



Airport Road Storm Sewer from International Centre to Derry Road

LOCATION: City of Mississauga, Canada

OWNER: Peel Region

OWNER CONTACT: Dan Bennington, C.E.T., Project Manager
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PROJECT PROFILE

This project included the construction of a curved microtunnel tunnel drive that was 323m long. The microtunnel excavation diameter was 1.575m; the curve radius was 1,150m; and the microtunnel RCP installed had an internal diameter of 1.2m. The purpose of the tunnel was for a storm sewer. Along with the tunnel, two (2) shafts were constructed through varying ground conditions such as gravel, sand, clay and silty clay under water pressure.

The location of this project is on a "high traffic street" operating 24/7. The tunnel passed underneath a 500mm watermain, (less than 12" of clearance) which provides water directly to Pearson International Airport, and a large population of the surrounding areas within the City of Mississauga. Tunnel line and grade was a key requirement of this job, therefore we implemented an Akkerman AZ100 real time TBM guidance system, to monitor the TBM progress at all times, due to the curve in the alignment. The machine used was an Akkerman SL60 Slurry MTBM with fully faced support. Bentonite was used for pipe lubrication and a Derrick Separation System was used for soil separation.

A value engineer proposal was submitted from CRS and approved by the Region of Peel to remove the shaft and open cut area to increase the length of the tunnel and curvature.

TOTAL VALUE OF CONTRACT:
\$ 2,894,142

COMPLETION TIMELINE:
MAY 18, 2017 - NOV 27, 2017

COMPLETED AS:
PRIME CONTRACTOR

