



## Panorama Drive Yeppoon, QLD, Australia

**Main Contractor: JRT Civil Pty Ltd**  
**Sub Contractor: The Rix Group Pty Ltd**  
**Council: Livingstone Shire Council**  
**Project Value: \$30 million**

Geoinventions Consulting Services (GCS) were contacted by JRT Civil to provide a optimized engineering design for cut face stabilisation works at Panorama Drive, Yeppoon, Queensland.

Livingstone Shire Council is upgrading the existing shire road system by the construction of Panorama Drive-Segment 2 as the proposed northern strategic link. It is approximately 3.4km in length and extends from Crannys Road, Adelaide Park to Laceys Road in Pacific Heights. Panorama Drive will serve as a key transport link to directly connect the northern suburbs of Yeppoon with resource nodes, mines and airports and offers as an alternative route for tourists and residents during traffic congestion or natural disaster on current Farnborough road. The new road alignment will be formed by using large cut and fill earthworks.

The project site is underlain by the Late Devonian to Early Carboniferous age Wandilla Formation, comprising interbedded argillite, chert, greywacke, siltstone, jasper, slate and rare schist. Cut faces varied between residual soil and extremely weathered rock based site investigations and onsite mapping conducted by GCS. Several significant geological features in the forms of dykes and altered zones were found in the cut faces which required specific detailed design and stabilization methods.

Four major cuts were identified as part of the bulk earthworks and the largest cut had a maximum slope height of 15.8m with a 76 degrees facing angle. To stabilize these very high sections, GCS designed a soil nailing solution with a shotcrete facing to provide the required design life of 50 years. GCS adopted a Tecco rockfall netting drapery system for one of the cut slopes which consisted of some medium strength rock. The Tecco rockfall netting contains and controls the possible dislodgement of rocks from the cut face thereby protecting road users.

The construction works for Segment 2 Panorama Drive was completed in September 2017 ahead of schedule.