

National Transcontinental Railway Terminal Facilities at Moncton, N.B.

The National Transcontinental Ry. has under construction the facilities for its eastern terminal at Moncton, N.B., where it connects with the Intercolonial Ry. for St. John N.B., and Halifax, N.S. The trackage at present contemplated amounts to 10.6 miles, with room for the laying of an almost equal number when the demand arises.

The extent of the terminal, with its various auxiliary buildings, may be judged from the accompanying plan of the yard layout. The yards, with approaches, are over a mile long, and are located one mile from the point where the line joins the I.R.C., or about $1\frac{1}{4}$ miles from Moncton station. It is but a short distance from the I.R.C. new shops. The yards are located on a slight grade of 0.2088 ft. per hundred, rising from east to west. The eastern, or Moncton, end is 79.10 ft. above mean high water mark, and the western end, 87.45 ft., meaning a total rise in the length of the yard of 8.35 ft.

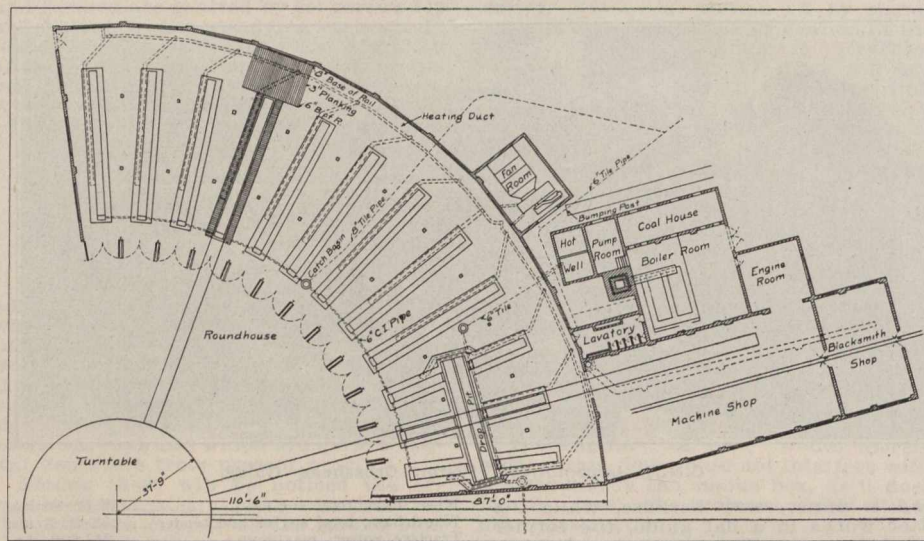
The yards are all to be north of the through main line, as it is expected that the trackage that can be placed there will prove ample for some time. To the south, it will be noticed, there is a strip the length of the yard which it is intended at some future date to convert into storage tracks, with a possible diversion of the main line to the south of this larger yard. The present storage capacity amounts to 600 cars, and the newer yard addition will add room for 600 more.

The main line along the south side of the property is located 18 ft. centres from a parallel track, the western end of which is used for caboose storage. Parallel with this, there is another through running track connecting with the caboose track through cross overs at the eastern end of the caboose storage space. To the north of this, at a 14 ft. spacing, there are nine through storage tracks leading from a 1 in 6 ladder track from the second track at the west end, and into a similar ladder at the eastern end, except for the lower three, which converge before leading on to the ladder, made necessary by the curve of the main line at that end of the yard. The first

The roundhouse and machine shop, located at the end of the car repair tracks, is of standard type, being erected along both the N.T. Ry. and the Grand Trunk Pacific Ry., and is shown more in detail in the plan of the standard layout. The same roundhouse and shop are used at this point, the layout being reversed, which is the only difference. The one to be built here will have 12 stalls, but it will be noticed in the yard plan that space has been left for a future addition, for

Between the bad order tracks and the upper through running track, there are three leading from the west from the same ladder as the upper running track at a 19 ft. spacing. The middle one of these from the west leads on to the coaling trestle, from which the chutes are supplied. The two outer tracks are for coaling the tender. Further east on the same tracks are the ashpits, both tracks converging from that point on to the turntable. From the turntable east, there is only a single track leading parallel to the ladders to the main line.

