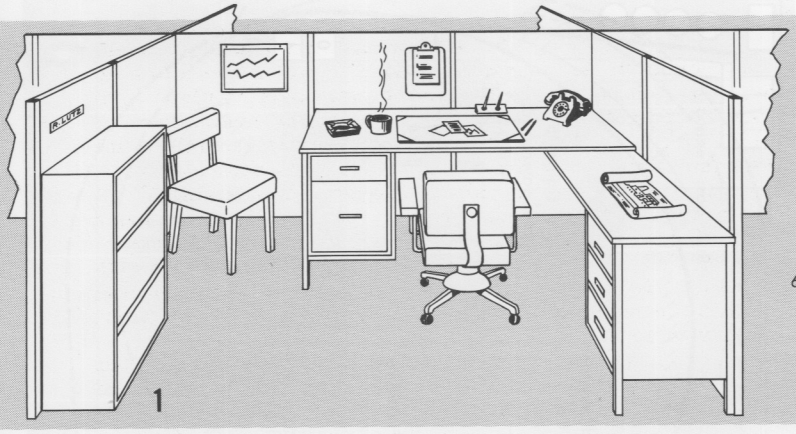

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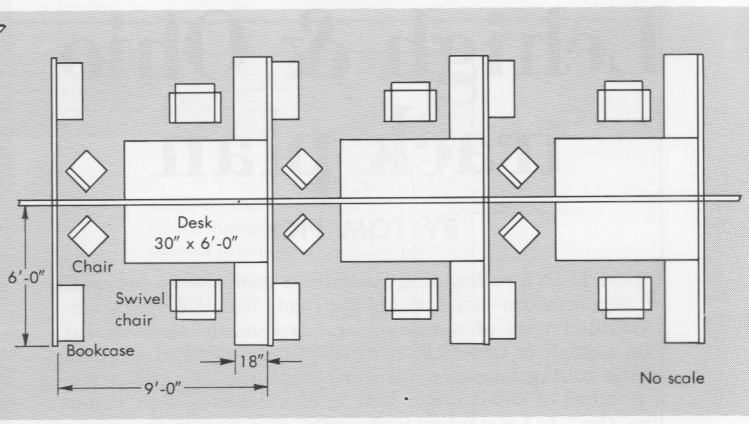



# Cubicle railroads—with two track plans

## Your hobby space doesn't have to be any larger than your work space

**BY ROBERT J. LUTZ**

THE idea for cubicle railroads was born one afternoon during a coffee break from a lengthy and tedious set of calculations.

I am employed in a large engineering office at an east coast shipyard where each engineer and draftsman is assigned to his own cubicle. The cubicles are separated by steel partitions arranged in rows as shown in fig. 1. The perspective sketch shows a typical arrangement of an engineer's cubicle measuring 6 feet deep and 9 feet wide—about 1.8x2.7 meters.

As I sipped my coffee, the old noggin began to wander to model railroading, as it is prone to do on many occasions. The "idea lamp" came on and, says I to myself, "I wonder what kind of a model railroad could be fitted into this cubiole?"

By the time I had finished my coffee I had rough-sketched a layout to fit the space. Since management would frown heavily on a railroad in the office, I took the cubicle idea home and finished working on it there. Real estate for a model railroad is hard to come by in many a household, so maybe this idea might be an answer to the space problem of other modelers. A cubicle would fit nicely in a corner of the basement or attic room either in just this size or in a slightly altered space.

Besides providing for a layout with operating challenge, the space should accommodate a workbench, parts storage, tools storage, and all within reach of a swivel chair. A way to frame the space is shown in fig. 2, although other methods could be substituted.

The storage equipment will be underneath the railroad framing, perhaps looking much as in fig. 1. Here, the set of drawers to the right would be handy for storing rolling stock, kits under construction, and parts. The drawers to the left would serve as a place to store tools. Many variations of small drawer cabinets are available from unpainted furniture stores, or you can build your own from plywood leftovers. A pullout work surface fitted with self-supporting extendable kitchen cabinet hardware is located under the 18" wing to the right. Railroad controls can be located under the layout, in front of the chair.

