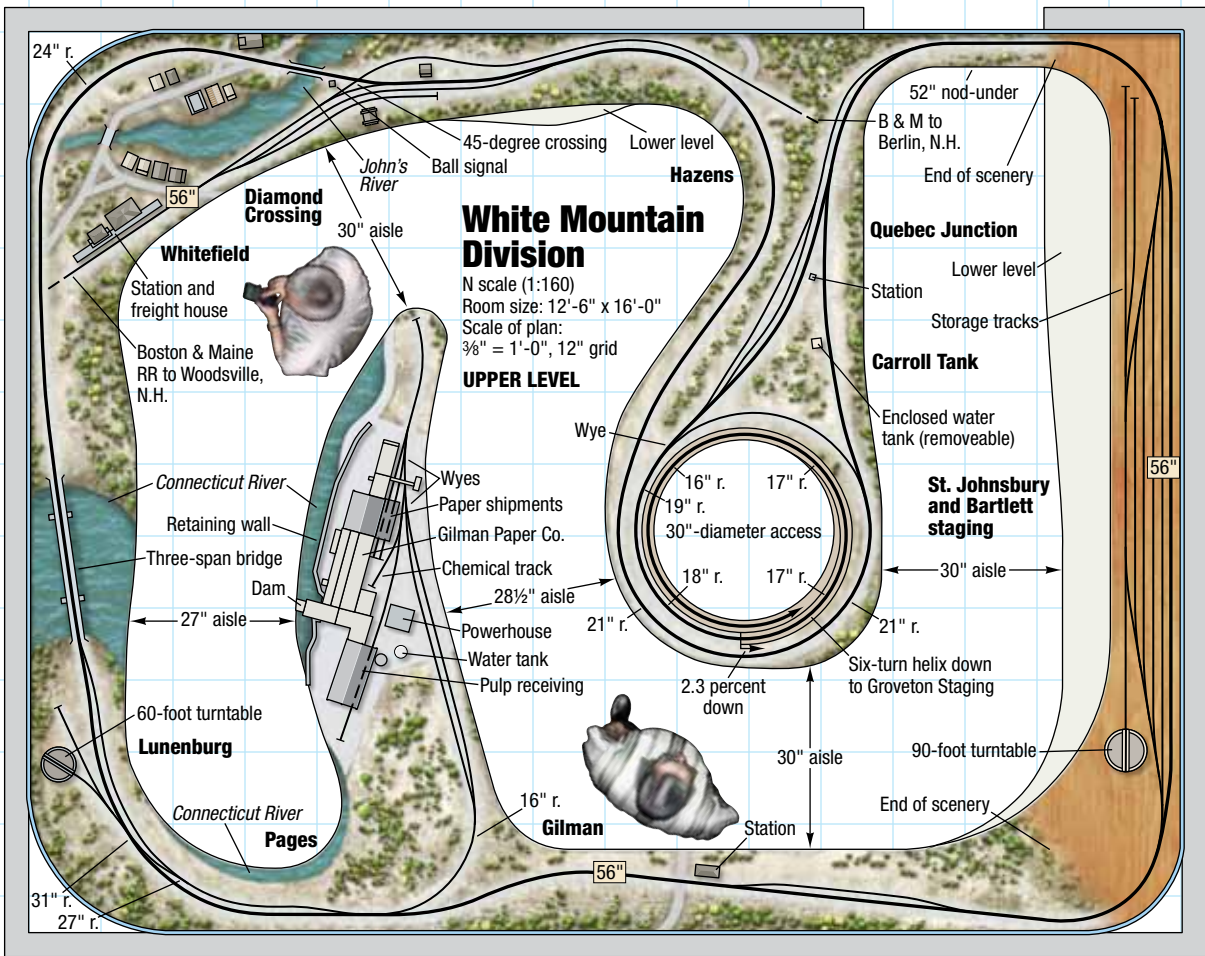
My plan for the N scale White Mountain Division represents the western end of the Maine Central's Mountain Subdivision that ran from Portland, Maine, to St. Johnsbury, Vt. This prototype subdivision features the dramatic 14-mile run through the White Mountains to Crawford Notch. West-

bound trains faced a 2.2 percent grade out of Bartlett, N.H. Local freights working to the west of Bartlett struggled on the other side of the Notch.