The engineering difficulties in the way of locating the yard were considerable, and careful planning was required. The

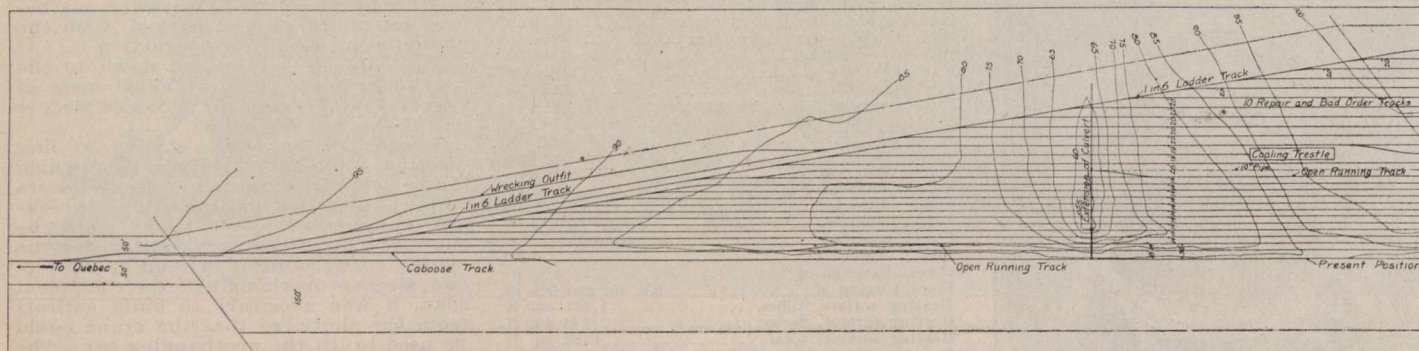


Standard Divisional Roundhouse and Shops for National Transcontinental Ry.

which the design of the shop layout is planned to accommodate. A $75\frac{1}{2}$ ft. turntable serves the roundhouse, the inner posts of which are at a $110\frac{1}{2}$ ft. radius. The roundhouse is 87 ft. deep. The upper nine of the stalls have no special fittings, but are constructed of concrete, the floor edge and the forward end planked. The three lower stalls have a drop pit connecting the three, with the centre track leading through into the

yards could not be located in Moncton from a lack of suitable space. Likewise, it was impossible to place the yards very close to the city, from the fact that the track rises out of Moncton on a 0.6% grade, which is rather too great for an extensive yard. The nearest place where a nearly level yard could be built, was the present site, $1\frac{1}{4}$ miles from town.

The contour lines of the original ground formation are shown on the yard



Yard Layout and Shop Arrangement for National

track north of these storage tracks is an open running track, connecting with the main line at both ends through a separate track parallel to the end ladder tracks. At both ends, there is a short parallel track, the one at the eastern end being used for caboose storage for traffic made up to travel in the opposite direction to that for which the west end caboose track is placed.

The upper ten tracks, at a 20 ft. spacing, entered by a separate 1 in 6 ladder track from the west, are for repair and bad order cars, conveniently located to the shops. Parallel with the ladder, near the west end, there is a short track for the wrecking outfit, which is handy to the main line on to which it can be run without any intermediate interference from blocked tracks.

machine shop to the rear. The machine shop in turn communicates with the blacksmith shop, which has an intervening wall, an optional construction being the elimination of this wall. An industrial railway connects the shops, leading out into the yard to the rear, where the bad order tracks are located. The engine room, boiler room, coal house, pump room and hot well adjoin this building. One of the bad order car tracks leads in alongside of the coal house for the coal supply. The fan room, along the outer wall of the roundhouse, supplies hot air through a concrete duct buried along the outer wall, smaller ducts leading therefrom along the walls of the pits, with entries at short intervals. The shops also have a buried system of conduits for heating.

layout plan. Between the level at the location of the culvert under the tracks and that of the ground where the roundhouse is to stand, is a full 45 ft. At the east end, the final elevation is to 79.10 ft., necessitating the reduction of the 100 ft. level of the shop site and the filling in of the ravine, carrying the filling-in operation nearly to the western end of the yards, where the final level is to be 87.45 ft. The tracks on the western portion of the yard are all on made ground, but the shops are all on the higher levels that were reduced. Any settling of the fill will not affect the buildings. A very convenient arrangement of tracks and buildings has been obtained, considering the restrictions laid upon the engineers in the laying out of these yards.

All the work of filling has been com-