After the framing is completed, one should install the background board before laying track. The sky background can be painted upon ⅛" Masonite, which will readily bend to the 12"-radius corners. Prime-paint the Masonite with several coats of flat white paint. Then apply a final finish coat of a very pale blue to simulate a clear sky background. Sky is darker at the top, nearly white at the horizon. The Masonite should extend below the intended background scenery profile. Hold the top edge of the Masonite in place with an outside corner cap molding or a U-channel type of molding. Scenery contour cleats made of scrap lumber can be fastened to the plywood and Masonite with glue and screws.

I designed track plans of two different concepts to fit the cubicle.

The Valley Western, fig. 3, a high-density-traffic, trunkline railroad, is an example of fitting a maximum of railroad into a minimum of space. If done in N scale it should fit the 6x9 cubicle, but, of course, it could be built in larger or smaller scales just as easily if the space is proportionately larger or smaller.

The other railroad, the Short Hills & Eastern, fig. 4, will fit the same space in HO.

Since I work on and enjoy ships, both layouts have a marine influence. Prototype railroads, too, have been influenced by water, with many a mile of track hugging the shores of rivers and bays. Considerable interchange traffic comes from marine service, and from a modeling standpoint it offers a somewhat different approach for scenery treatment.

I am also partial to passenger train operation, so both layouts are geared to it; but I have also tried to strike a reasonable balance by including some intricacies of freight train operation.

### Valley Western

The Valley Western is a single-track trunk line with numerous passing sidings. It is basically a point-to-point bridge-traffic system. Its western terminal is Rine Cliffs. Here an interchange point is found high on a plateau. It has an engine terminal with turntable. The main line descends from the plateau, runs through the Rine Valley, and then rises to Queenstown on another plateau. Queenstown has a stub terminal fitted inside a return loop. The return loop is used to turn locomotives, observation cars, and sometimes complete trains. Out-and-home operation from Rine Cliffs is possible by using the loop.

Stations are relatively close together, so geography in the form of the river, low mountains, and rocky cliffs with cuts, tunnels, and bridges provides natural separations between towns. There is some European influence which is the result of my watching German railroads operating on both banks of the river in the Rhine Valley.

Passing sidings are deliberately kept short to add to the operating problems. This keeps trains short, creating an illusion of distance. Freight trains ought to be 12 to 15 cars long. The stub terminal tracks at both Rine Cliffs and Queenstown can accommodate six-car passenger trains. A combine, two coaches, diner, parlor car, and observation car would make a typical limited consist. There are many prototype precedents of name-train consists just like this example.

In the 1930's and 1940's the Reading Co. ran frequent Philadelphia to New York three-car "Clockers" consisting of a beautiful high-wheeled Pacific, two coaches, and a heavyweight cafe car. They were a pretty sight and they rolled fast. This is the intent here. The passing sidings do not allow two six-car passenger trains to meet, but these shorties can oppose the limiteds successfully. Double-tracking the main line from Kessart along the shore of the bay to Donnaburgh would alleviate this situation, for those who would prefer it.

Donnaburgh represents a fair-sized city. The station has a spur for a sleeper or diner drop. Also located here are seven industrial sites and a small yard, warranting the assignment of a full-time yard switcher. The way freights and through freights can drop and pick up cars by the block, with the local switcher doing the industrial switching.

All told, 23 industrial sites are scattered throughout the system. This will keep way freights on the line for quite a time. I've made no attempt to define the specific industries, but the nature of freight traffic should be general mixed in keeping with trunkline bridge traffic.

With the use of a few local control panels, several people could operate this railroad together. Motive power can run the gamut, as long as the overall wheelbase of single-end locomotives and cars does not exceed the 96-foot turntable at Rine Cliffs.