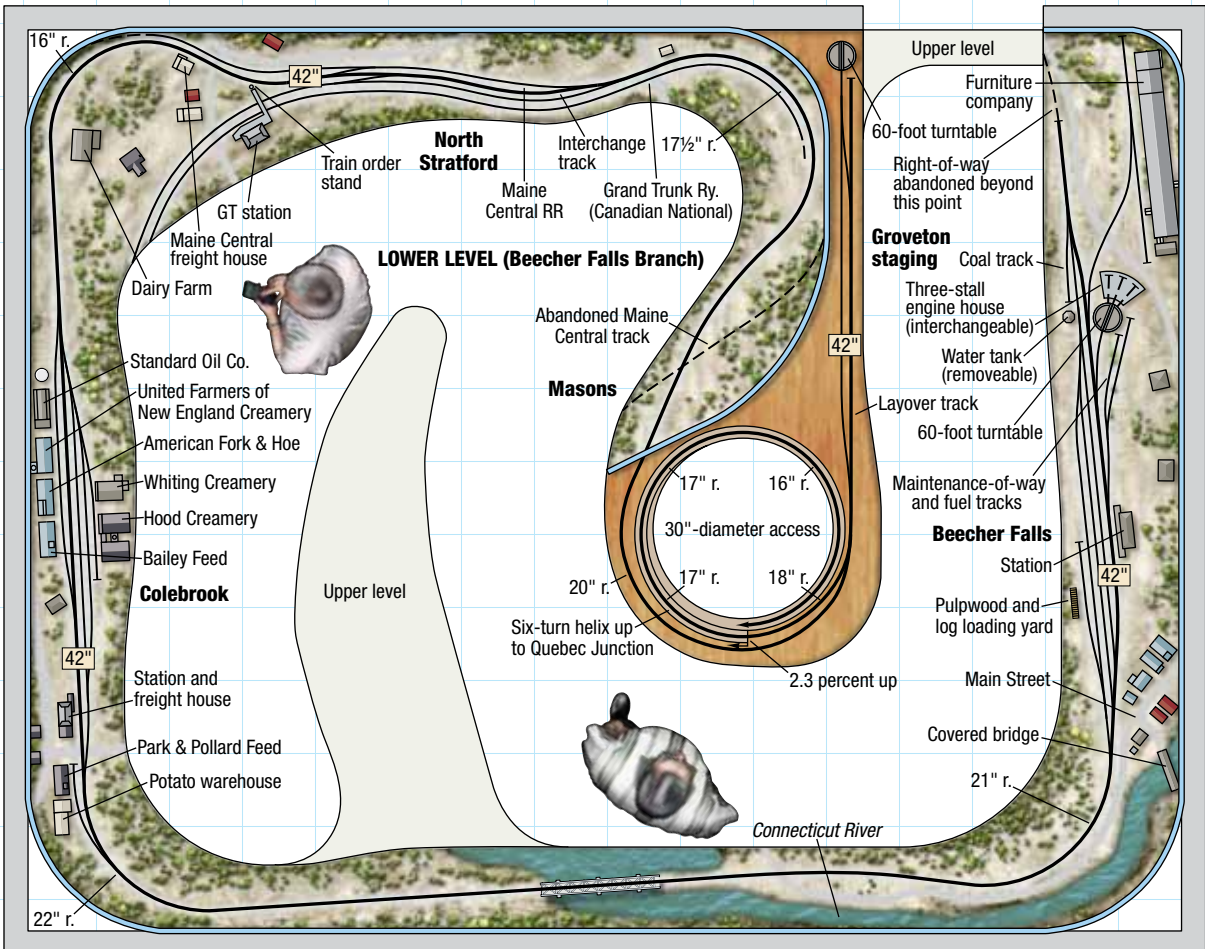
This is a mid-sized N scale railroad that offers a variety of trains, operating schemes, and modeling options. It's ambitious, but it lends itself to constructing a town at a time. [MR](#)

▶▶ The track plan at a glance

- Name:** The White Mountain Division
- Scale:** N (1:160)
- Size:** 12'-6" x 16'-0"
- Prototype:** Maine Central
- Locale:** Northern New Hampshire and northern Vermont
- Era:** early fall 1949 to early fall 1960
- Style:** two-level, walk-in
- Mainline run:** 69 feet
- Minimum radius:** 16"
- Minimum turnout:** no. 6, except where indicated
- Maximum grade:** 2.3 percent



Illustrations by Theo Cobb





Motors 604 and 603 pull cars off the ferry *Ramon* at Mallard, Calif., on the south shore of Suisun Bay. Reginald McGovern photo

Sacramento by train... and by ferry

This plan for an 11 x 19-foot switching layout features street running and ferry operations

By John Williams

The Sacramento Northern Ry. (SN) was conceived by predecessor company Oakland, Antioch, & Eastern as an interurban route between the San Francisco Bay area and Sacramento. Although the SN abandoned passenger service in 1941, electric freight service continued until 1957.

