



CN/GO Mainline Expansion

Port Credit, Ontario

The Geopier GP3® system was installed and accelerated the foundation construction schedule

Description: This project involved the expansion of the main Lakeshore Rail Line from two rails to three. A section of rail close to the Credit River required a bridge expansion where grade separation and property line restriction were design issues.

Subsurface Conditions: The subsurface conditions consisted of thick silty fill with debris underlain by stiff clayey silt till and weathered fill.

Geopier Solution: Designers wanted to use a Mechanically Stabilized Earth (MSE) wall to save costs, which would require improvement of the fill soils for the global stability. The Geopier GP3® system was selected and installed in the very tight corridor between the existing rail embankment and a storm channel to support the MSE that ranged up to five meters high. Jim Whitehead from Grascan Construction, says: "Geosolv is very innovative and accommodating. Their expertise in the field helped to expedite a very time sensitive project with excellent results."



PROJECT TEAM

Owner:

Canadian National (CN)

Geotechnical Engineer:

GeoTerre Limited

Structural Engineer:

Hatch Mott MacDonald

General Contractor:

Grascan Construction Ltd.

Geopier Installer:

GeoSolv Design/Build Inc.

Geopier Designer:

GeoSolv Design/Build Inc.