Scenery is important to the illusion on this layout. Low rolling mountains provide a logical geographic separation of tracks and towns without being excessively high. At Rine Cliffs and Queenstown the cities are above track level, partly supported by a stone retaining wall. At Rine Cliffs this wall should be just a few feet higher than a standard passenger car. Rine Cliffs station is an ancient three-story frame structure with a waiting room at track level, a ticket office at street level, and division offices in an attic having twin dormers.

At Queenstown, the street level and the stone retaining wall must be high enough in elevation to clear the hidden portion of the return loop. The station is a multistory red brick structure similar to that at Rine Cliffs. The road's general offices are on the upper floors, and a square clock tower tops the building.

### Short Hills & Eastern

The Short Hills & Eastern is a point-to-point shortline railroad. It has no turning facilities for locomotives, but it contains a hidden lower-level "fiddle yard" which adds considerably to the operating fun.

The road represents a wholly owned island subsidiary of a major mainland trunk line. It is located some 2 hours' sailing time from the mainland. Interchange by car float and car ferry arrives at Seaford Harbor. These ships sail alternately to the mainland. Train operations are scheduled to the arrivals and departures of the two marine units.

The major source of freight traffic comes from Hoozitts Mining Co. at Short Hills. It exports a rare and extremely heavy material known as wattchamacallit that is hauled in ore trains that roll onto the car float to reach mainland refining plants. The balance of freight service is hauling general merchandise to and from industries along the line.

Cliff Castle, at Short Hills, is a model of a medieval castle that was built in the early 1900's by a wealthy mining magnate and is now operated as a luxury tourist hotel.

Bay Pier is a popular stop for sport fishermen. Many fishing party boats operate from its pier.

Passenger traffic is frequent to satisfy the tourist traffic, sport fishermen, and the miners at the Hoozitts Mine, who work very short shifts due to the great weight of wattchamacallit.

The two marine units are kept deliberately small to avoid overpowering the model railroad by sheer size. The design of the car ferry, fig. 5, was checked by a naval architect friend of mine, and it is well within the realm of practicability as a diesel-powered ship. The car float is a typical two-track railroad car float with a specially strengthened hull to carry the great weight of the ore cars.

Both units are waterline models with hulls to be carved out of white pine and the superstructures built up of multiply Strathmore board. The car ferry is 182'-0" long, the car float is 152'-0" long, and both have a beam of 43'-6" and a car deck freeboard of 10'-0". Both hulls are fitted with a pocket in the car deck at the stern which receives the outboard end of the ferry bridge. To keep my story plausible, let me specify that tidal variations at Seaford Harbor are only a few feet and there is always a slight decline over the ferry bridge to the stern of the hulls.

The ferry bridge is of heavy truss construction. Realism will be enhanced if it is made to operate. It could be motor-driven with a double-ended motor and gearing located in the control room atop the lifting bridge, or it could be operated by a small hand crank. It should be raised and lowered to correspond with the docking and undocking of the hulls.

The ore trains are limited to eight cars because of their great weight. They are operated as unit trains, never mixed with general-service cars. The car float has a capacity of six 50-foot cars or eight ore cars. Ore trains are handled on alternate sailings; loaded cars are pushed aboard two at a time, first to port, then to starboard, with a light idler car ahead of the locomotive.

The car ferry carries general-service freight cars only, plus passenger cars. It also has day accommodations for 81 passengers in the upper cabin. It has a capacity of six 50-foot freight cars or four 50-foot freight cars and one 80-foot pullman or coach. The one-car passenger interchange is made on alternate sailings.

After unloading and reloading, either hull is lifted out of the slip by hand (simulated sailing) and placed in its proper slip on the lower-level fiddle yard.