From the 40th and Shafter Yard in Oakland, westbound freights continued over Key System tracks to the Oakland Terminal Ry., which served the important Oakland Army Base. This was the only access to the base for the Western Pacific, SN's parent company, until a new connection came in 1957.

▶ The track plan at a glance

Name: Oakland, Antioch, & Eastern Ry.

Scale: HO (1:87.1)

Room size: 10'-6" x 19'-0"

Prototype: Sacramento Northern Ry.

Locale: San Francisco Bay area, California

Era: Late 1940s to early 1960s

Style: shelf with central peninsula

Mainline run: 108 feet

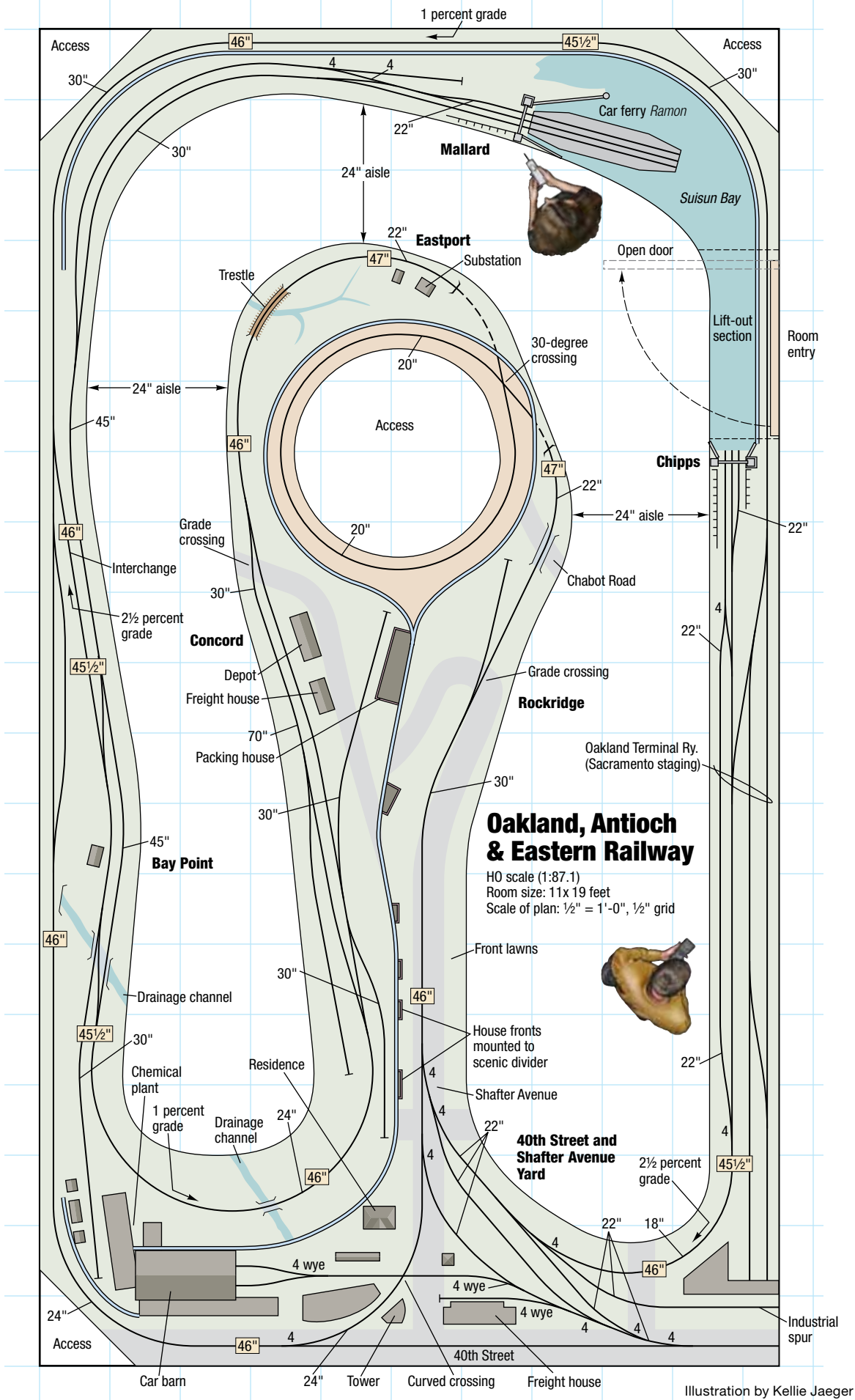
Minimum radius: 18"

