



Atlantic Industries Limited

# PROJECT PROFILE



May 14, 2018

## Thunder Bay chooses Super•Cor Box Culvert with Best-Kote

When the City of Thunder Bay, Ontario, needed to replace an aging closed-bottom culvert under Briarwood Drive, they opted for a Super•Cor Box Culvert with Best-Kote Polymer Coating so they could benefit from its 75+ years of design service life expectancy.

Plus, the geometry of the wide-mouthed (10 m), open-bottom Box Culvert offered improved hydraulic flow properties to greatly reduce the chance of any debris jams and flooding events.

### Polymer Coating extends structural plate's service life to 75+ years

Since it's been in use since the early 1970s, many are familiar with the enhanced performance that the Polymer-Lamination process adds to Corrugated Steel Pipe (CSP), but fewer are aware of the 75+ years of service that the newer Polymer Coating System delivers to structural steel plate in aggressive environments.

### Canada building on Europe's success with Polymer-Coated Plate

It was first used in Eastern Europe in the mid-1990s, and now this region uses Polymer Coating on over 30% of its new structural

### Project at a glance:

**Name:** Briarwood Culvert Replacement

**Location:** Thunder Bay, Ontario

**Owner:** City of Thunder Bay

**Engineer:** KGS Group

**Contractor:** PNI Contracting

**Sector:** Transportation

**Application:** Stream Crossing Culvert Replacement

**Product:** Super•Cor Box Culvert SB-10L with one bevel end and one end with MSE Wire Wall Headwall

**Dimensions:** Span 10 m, Rise 2.29 m, Length 14.5 m

**Installation Time:** One week for Box Culvert, Two weeks for MSE Headwall





Atlantic Industries Limited

# PROJECT PROFILE

plate installations, which have gained a larger share of the bridge and tunnel market because of it. Our AIL Group Licensee in Europe, ViaCon, has been breaking new ground in using Polymer Coatings on SuperCor, with many successful installations in their portfolio.

## Used in Canada since 2005

The success of this coating method in climates like Finland led Canada to start using the system in 2005. Of the hundreds of installations now in Canada, many are from AIL, with the coating applied to all or part of the structure. A decade of positive results and third-party scientific testing have concluded that the Polymer Coating is more effective in aggressive environments than Hot-Dip Galvanizing.

## Packaged Solution included MSE Wire Wall Headwall

This stream crossing had an integrated MSE Wire Wall Headwall on the upstream end and a bevelled-end embankment on the downstream end. Production lead times were discussed upfront, delivery schedule was met and installation happened right away. On-site supervision was provided by AIL to aid in the installation of the structure and wire wall.

All parties were pleased with how quickly the structure came together. This was the first time PNI Contracting had ever installed a structural plate system and wire wall system and were very happy with the level of on-site support they received from AIL during the process.

*"AIL was excellent to work with. Their support from start to finish of the project greatly exceeded our expectations. We look forward to working with them again on future projects."*

– Doug Bolt, PNI Contracting Ltd.

**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](http://ail.ca)