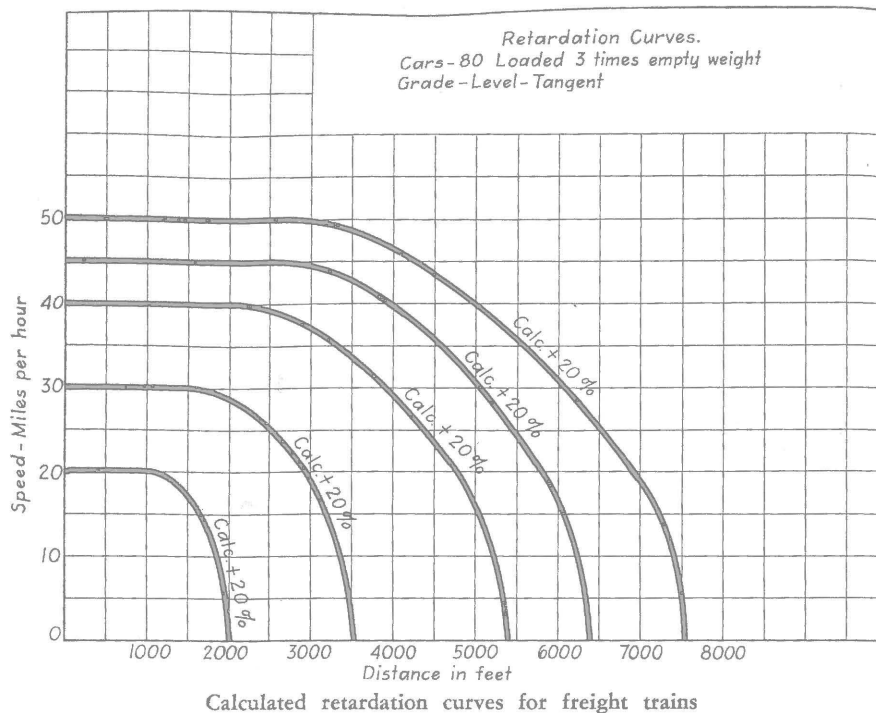


make a graphic chart of the train movements to determine whether, with certain block spacing, scheduled trains following one another would receive too many restrictive signals in succession.

The current time-table schedule cannot be entirely depended upon, for, in the northern part of the country, a signal spacing which might be satisfactory for a winter schedule might not work so well with the summer time-table. In suburban territory using daylight-saving time, the suburban trains are usually advanced one hour, while the long-distance trains may or may not be shifted, thereby possibly setting up a very different grouping of trains between the two time-tables.

In general, the proper location and spacing of signals is dependent not only on consideration of the above mentioned items, but also on the good judgment and knowledge of local operating conditions on the part of the men designing the layout.



## Maintainers' Tool Houses

*"Do you use a standard plan for maintainers' tool houses? If so please furnish construction plan and details."*

### On the Southern Pacific

R. D. Moore

Signal Engineer, Southern Pacific  
San Francisco, Calif.

Some provision should be made for protecting a maintainer's motor car, tools and supplies, and it is our standard practice to furnish a 12-ft. by 14-ft. tool house, as shown in the drawing. This provides space for his motor car and supplies, also a small work bench and clothes locker. These houses are neat in appearance but are located by preference away from station buildings, at points in the yard, where there is little likelihood of tracks being blocked by trains or cars.

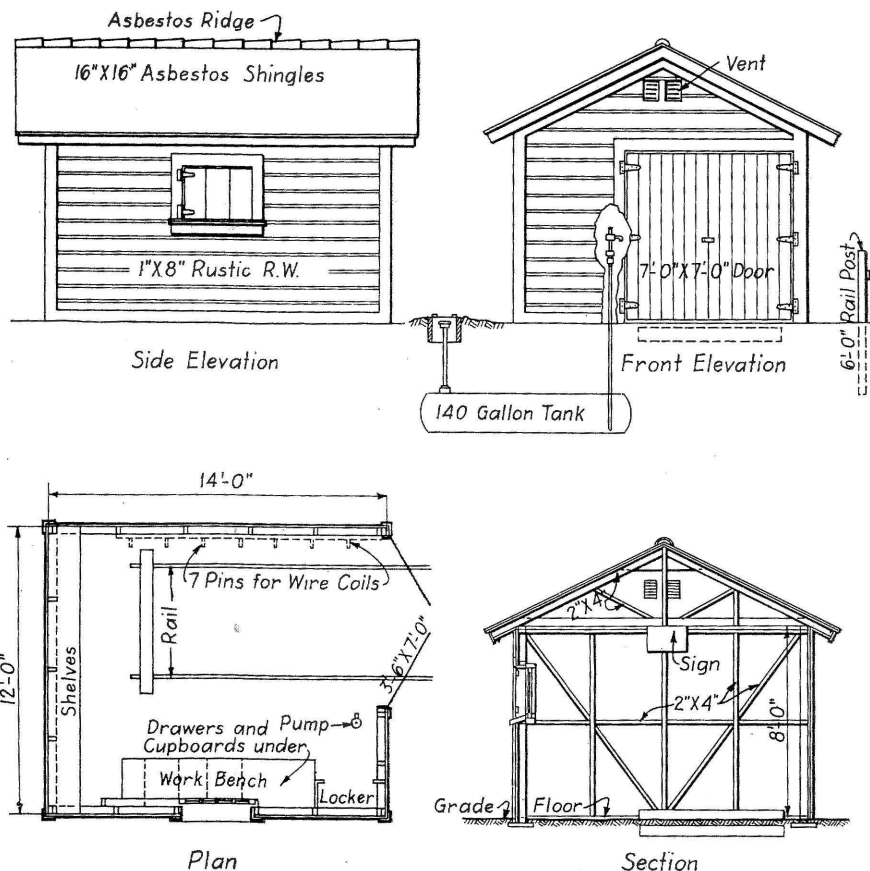
The plan also shows the method of storing gasoline underground with a pump inside the tool house. The gasoline is delivered in drums and emptied into the underground storage tank. In some cases, where a section foreman and maintainer are located at the same station, only one storage tank is provided, being located either at one tool house or the

other, and used jointly by both men.

In most cases, these tool houses were provided when the signals were installed, being included in the signal estimate as a part of the installation program.

Practically all of our automatic sig-

nal sections have tool houses of this type. Interlocking maintainers, however, as a rule, have other facilities for keeping their tools and supplies and do not use motor cars, so this type of tool house is not needed for them.



Other answers to this question will appear in subsequent issues.