Maximum grade: 4 percent

Minimum turnout: no. 4

Having researched the Sacramento Northern Ry.'s South End route (www.people.virginia.edu/~ggg9y/home.html), stretching from Oakland to Sacramento, Calif., I was easily convinced that its interurban origins, short trains, steep grades, tight curves, and minimal facilities would make it ideal for developing into an HO scale layout.

Though many signature elements found along the south end route can be re-created on a layout, I avoided the complexities of overhead wiring by designing my plan for diesel operation.



A trip around the track plan


A typical eastbound freight to Sacramento departs from the staging area on track representing the Oakland Terminal Ry. The track curves left behind a scenic divider and encounters a 1 percent grade. When the line reappears along the opposite wall, it's running adjacent to the mainline between Bay Point and Mallard. Here, the track is masquerading as either a Atchison, Topeka & Santa Fe or Southern Pacific line and incorporates part of an interchange connection.

Beyond the interchange, the line disappears behind a scenic divider and curves left onto 40th Street in Oakland. At the west end of the wye at 40th Street and Shafter Avenue, the route swings north onto Shafter.

Most trains work at the 40th and Shafter Yard, typically pulling an SN boxcar in less-than-carload-lot (LCL) service from the freight depot track to the head end or switching out cars from the industrial spur. All freights between here and the next stop at Concord require a helper. The short spur at Rockridge is used by the helper on westbound trains, allowing it to cut off, back in, and return to the yard.

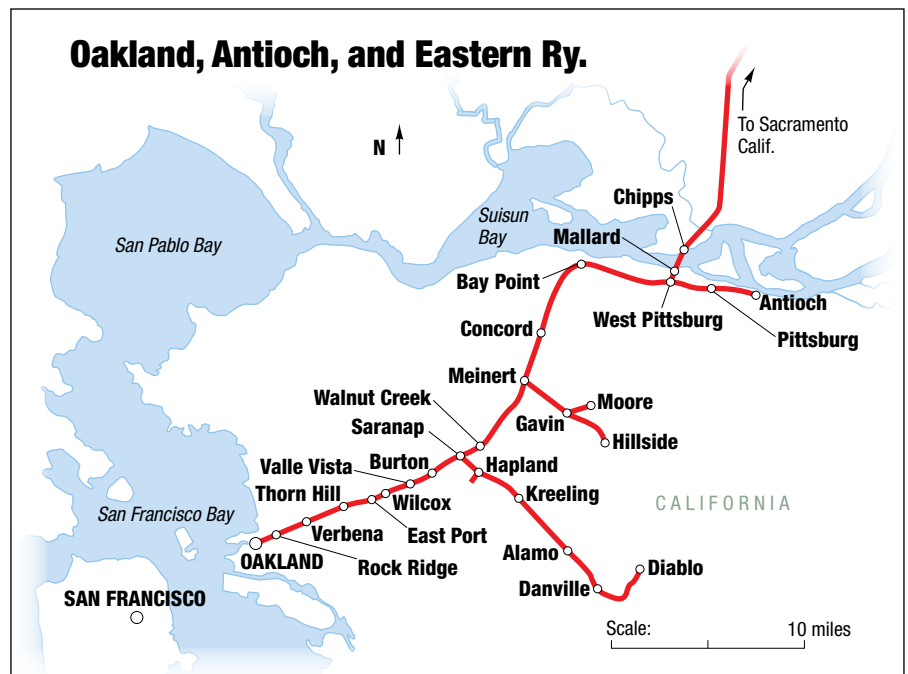
Continuing from the Rockridge turnout, the line reaches the end of its 4 percent grade, crossing a fill and Chabot Road, then entering a tunnel, where it makes a 360 degree turn. This may look like a helix, however, the track remains level at 47" and crosses itself at grade. This lengthens the mainline run within the tunnel and helps conceal a train so it isn't simultaneously visible at both tunnel portals.

