



CN/GO Mainline Expansion Port Credit, Ontario

This constrained worksite was handled with ease using Geopier® GP3 system

Project Team

Owner

Canadian National Railroad (CN)
& Go Transit

Structural Engineer

Hatch Mott MacDonald

Geotechnical Engineer

GeoTerre Ltd.

General Contractor

Grascan Construction Ltd.

The Ground Improvement People™

Challenge

This project involved the expansion of the main GO Lakeshore West Rail Line from two rails to three. The proposed rail very close to the Credit River required a bridge expansion where grade separation and property line restrictions caused many design challenges. Subsurface conditions consisted of thick silty fill with debris underlain by stiff clayey silt till and weathered fill creating global stability issues for the proposed Mechanically Stabilized Earth (MSE) wall.

Solution

An MSE wall for the steep grade separation caused by the additional rail required improvement of the underlying fill soils for global stability. The Geopier Rammed Aggregate Pier® system (GP3) was selected and installed in the very tight corridor between the existing rail embankment and a storm channel to efficiently support the five-metre-high MSE wall.

Outcome

The GP3 system's rapid installation time, small working footprint requirements and low spoil system allowed for the rail tracks to continue to be in use throughout the entire project. This critical project was completed on time and well within budget.

Contact The Ground Improvement People®

(905) 266-2599 or

Email us at solutions@geosolv.ca

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