



DATA SHEET

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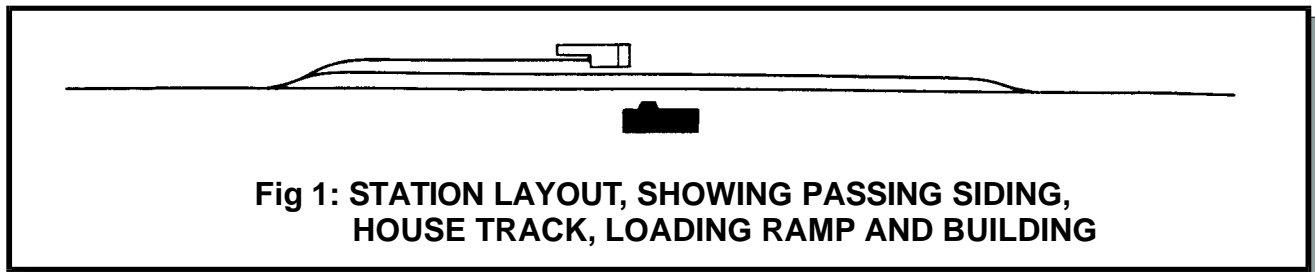
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GENERAL

Station tracks and side tracks fulfill the operating requirements of a railroad. Between-terminal sidings allow trains to meet and pass on single-track lines, while lineside industries and storage tracks at stations, originating occasional carload movements, are the grass roots of railroad commerce. This trackage calls for careful planning. On the prototype, too much trackage at a station increases tax and maintenance expense, while on the model railroad it adds to construction time and cost. On both, improper design decreases the useability of the trackage. On the other hand, in model practice a moderately awkward track arrangement can present challenging, and therefore interesting, operating problems.

STATIONS

In railroad language, the word "stations" doesn't mean only freight and passenger station buildings; instead, a station is a point at which train orders may be given and trains held, met or passed. An interlocking tower, or, on traction lines, a telephone box, might be considered a station.



STATION TRACKS

The definition above implies that there will be a passing track at each station -- usually a double-end siding. On some traction lines, where short trains were the rule, single-end, or stub, sidings were used as passing tracks. Under telegraph dispatching or manual blocks, each station would require an office for the operator and his equipment, including manually-operated train order signals. In open country the office might be a small building, or an old boxcar, with or without adjoining living quarters for the operators. Sometimes section crews are based at these outpost stations.

In towns and villages, the station buildings are more elaborate, designed to suit the needs of the community, and the operators are also station agents. For convenience in loading passengers, handling baggage and passing orders to moving trains, station buildings are usually placed beside the main-line track. More than one passing track might be provided, or the highly-flexible lap siding might be used.

Extra, single-end sidings are often placed at stations. These are called "house tracks." Cattle pens, floor-high loading ramps or bulk loading devices may be placed at house tracks. For simplicity in maintenance, house tracks are made spurs of the passing sidings.



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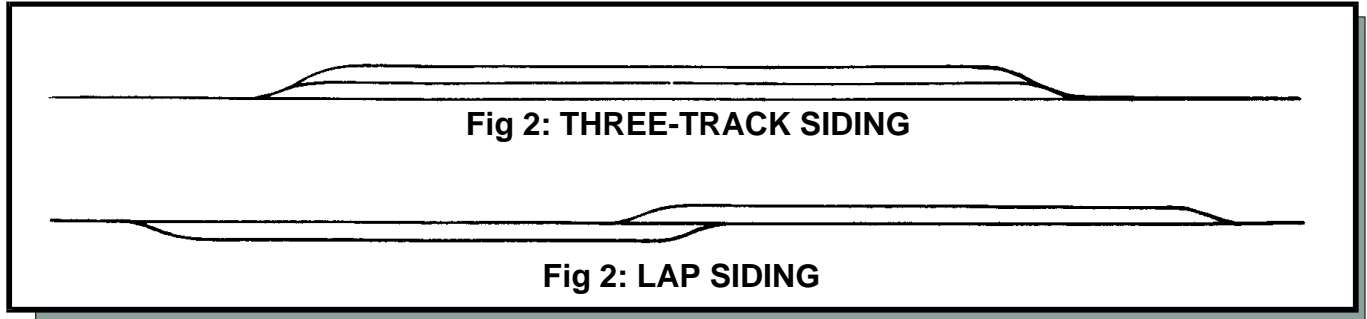
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STATION TRACKS - continued



PASSING TRACK LENGTH

Passing tracks may be several miles long, habitually operated as double track, or just long enough to accommodate the local freight train. On interurban lines, passing tracks may be large enough to hold only five or six cars. Generally, though, important passing sidings are just a little longer than the longest train which can be made up on one track of the yard at the end of the division.

