



Atlantic Industries Limited

PROJECT PROFILE



Largest Dur•A•Span Box Culvert recently installed in Ontario

Aluminum Box Culvert offered an environmentally friendly, open-flow solution

AIL's Dur•A•Span Aluminum Box Culvert is the largest in Ontario. An older, single-span steel bridge in the town of Plympton-Wyoming, on Lake Huron in Ontario, had been closed for over a year due to safety issues. The bridge's concrete abutments had deteriorated and its rail system did not meet code. Town officials, and especially residents using the Uttoxeter Road crossing over Hickory Creek, were eager to have a safe and dependable replacement as soon as possible.

After considering several options, the project partners chose an AIL Dur•A•Span Aluminum Box Culvert as it offered an environmentally friendly, open-flow solution that was well-suited to the site.

Project at a glance:

Product: Dur•A•Span Structural Aluminum Plate

Product: MSE Retaining Wall System (Wire Walls)



Atlantic Industries Limited

PROJECT PROFILE

Reinforcing rib technology allows for longer, stronger spans

The Hickory Creek project represents the largest aluminum box culvert ever installed, with a span of 12.013 m, a rise of 3.562 m and a length of 12.344 m. The cover depth is 600 mm to 670 mm and there is an engineered backfill envelope of 3 m on each side, up to the road grade. This solution was designed for a CL-625 Ontario Truck Live Load. AIL's economical and easy-to-install MSE Retaining Wall System (Welded Wire Wall with Cobble Stone) was used for the headwalls.

In response to the Town's requirement to get the new structure in place as soon as possible, assembly, placement and some of the backfilling was able to take place during the winter months. The structure was assembled adjacent to the site and then crane-lifted in one piece onto the footings. With the spring thaw, the remaining backfill, road surface and rail structures were completed.

Ontario-based project partners were: the Town of Pympton-Wyoming, Northwest Consulting Engineers of Ilderton and Murray Mills Excavating and Trucking (Sarnia) Ltd. Interesting project factoid: Just 2.5 km further upstream on Hickory Creek is the site of AIL's first Super•Cor Box Culvert ever installed in Ontario, in 1993.

[See all Project Profiles on ail.ca](http://ail.ca)



Head Office:

32 York Street
Sackville, New Brunswick
Canada E4L 4R4
1-877-245-7473



Atlantic Industries Limited

ail.ca