

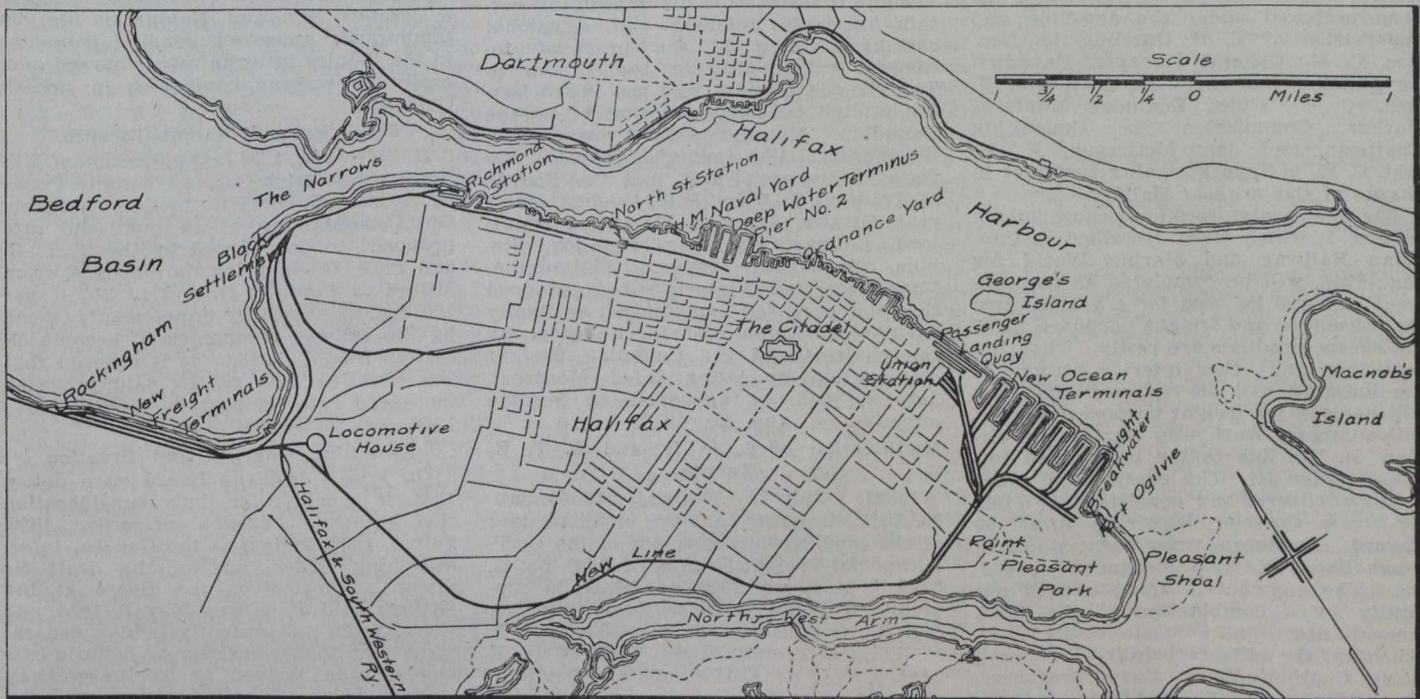
Halifax Ocean Terminals, Intercolonial Railway.

Canadian Railway and Marine World for Jan., 1912, contained an illustrated description of the deep water terminals being built at Halifax, N.S., for the Intercolonial Ry., work on which is still in progress. It, however, became apparent some months ago that these terminals would be altogether inadequate for the port's rapidly growing trade, and the Minister of Railways instructed F. P. Gutelius, M. Can. Soc. C. E., who has since been appointed General Manager, Canadian Government Railways, and F. W. Cowie, M. Can. Soc. C. E., Chief Engineer, Montreal Harbor Commission, to prepare a scheme for more comprehensive terminals, which was adopted. At present Halifax has the Richmond terminals and the "deep water" terminals, the former at Richmond, in the northern extremity of the city, the latter located quite centrally in the city, off Water St. It has been decided to place

storage and shunting of cars; the construction of an elevator which will permit of grain being loaded into ships at each of the 32 berths; a locomotive house for the cars of passenger locomotives and switch engines, and a breakwater from Point Pleasant Park to the Reid rock buoy.