INDUSTRIAL SIDINGS

Single-end sidings are placed at trackside industries. Trailing-point sidings are preferred in high-speed, multiple-track territory since high-speed running through trailing points involves less risk of derailment than through facing points.

Switching a trailing-point siding is easier, since the car can be picked up or set out without the need of a runaround move. Even in single-track territory, a local freight may do all its switching in the trailing direction, working some sidings on the outbound trip and the others on the return run. If traffic is dense, double sidings may be provided, allowing the train to be "parked" off the main line while the industrial siding is worked.

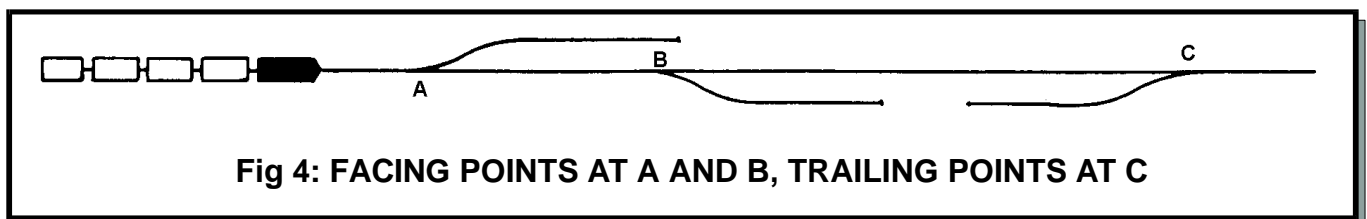


Fig 4: FACING POINTS AT A AND B, TRAILING POINTS AT C

WYES

Wye tracks are often found between terminals, where cars, engines or whole trains need be turned. See sheet D3h.I for a discussion of wyes and their use.



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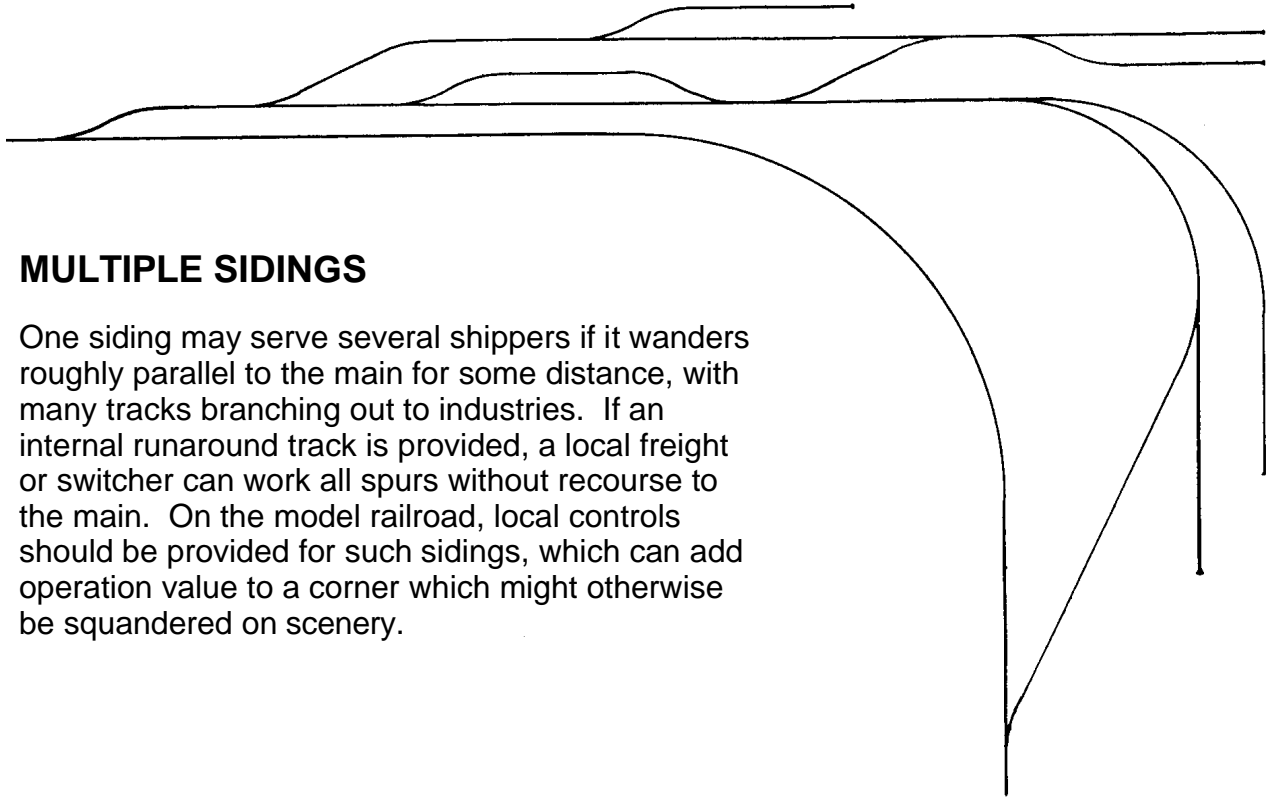
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ROADBED

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MULTIPLE SIDINGS

One siding may serve several shippers if it wanders roughly parallel to the main for some distance, with many tracks branching out to industries. If an internal runaround track is provided, a local freight or switcher can work all spurs without recourse to the main. On the model railroad, local controls should be provided for such sidings, which can add operation value to a corner which might otherwise be squandered on scenery.



