

# Project Profile

## Holland Marsh Drainage System

### Canal Improvement Study

Bradford West-Gwillimbury, Ontario



*North Canal Road along side of the North Canal*

The Holland Marsh is a 2,833± hectare (7,000± acre) area of organic land that was reclaimed for agriculture by a substantial drainage and land clearing scheme.

The Holland Marsh Drainage System refers to a drainage project designed and constructed for the Holland Marsh lands pursuant to the Ontario Drainage Act. The engineering report was prepared in 1924 and the construction of the recommended work occurred around the mid 1920's. The project involved the interception of the Schomberg Branch of the Holland River at the upstream limits of the area to be reclaimed and its diversion around the perimeter of the area using two drainage canals.

The material from the canal excavation was used primarily to create dykes on the to-be reclaimed (marsh land) side of the canals. Roads were constructed on top of the dykes to allow for transportation in the marsh area.

In 1954 Hurricane Hazel ravaged the area, breaching the dykes and causing massive flooding. As a result the channels were enlarged, reducing the separation between dyke and channel. A number of lives were lost due to traffic accidents associated with this road/dyke/channel configuration.

In 2003 K. Smart Associates was appointed to prepare a Final Engineering Report on improvements to the Holland Marsh Drainage System under Section 78 of the Ontario Drainage Act. Work on the Engineering Report was suspended in 2004 to undertake a Canadian Environmental Assessment Study as mandated by the Canadian Environmental Assessment Act. The Final Engineering Report was recommended and completed in 2008. The report provides that the canals are to be improved by shifting the existing canals laterally in some portions and by a bottom cleanout with minor widening in some portions.

Ancillary work involved with the improvement to the canal system includes grading a berm beside the dyke roads on the canal backfill, repair of scattered lengths of dyke, addressing the numerous irrigation inlets that have service from the existing canals, addressing the issue of drain outlets and well overflow outlets that discharge to the canal, addressing 13 bridges that cross the canal and to provide for minor works of buffer construction, lateral channels, and providing drainage along canal roads/where new berms are built.

Construction will be completed in phases, with the first phase starting in the summer of 2010.



*Construction of the Canal*

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