The first unit will consist of a bulkhead pier, the freight and immigration sheds, passenger station, one ship and one freight pier equipped with sheds and tracks together with the necessary accessories, which will provide accommodation for eight of the largest ocean steamships. As soon as business warrants it, two more piers will be constructed, giving an additional capacity for eight such steamships; and in five or six years, or sooner if necessary, upon the opening of the Quebec bridge, provision will be made for a further accommodation of eight such steamships. As

will be no grade crossings, the railway being carried under the Halifax and South Western Ry., and in all cases either under or over all streets and routes by means of bridges, the designs for which will be made to harmonize with their surroundings. The railway has been designed for high speed passenger and heavy freight trains. The maximum curvature will be 4°, and all curves will be laid out with suitable easement curves. The maximum gradient will be 0.6%, compensated 0.04% per degree of curvature. To preserve the appearance of the residential sections of Halifax along the Northwest Arm and in the vicinity of Point Pleasant Park, the railway will be constructed from Quinpool Road to Young Ave. in a cutting of sufficient depth to give clearance for the railway under the overhead bridges, which will carry the streets and roads over the railway. The railway will be double tracked throughout, with additional lead tracks at the yards and terminals. The bridges, culverts and



Site of Halifax Ocean Terminals and Union Passenger Station, with Double Track Railway to be Built from Main Line at Rockingham.

the new ocean terminals considerably farther out in the harbor at Georges Island Bay near the ocean end of peninsula on which the city is situated.

The terminals, which are intended to be the best equipped on the Atlantic coast, will consist of a passenger landing stage or bulkhead wharf 2,000 ft. long with 45 ft. depth of water at low water of spring tides at which three of the largest ocean vessels can dock in safety without tug assistance; a wharf building the whole length of the bulkhead pier; the first floor of which will be for freight and the second floor for passengers, customs and immigration quarters. Passenger and freight tracks will run alongside the ships. The whole will be laid out so as to give the most expeditious, convenient and economical arrangements for the transfer of passengers, baggage, mails and freight from ship to rail and vice versa. This scheme of development provides for the construction of six freight piers 1,250 ft. long and from 320 to 360 ft. wide, which will be equipped with wharf freight sheds and railway tracks; yards for the

business develops and the demands of trade necessitate, the two southerly piers will be constructed, thus completing the scheme. Tenders for the landing quay and the first pier are to be called for at an early date.

The union passenger station, which will be built near the corner of Pleasant and South Sts., will be a handsome and substantial structure, and will be provided with all modern conveniences and facilities for passengers and the handling of baggage, mails, express, etc. The passenger car yard will be situated immediately southwest of and adjoining the union station, and will be of ample capacity and equipped with all necessary supply buildings and up to date facilities.

The ocean terminals will be reached by a branch railway to be built from Rockingham, on the I.R.C., four miles from the North St. station, Halifax, about five miles from the present deep water terminals, and about six miles from the new terminals, which will be situated nearer the entrance to the harbor than any existing wharf. There

structures will be of permanent construction throughout. The excavations for the railway, which will greatly exceed the embankments, will consist mostly of rock, but there will be no wasting of material. The surplus excavations from the northern end of the railway will fill in and reclaim from Bedford Basin a large and comparatively shallow arm, which will be used for the new freight terminal yard. A suitable site for this yard would otherwise be very difficult to provide, on account of the very hilly nature of the peninsula and surrounding country. This new terminal yard will be open ended and will have standing room for 1,000 cars on body tracks 4,000 ft. long, and it can be readily extended. It will take care of all freight to and from both the old and new terminals, transfer or switching engines only being used between the new yard and the city and harbor terminals. The excess materials from the railway cuttings at the southern end will be used for filling behind the quays and piers which are to be built in the harbor. Selected rock will also be obtained from