



Project Title: Riverview Sobeys, Retaining Wall Rehabilitation

Client: Sobeys

Project Description:

GEMTEC was retained by Sobeys to investigate a failing concrete gravity retaining wall in Riverview. Our investigation revealed that about 80 metres of retaining wall showed signs of excessive outwards movements, which were as much as 250 mm (\pm). A test pit was excavated behind the wall and revealed that the connection between the concrete wall and base foundation had failed.

GEMTEC Limited designed a tied back system to prevent future wall movements. Our design consisted of:

- Removing the silty fill soils behind the wall down to the concrete base foundation
- Backfilling excavation with 75 mm minus crushed rock subbase
- Placing six layers of geogrid reinforcement within the 75 mm minus crushed rock layer at predetermined locations.
- Mechanically connecting the geogrid reinforcement to the wall using a 6" diameter galvanized steel pipe anchored to the wall.

The work commenced on September 4, 2007 and was substantially completed on October 8, 2007.

