



Gateway Upgrade South & South East Busway Extension Pacific Motorway, QLD, Australia

Contractor: Abigroup Contractors Pty Ltd
Project Value: \$96 million

Australian Government and Queensland Government joint fund to upgrade the Gateway Motorway Southbound to the Pacific Motorway. The \$96 million project included the realigning of the Gateway Motorway on-ramp to the Pacific Motorway, lengthening the on-ramp by 500m to provide motorists more time to merge and extending the South East Busway from Eight Mile Plains to School Road, Rochedale.

Despite the challenges of constrained construction work space and working alongside continued traffic flows, Geoinventions conducted several temporary work designs by applying value engineering through design optimization.

Geoinventions has been engaged by the client to assist with the following temporary work designs:

- CFA pile wall design for busway underpass
- Temporary slope stability design assessment for busway underpass
- Temporary batter assessments and stabilisation techniques for various culvert extensions
- Temporary alternative geogrid retaining structure design which provided significant cost savings
- Temporary soil nail and shotcrete wall in close proximity to the trafficked motorway
- Piling rig and crane platform design for bridge over Bulimba Creek using reduced platform thicknesses which provided cost savings on platform material.
- Pipe cover assessments for all construction plant travelling over existing services

Geoinventions successfully completed twenty three temporary works packages throughout the duration of the project.

Geoinventions provided on-site support and inspections by experienced RPEQ geotechnical engineers on a daily basis so construction works could continue without delay. The project was successfully completed in mid 2014.