DESIGN LIMITATIONS

A siding can be made effective for only one purpose. If it is to be used for meeting and passing, no attempt should be made to locate an industry directly on the siding, as a spotted car would interfere with the operation. Points where cars must be spotted undisturbed for long periods, such as bulk plants or powerhouses where tank cars are attached to unloading pipes, should be farther from the switch than points from which cars can be briefly removed during loading. Where switchback spurs are built, the distance from the end of the stub track to the inner switch, "A" in Fig. 6, should accommodate a locomotive and at least two cars;

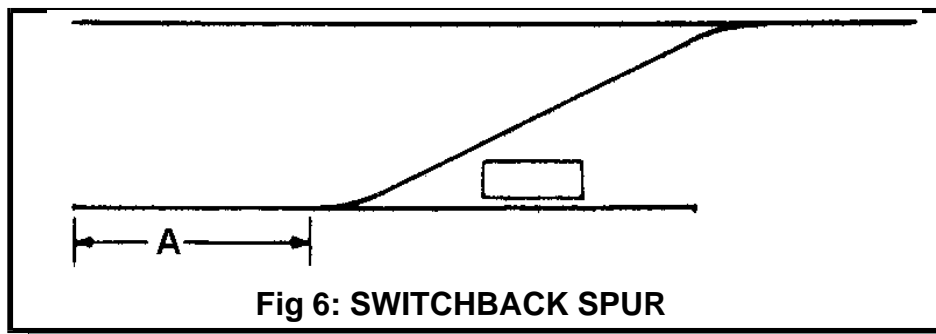


Fig 6: SWITCHBACK SPUR



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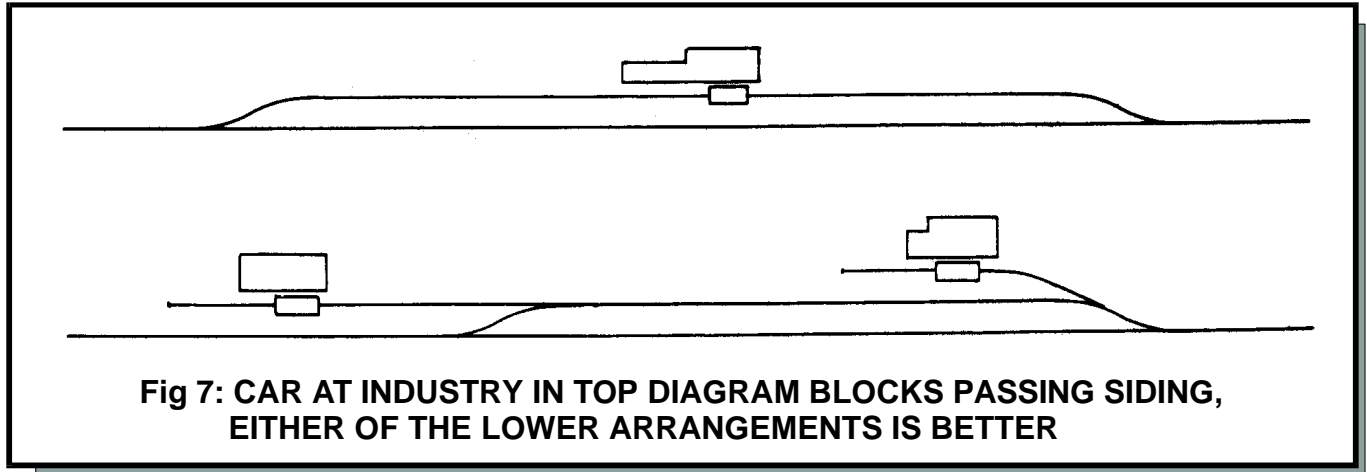
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DESIGN LIMITATIONS - continued



DESIGN FREEDOM

Industrial spurs which are worked by lightly-loaded locomotives may have steeper grades and sharper curves than main line trackage and passing sidings. Long leads may be laid down street centers. Sidings frequently enter buildings.

AWKWARD BUT CHALLENGING

Figure 8 shows three industrial siding situations which afford interesting model railroad operation. In each one, a runaround is required. In the upper diagram, some especially fast switching is required to reach the industrial spur.

