46 SENATE

will practically complete wharf construction in this section of the harbour during the next

4.—New Wharves below Sutherland Pier

(Section 47-48), \$810,000.

As the whole of that portion of the harbour above the Laurier Pier is approaching complete development, no site or space is available in that section for a sufficiently large scheme of expansion to take care of rapidly increasing business and anticipated future requirements. The Commissioners were, there-fore, obliged four years ago to begin the in-tensive development of the Maisonneuve sectensive development of the Maisonneuve section of the harbour. Elevator No. 3 has been built in close proximity to the Tarte Pier, a grain unloading jetty has been constructed and the adjoining existing berths equipped with grain handling facilities. Any wharf construction carried out immediately above this location would merely be a replacement of existing wharves which, although they are only of the old low level timber crib work type and will eventually have to be replaced by walls of modern construction, cannot be dispensed with until additional berthage is available elsewhere to take care of the business which they now accommodate. The additional accommodation so urgently required can, therefore, only be obtained by proceeding down-stream from the Sutherland Pier, where ample width of wharf is obtainable.

It is estimated that the above sum of \$810,000 will permit of the completion of 1,000 lineal feet of additional wharf at this location within the next three years.

5.—Reconstruction of Jacques Cartier Pier, \$330,000.

The three main piers in the central harbour, completed about twenty-five years ago, were constructed entirely from foundation cope in timber, and as the life of timber crib work above water level is not usually expected to exceed from twelve to fifteen years, the Com-missioners have had under contemplation their reconstruction for the last fifteen years.

Reconstruction, of course, necessitates putting the portion of wharf to be dealt with out of commission, partly or wholly during the season of navigation, and while the Commissioners' son of navigation, and withe the commissioners programme fifteen years ago was to do one berth each season. accommodation was so limited on account of increasing business that it has been practically impossible to take possession of a single berth for this purpose. The only part of this work that has so far been accomplished was done in 1915 and 1916 when, by means of the closest co-operation of the Manchester Line officials, who did all in their power to facilitate the work, while at the same time maintaining their own services, the reconstruction of the down-stream half of the Jacques Cartier Pier was accomplished.

Fortunately the materials and workmanship of the original piers have been of a very high quality, and, so far, by careful and sometimes somewhat heavy maintenance, it has been possible to keep the old wharves in commission, but reconstruction is very urgently required and it is hoped to proceed with the work as soon as additional berthing accommodation is available, while there is always the contingency of some portion giving out at any time and necessitating immediate action.

Hon. Mr. DANDURAND.

The Commissioners, therefore, request that the above sum of \$330,000, which is the estimated cost of reconstructing the up-stream face of the Jacques Cartier Pier, be provided, in order that that or any other more urgent portion may be proceeded with as may be necessary.

6.—Industrial Wharves, \$425,000.

The Commissioners have had before them for some time applications from the present lessees of the Vulcan Wharf and the Canada Cement Wharf, Montreal East, for extensions to these wharves, which increasing business to these wharves, which increasing business has rendered imperative. The estimated cost of the required extension to the Vulcan Wharf amounts to \$267,000, the extension to the Canada Cement Wharf \$158,000, making a total of \$425,000, and the industries guarantee the necessary revenue to warrant the work being undertaken.

It is requested, therefore, that the necessary provision be made in order that these items may be carried out during the present year.

Total for Wharves, Piers and Basins,

\$5,400,000.

C-PLANT

1.-Locomotive Cranes, \$45,000.

The Commissioners' force of locomotive cranes, formerly used mainly on construction, have had to be utilized almost exclusively during the past two or three years for wharf service in unloading cargoes from ocean steamships. The demands for this service became so great during the past year that the present force of cranes, even by working twenty-four hours a day, could not meet requirements, and two additional locomotive cranes are immediately necessary to overtake the business in prospect for the present season.

The estimated cost of two new locomotive

cranes is \$45,000.

2.-Flat Scows, \$110,000.

The extended nature of operations consequent upon harbour improvements in general has rendered the present fleet of scows totally inadequate for the efficient service of the dredges and derricks engaged in reclamation work, and six additional flat scows are necessary to meet these requirements, as well as supply such lightering services as are required by shipping. The above sum of \$110,000 is the estimated cost of constructing six new flat scows.

Total for Plant, \$155,000.

D-SHOPS AND BUILDINGS

Extension of Harbour Yard, \$322,000.

The enlargement of the grain elevator system has increased proportionately the amount of machinery repairs and maintenance done by the Mechanical Department, and four years ago the Commissioners were obliged to erect up-to-date mechanical shops at the Yard at Hochelaga, at which are also situated the locomotive shops.

The change from steam to electric traction necessitates garage accommodation for the electric locomotives and the establishment of a power sub-station, and these, for the greatest efficiency and economy, should be provided at this location. In order to provide for these this location. In order to provide for these facilities it is necessary to generally re-model the arrangements at the Yard; divert and bridge over the Aylwin Street ramp and generally extend the Yard eastward.