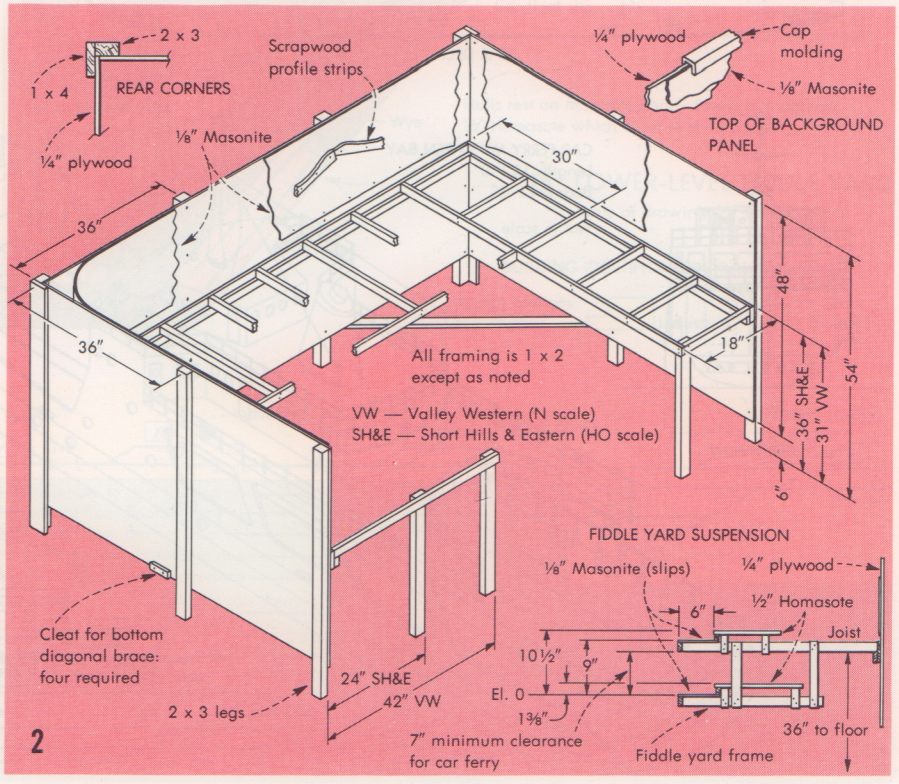
The fiddle yard lends itself to the man with more rolling stock than the railroad can accommodate. This makes for variety in interchange and can be made as elaborate as one may wish. It provides for a traffic pattern diagramed in fig. 6. Since the fiddle yard trackwork is hidden under the layout, so is purely functional, I'd suggest using flexible track and no. 4 switches.