At Eastport the line emerges into Pinehurst Canyon, passing the electrical substation on the left. Descending a 2 percent grade, the line reaches the depot at Concord, where helpers cut off. Leaving Concord, the line descends a 1 percent grade on a fill to reach Bay Point. This location represents the shore of Suisun Bay, where SN serves local industries and interchanges cars with the ATSF and SP. An industrial spur serves a chemical plant, and the interchange track is connected by a steep link to the main line above.

From Bay Point it's a short distance across marshes to a trestle at the water's edge and the slip at Mallard. The route continues over water aboard the ferry *Ramon* to the slip at Chipps. The locomotive, after splitting its train and shoving the sections onto the car ferry, crosses with its consist. Upon arrival, the locomotive pulls the cars off the *Ramon* and into the Oakland Terminal Ry. staging area. 



The *Ramon*, a 3-track ferry, moved cars between Mallard and Chipps. Because of the width of the cars, only two tracks are in use here. William D. Middleton photo



A B&O branch line for a **GARAGE**



▶▶ The track plan at a glance

Name: Baltimore & Ohio RR, Shenandoah Subdivision
Scale: HO (1:87.1)
Size: 10'-8" x 18'-6"
Prototype: B&O
Locale: Virginia
Era: 1953
Style: walkaround
Mainline run: 50 feet
Minimum radius: 27" main line, 24" in engine terminal and leads to PRR switching track
Maximum grade: 1.5 percent
Minimum turnout: no. 6, except where noted

This plan for a 10 x 18-foot layout is based on operations in the Shenandoah Valley

By Michael Flanagan

This HO scale layout was influenced by Baltimore & Ohio RR operations through the Shenandoah River Valley circa 1953. The prototype Shenandoah Subdivision begins at a switch that diverges from the B&O (now CSX) main line on the Maryland side of the Potomac River bridge at Harpers Ferry, W.Va. The northern end of this route opened in 1836 as the Winchester & Potomac RR. Under B&O control in 1870s, the W&P was connected with the newly built Winchester & Strasburg RR. That formed the present line, which runs roughly 50 miles in a southwesterly direction through the farm country of the lower valley to Strasburg Junction. The junction includes a wye interchange

Baltimore & Ohio's no. 4592, a 2-8-2 Mikado, is typical of the steam power working the Shenandoah Subdivision. Jim Shaughnessy photo

with the Southern Ry.'s Manassas-to-Harrisonburg line.

I developed my plan to highlight several key elements and locales along the route. On this point-to-point plan, the fictitious community of Shenandoah Springs occupies the same spot on the map as the actual city of Winchester, Va. I intentionally designed "The Springs" to be a smaller and hillier locale than Winchester. Lime City and Mount Zion are also fictitious locales, developed from elements found in Stevens City, Strasburg, and Mount Jackson.

Surveying the subdivision

Before settling on the Shenandoah Subdivision, I spent years studying other B&O branches or related lines. I finally chose to develop the Valley Sub because it offered so many of the features I desired in a model railroad.

Variety of traffic. During the 1950s, limestone was shipped out of the region's quarries by rail aboard covered hoppers, open hoppers, gondolas, and even boxcars loaded with bagged lime.

Winchester produced apples and fruit, so wood-sheathed reefers to handle seasonal produce are required. Other rail traffic in the valley included grain, textiles, coal, and fuel oil.

