



## Eglinton Crosstown West Extension Advance Tunnel (CAN) Cross Passage Waterproofing

<b>Country</b>	Canada, Ontario
<b>Type</b>	Transit, Railway, Metro
<b>Client</b>	Infrastructure Ontario (IO), Metrolinx
<b>Main Contractor</b>	West End Connectors (Aecon, Dragados, Ghella)
<b>Execution of the work</b>	Renesco Inc.
<b>Designer</b>	EXP Services, TYPSA, Dr G Sauer & Partners, Pedelta Canada
<b>Construction Period</b>	2023–2024

## Project Description

Challenging Urban Tunnel Construction involving the construction of a new TBM tunnel for the railway line as well as various shafts, stations, and galleries. The Eglinton Crosstown West Extension (ECWE) Advance Tunnel Project is the first phase of work for the 9.2 kilometer extension of the Eglinton Crosstown Light Rail Transit (LRT, future TTC Line 5) in the city of Toronto. The extension will run mostly underground, westward from the future Mount Dennis station to Renforth Drive.

## Scope of Service

Supply & Apply of a permanent sheet waterproofing membrane system for 9 x Cross-Passages, full-round (360°) sealing including termination to the pre-cast-concrete segments of the main tubes. The sheet membrane waterproofing system is installed between the initial shotcrete lining and the final cast-in-place concrete lining.

- Protection geotextile, 750g/sqm, PP
- Waterproofing sheet membrane, PVC-P, 3mm
- Protection Sheet membranes, 2mm, PVC-P
- PVC-P water barriers, 400/6/30
- Drainage layer
- Termination via adhesive strips
- BA anchors
- Penetrations
- Supply + Apply of an injection system
- Contact grout pipes
- Re-groutable hose system
- Hydrophilic waterstops



1. Waterproofed cross passage
2. Project overview
3. TBM section