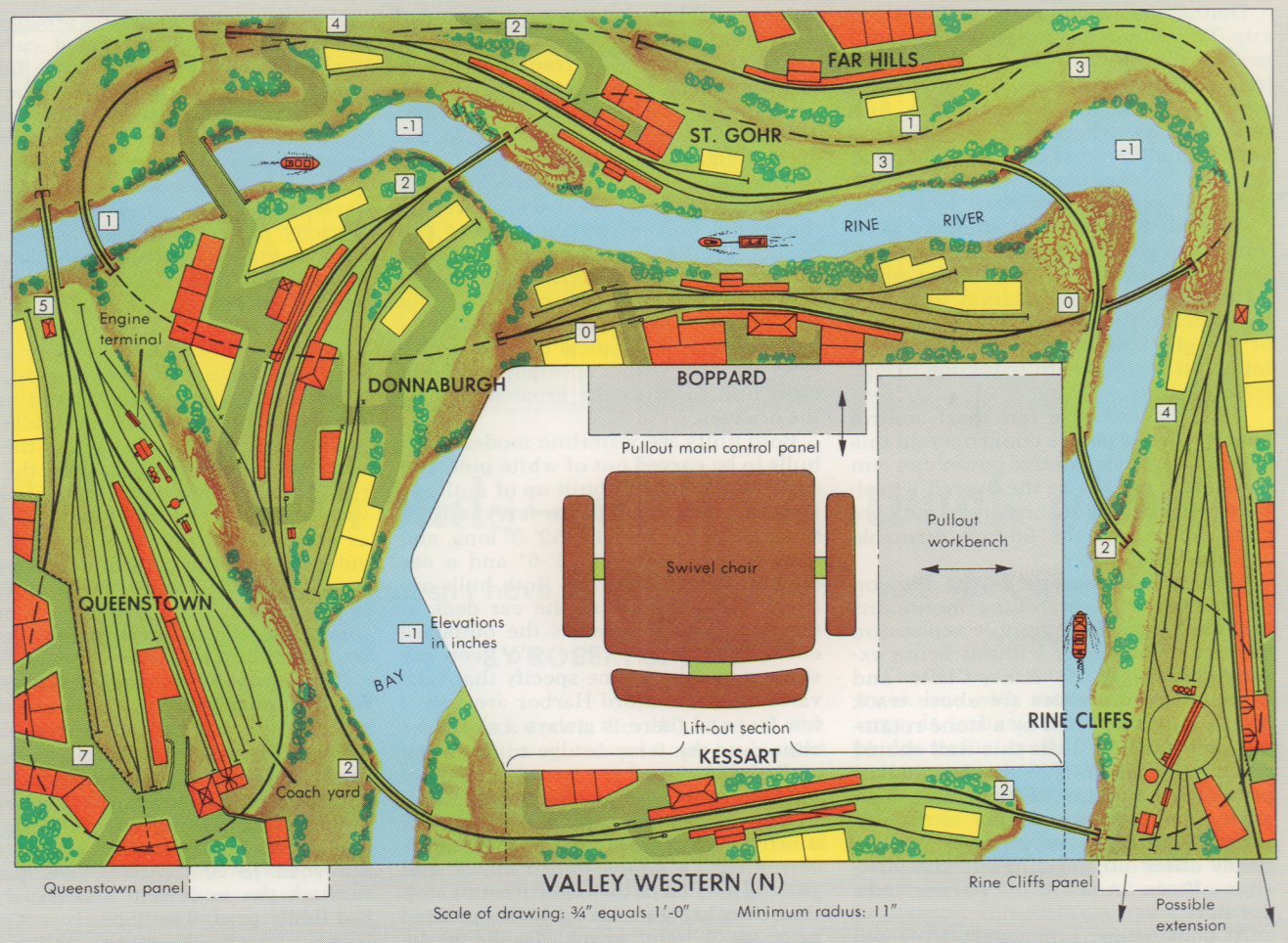
The mine interchange track of the fiddle yard eliminates the bothersome sight of loaded ore cars returning to the mine. Two sets of eight ore cars are used. One set is always empty; the other carries simulated loads.

Empty ore cars move from fiddle yard to car float, float to Seaford Harbor, over the road to Short Hills; are pushed through the minehead and down into the fiddle yard. The loaded cars travel in the opposite direction starting from the minehead.

Set your own period in time; a large variety of small motive power and passenger rolling stock is available, both modern and old-time.