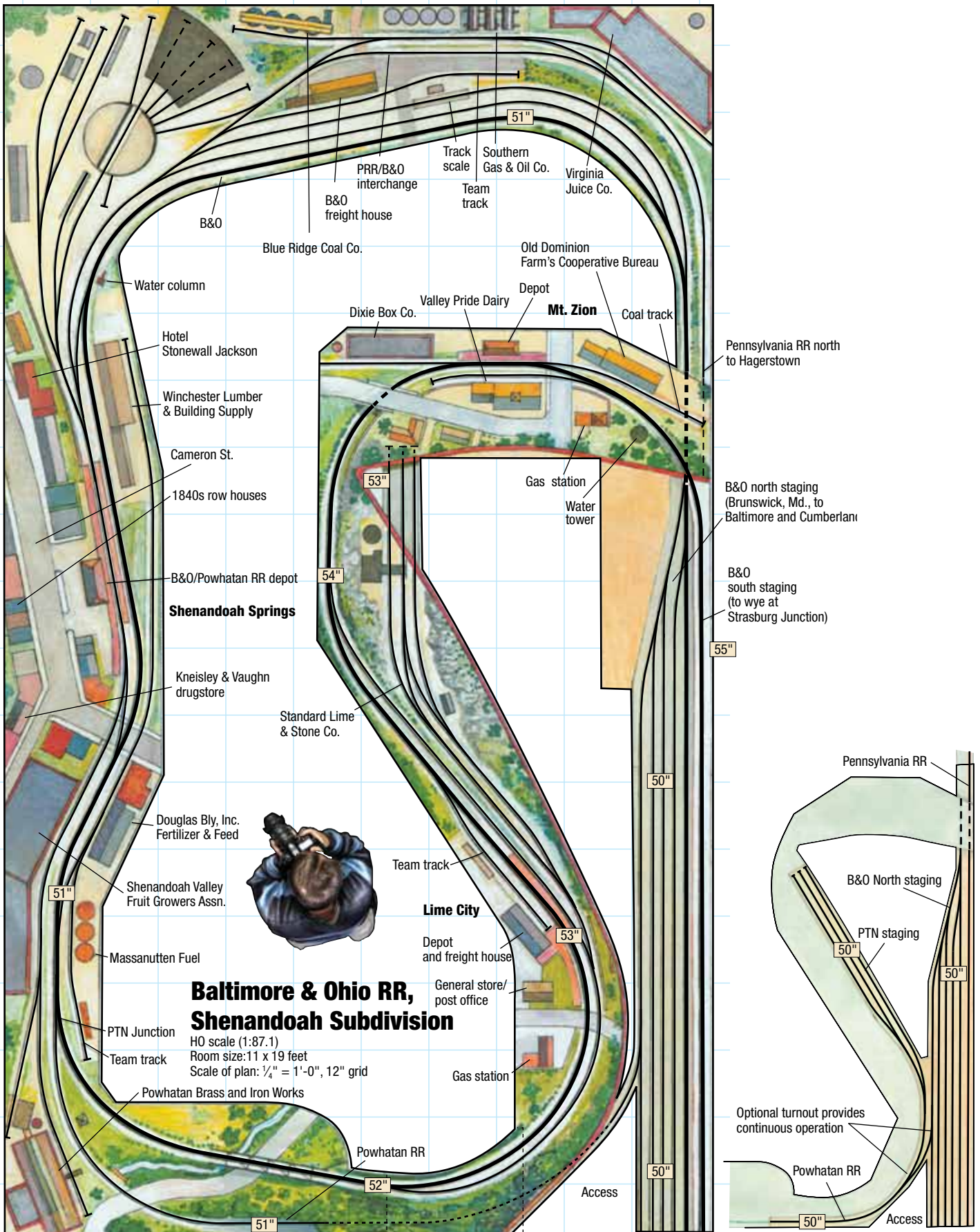
Short passenger trains. By the late 1940s, B&O passenger service in the valley was down to a daily train from Brunswick, Md., to Strasburg and back, often with just a milk car, baggage-Railway Post Office, and an A-18 coach in tow. Service ended in August 1949.

Interchange. The B&O's Valley Sub interchanged with four railroads. My track plan incorporates two – the PRR and the fictional Powhatan.

Mixed motive power. Steam, mostly represented by B&O's E-27ca Consolidations, and Q-1 and Q-7 Mikados, still ruled until 1953, when Electro-Motive Division GP7s began showing up.

Regional architecture. Shenandoah Valley towns display a variety of architectural styles unique to the area. They include freestanding Pennsylvania-German stone houses and classic brick row houses of the Federal Period.

Winchester's largest industry can be identified by its ungainly architecture. Virginia Apple Storage, ZeroPak, Robinson's, and Winchester Cold Storage occupy huge windowless warehouses of brick and concrete. **MR**



Illustrations by Michael Flanagan

Room entry (duckunder)

To Strasburg staging