

**Rideau Canal.**—The change in the Rideau Canal would give a deep-draught modern harbor connected with the Georgian Bay Canal, and one which could be extended indefinitely up the present Rideau Canal as occasions demand. A definite location is not shown for this canal, as it would require extensive surveys to actually determine, but it would be somewhere in the vicinity of the route shown.

If the Dominion Government spend from \$100,000,000 to \$150,000,000 in building the Georgian Bay Canal, it should not hesitate to spend an additional one or two per cent. to get direct connection with the city of Ottawa—the greatest traffic centre between Georgian Bay and Montreal.

Such a modern, deep-draught canal, giving entrance to the city of ocean-going vessels, with branch railways on either bank, with a superabundance of power within easy transmission distances, and large deposits of iron within easy reach, should make a manufacturing centre second in future possibilities to none on the continent.

The present Rideau Canal could be closed with a dam in a line with Main Street and Robert Street, Ottawa East, and the portion between that and Dow's Lake used as a pleasure lake in summer and an open-air skating pond in winter. Streets could be carried over it wherever desired at low cost with a large saving to the city. This would at once increase the value of the land between the canal and river and make it available as a high-class residential district. All of this can be done at an actual saving to the city of over \$500,000.

Placing the railways in the proposed reserve and through the tunnel would put them where they would be doing the very least damage possible to the city and giving the most effective service. It would firmly anchor the Canadian Pacific main line to the city of Ottawa. It would give the Canadian Northern, the Canadian Pacific, the electric lines, and all other railways, an entrance to the heart of the city, and convenient to the business and residential districts.

Removing the Grand Trunk Isabella Street line would naturally improve what should be a fine residential district, and materially increase real estate value in the neighborhood. The ultimate cost to the city should not be high. The cost of necessary subways, bridges, etc., estimated at \$500,000, would be saved. A portion would be recouped by the sale of the land, and additional taxes from the increased values of real estate would materially reduce, if not completely wipe out, the balance.

The suggested change would give the Grand Trunk an equally good line. Some inconvenience would no doubt be found in the necessary change in the Grand Trunk yards, but the heart of a great city is not a fit and proper place for through yards such as these are. They should be located outside the city, as land in their present location is entirely too valuable for such use.

The proposed line could be had with grades not to exceed 0.65 per cent., and there are many steeper grades on this branch. The principal objections are that a level crossing of the Chaudiere branch of the Canadian Pacific Railway would be necessary, and the work to rejoin their Parry Sound line would be rather heavy.

It is a matter of great importance to the city that a Transcontinental Railway, such as the Canadian Northern will soon be, should have satisfactory terminals, and the proposed arrangement will give it as good facilities as either the G.T.R. or the C.P.R., and so put it into direct competition with those roads.

The advantages to the city of an Inter-Urban Electric Railway depends in a great measure on the ease and convenience with which it can be reached, and the proposed arrangement would put the terminals of the electric line right into the heart of the city, and close to the Ottawa Street Railway, making access to it easy from any part of the city.

With the exception of a few unimportant spurs and the Canadian Pacific Railway through Mechanicsville, the proposed changes would eliminate all level crossings, and put Ottawa in this respect in a better position than any city on this continent.

**Alternative.**—The foregoing recommendations are based on a well-founded assumption that the Georgian Bay Canal will be built in a reasonable time, and if so built, that the Government will rebuild the outlet of the Rideau Canal as a branch of the Georgian Bay Canal to the same standard as the main canal.

If, on proper representation to the Government, it is found that this canal will not be built for many years, and if it is considered undesirable to close the outlet of the Rideau Canal, we recommend that a strip 107.5 feet in width be taken on the west bank of the canal for a railway reserve from the deep cut to Laurier Avenue, together with all canal lands, exclusive of streets, from Laurier Avenue to Sparks Street, and that the foregoing proposals be modified as shown on the accompanying plans. This modification consists principally in raising the proposed grade through the tunnel between eleven and twelve feet, and continuing the 0.4 per cent. grade to the Union Station, where a lift in the grade of the C.P.R. tracks of one to two feet would be necessary. The only objectionable feature in this recommendation to the railways would be the lift-bridge necessary across the canal at the deep cut.

**Objections to Alternative Proposition.**—It would be objectionable to the city, however, in a number of ways. It would take an unduly large portion of the driveway. The roof of the tunnel being so much higher would interfere with the new relief sewer at Kent Street, necessitating an inverted syphon. The new grade would be so high at Wellington Street as to make necessary a viaduct, and it would also be difficult to get overhead crossing on the streets between Lett and Broad. Should it be necessary to make a level crossing at Broad Street it is recommended that the railway line be deflected to the north of the station.

The new line to connect with the Interprovincial bridge, as shown on the plan, would occupy an undesirable position. It would pass under the post-office and destroy the Customs abode now between the post-office and canal.

A bridge would be required across the Rideau Canal opposite the new G.T.R. station to permit the present G.T.R. tracks to be connected with the tracks through the tunnel.

This alternative is only recommended in the event of the Georgian Bay Canal not being built, and does not in any way affect our recommendation as to the purchase and removal of the Isabella Street branch of the G.T.R. between Concord Street and Breeze Hill Avenue.

The following maps, plans, etc., accompany this report:—

Map of Ottawa, showing proposed changes.

Plan and profile of the proposed new line from the Central to the Union Stations.

Plan and profile of the alternative new line from the Central to the Union Stations.

Cross-sections of the canal and driveway, showing lands to be taken for the proposed Railway Reserve.

Profile of the proposed new G.T.R. connection near Bayswater Avenue.

From the British Columbia marine yards at Esquimalt will shortly be launched the steel steamship "Princess Maguinna," the largest vessel ever built in British Columbia waters. She will be employed in the coasting service of the Canadian Pacific Company. The engines and boilers are being built by British manufacturers. The vessel will be fitted as an oil burner.