If you choose the steam era, keep in mind the lack of locomotive turning



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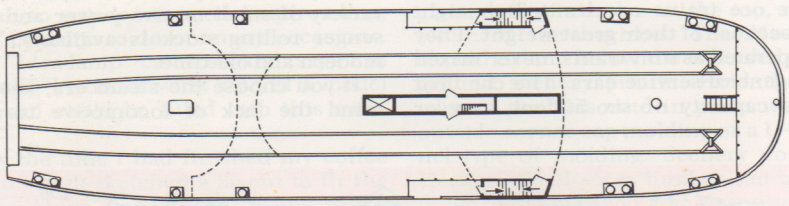
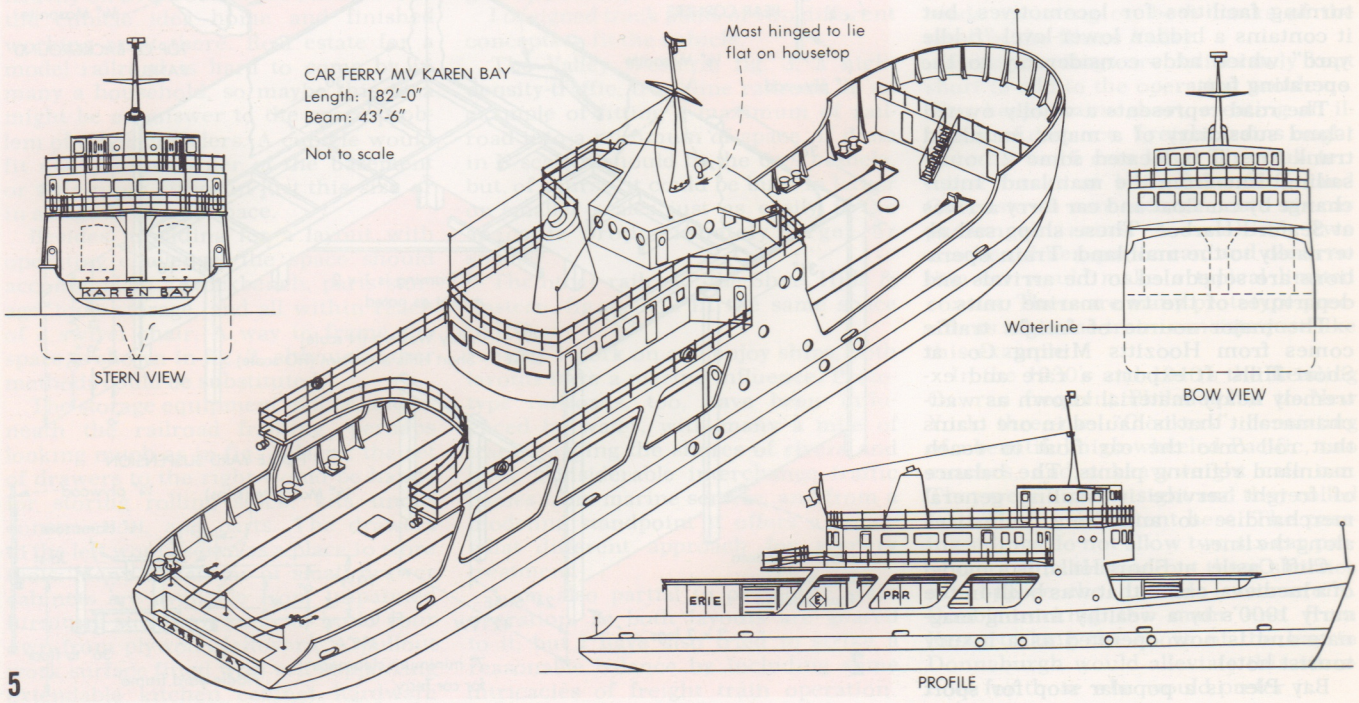



facilities. I would lean toward tank-type locomotives such as 4-6-4T's or 4-6-6T's for passenger service, and possibly 2-6-6-2T's for pulling the ore trains. A Dockside, Tyco Shifter, or Roundhouse Goat would do nicely for the yardwork.

