

## REPORT

(47)

OF THE COMMISSIONERS appointed to consider the advisability of extending the Trent Valley Canal, and to what extent.

To the Right Honourable Sir JOHN A. MACDONALD, G.O.B.,  
Minister of Railways and Canals for the Dominion of Canada.

The commissioners appointed to "consider the question of further extending the line of water communication between Lake Huron and Lake Ontario, and to determine whether any other local works are necessary and whether it is advisable that an extension of the main work should be undertaken and if so to what extent," beg leave to report:—

The main work referred to is what is commonly known as the "Trent Valley Canal," being a projected waterway from Matchedash Bay, Georgian Bay, Lake Huron, to Trenton, on the Bay of Quinté, Lake Ontario.

The work already completed, as set forth in the report of the chief engineer of canals, have rendered navigable the following portions of the main route, viz.:—Balsam Lake to the village of Lakefield; the town of Peterborough to Heely's Falls on the Trent River, leaving necessary to be done, according to the same report, to render the whole route navigable. The following sections, viz.:—a canal from Matchedash Bay to Lake Couchiching, a distance of 18<sup>3</sup>/<sub>16</sub> miles, requiring fourteen locks, a canal from Lake Simcoe to Balsam Lake, 17<sup>1</sup>/<sub>16</sub> miles, requiring eleven locks, a canal from the village of Lakefield to the town of Peterborough, 9<sup>1</sup>/<sub>16</sub> miles, requiring thirteen locks, a canal and improvement in the present navigation between Heely's Falls and Hord's Creek, 10<sup>1</sup>/<sub>16</sub> miles, requiring twenty-three locks, improvement in the present navigation between Hord's Creek and Frankford, and a canal between Frankford and Trenton, 7<sup>2</sup>/<sub>16</sub> miles, requiring ten locks.

In endeavouring to obtain all available information on the subject under consideration, the commissioners went over the whole route, travelling by steamer from Peterborough to Heely's Falls and from Lakefield to Fenelon Falls and Lindsay, and they also took evidence at the following places:—Montreal, Kingston, Toronto, Collingwood, Midland, Barrie, Orillia, Lindsay, Peterborough, Trenton and Deseronto, and at several points on the line of the Erie Canal. Due notice of the sittings held at the places on the route of the proposed canal was given, in order that an opportunity of expressing opinion on the subject might be afforded to any one disposed or inclined to do so.

The commissioners thought it desirable to frame a set of questions of a general character, which they caused to be forwarded to the members of the House of Commons and of the Legislature of Ontario, and to the publishers of the newspapers in the province of Ontario, and to the clerks of the cities and towns in that province. To these very few replies have been received. These questions and the answers thereto, together with the other information obtained, are forwarded herewith.

In regard to the practicability of the proposed route in reference to its water supply, the commissioners are of opinion that this has been established beyond question, both by the report of the engineer and by the evidence received.

The attention of the commissioners has been called to the width of the locks at present completed. There are twelve of these, 134 feet long by 33 feet wide. For modern locks this width is very great in proportion to the length. They are of the same size as those on the Rideau Canal, the latter, however, were built to accommodate side-wheel vessels, which at this day it is not necessary to use. The com-

missioners suggest that a width of twenty-three feet would be sufficient. It is proposed according to the report of the engineer, that the prism of the canal should be fifty feet in width at its bottom. That would be insufficient to admit of vessels passing each other, should they be of the extreme width of the present locks, but it would admit of such passage by vessels of the reduced width, and, further, four barges of this reduced width would just about fill the St. Lawrence Canal locks, when enlarged, and it is obvious that a considerable saving in construction by the suggested reduction in width would be effected. The attention of the commissioners has also been called to the expensive class or character of the works upon the locks lately constructed at Burleigh, Lovesick, Buckhorn and Fenelon Falls. They think that a considerable saving in that respect might be made in the building of the remaining locks, without materially affecting their substantial character, and they suggest that locks of a class of work somewhat similar to those at Bobcaygeon, Young's Point and Peterborough, would be sufficient for the purposes of this canal. The commissioners desire to call attention to what is known as the "lift lock," which is now in practical use in England, France and Belgium, and to which rather full reference is made in the exhibits herewith. They suggest that it might be judicious to make a resurvey of the section between Heely's Falls and Hoard's Creek, and probably other sections of the route with a view to the possible use of the "lift lock." It will be observed, as pointed out above, that the distances between these points is 10.44 miles, requiring twenty-three locks. Under such circumstances the use of the "lift lock" would seem to be desirable in the direction of economy in the cost of construction and in the time required for lockage. The commissioners simply call attention to the point without themselves having formed any decided opinion upon it.

As will be observed in the evidence taken at Collingwood it is suggested that the route from Lake Simcoe to Nottawasaga Bay would be a more satisfactory and judicious one than that now contemplated between Lake Couchiching and Matchedash Bay, and it may be thought desirable, should that section be built, that a survey of the suggested line be made, in order to determine the respective merits of the two routes.

In considering the bearing of the canal upon the development of the trade and natural resources of the country through which it will pass, it should be noted that the conditions are peculiar, inasmuch as it would act as a connecting link in a chain of lakes and streams, which, for the most part, lie transversely to the line of canal, and that it would therefore afford access to an extent of country and coast line much greater than usual in a canal of its length.

The commissioners, upon the evidence and information which they have been able to obtain, and which accompany this report, are of opinion that an extension of the main work should be undertaken by the completion, as soon as convenient and practicable, of the work necessary to give continuous navigation from Balsam Lake to the Bay of Quinté. This would embrace the sections between Lakeside and Peterborough and between Heely's Falls and Trenton. In the opinion of the commissioners a waterway would thereby be made which would not only greatly increase the value of the works already constructed but would assist and develop the industries along its route, and open up the resources of the country through which it would pass, to such an extent as to amply compensate for the expenditure necessary to be incurred although the work itself would not be expected to produce direct revenue.

This conclusion is arrived at by a careful consideration of the evidence adduced before the commission by which the commissioners feel they must be guided, such evidence to their minds greatly preponderating in favour of the extension of this important work in the manner indicated.

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