

ANNEX

CONTROLLED SINGLE STAGE PROJECT (238-242)
FOR WORKS IN THE INTERNATIONAL RAPIDS SECTION

(See Article 1, Paragraph 1 (a))

The main features of the Controlled Single Stage Project (238-242), described in detail with cost estimates in the report of the Temporary Great Lakes-St. Lawrence Basin Committees dated January 3, 1941, are as follows:

- (1) A control dam in the vicinity of Iroquois Point.
- (2) A dam in the Long Sault Rapids at the head of Barnhart Island and two power houses, one on either side of the international boundary, at the foot of Barnhart Island.
- (3) A side canal, with one lock on the United States mainland to carry navigation around the control dam and a side canal, with one guard gate and two locks, on the United States mainland south of Barnhart Island to carry navigation from above the main Long Sault Dam to the river south of Cornwall Island. All locks to provide 30 ft. depth of water on the mitre sills and to be of the general dimensions of those of the Welland Ship Canal. All navigation channels to be excavated to 27 ft. depth.
- (4) Dykes, where necessary, on the United States and Canadian sides of the international boundary, to retain the pool level above the Long Sault Dam.
- (5) Channel enlargement from the head of Galop Island to below Lotus Island designed to give a maximum velocity in the navigation channel south of Galop Island not exceeding four feet per second at any time.
- (6) Channel enlargement between Lotus Island and the control dam and from above Point Three Points to below Ogden Island designed to give a maximum mean velocity in any cross-section not exceeding two and one-quarter feet per second with the flow and at the stage to be permitted on the 1st of January of any year, under regulation of outflow and levels of Lake Ontario.
- (7) The necessary railroad and highway modifications on either side of the international boundary.
- (8) The necessary works to permit the continuance of 14 ft. navigation on the Canadian side around the control dam and from the pool above the Long Sault Dam to connect with the existing Cornwall Canal.
- (9) The rehabilitation of the towns of Iroquois and Morrisburg, Ontario.

All the works in the pool below the control dam shall be designed to provide for full Lake Ontario level but initially the pool shall be operated at maximum elevation 238.0.