If you choose a contemporary period, I would stick to boxcab diesels such as

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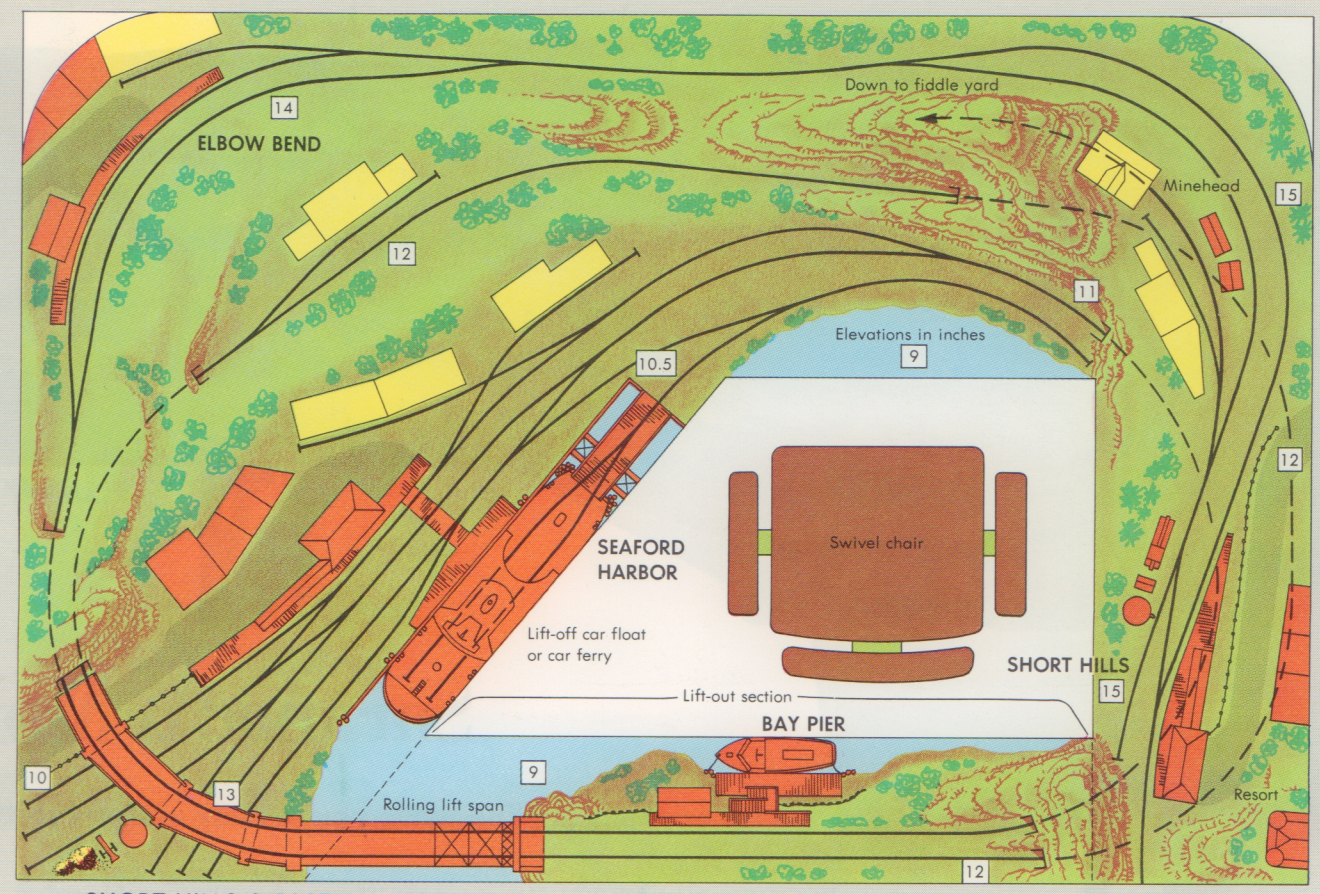


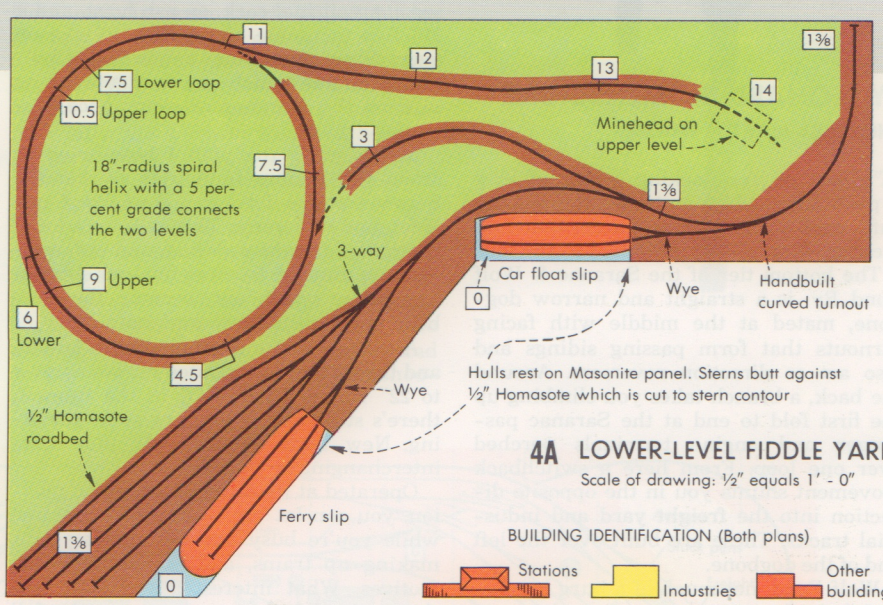

**4** SHORT HILLS & EASTERN (HO)

Scale of drawing: ¾" equals 1'-0"
Minimum radius: 18"

EMD's BL-2 or any of the Geep locomotives. An Athearn Hustler or a Plymouth diesel would be nice for the switching chores.

The Short Hills & Eastern owns only two passenger cars: a combine and a day coach. The interchange cars should include at least one 80-foot pullman sleeper, modern or standard, and several coaches. These should all be lettered for foreign roads.

I'd suggest powering one track on the car float through a set of contacts on the ferry bridge so you can occasionally bring different motive power from the fiddle yard. The car float is designed to carry the weight because the Short Hills & Eastern's locomotives are serviced at the parent road's shops on the mainland.

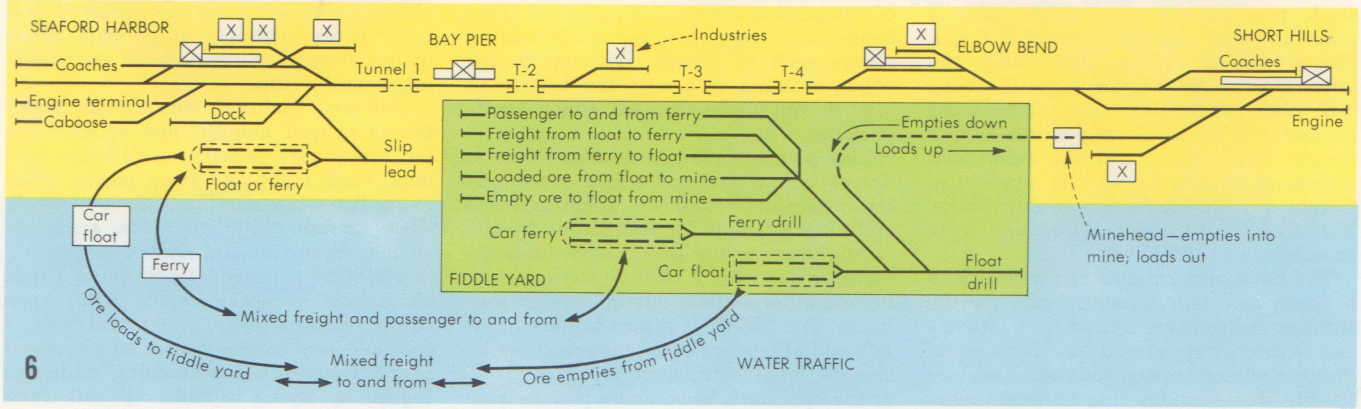



**4A** LOWER-LEVEL FIDDLE YARD

Scale of drawing: ½" equals 1' - 0"

BUILDING IDENTIFICATION (Both plans)

Stations · Industries · Other buildings

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