

Reference Project

Geotechnical

Geotechnical: Slope Stabilisation

Location	Blackrock Road, Newlands, Wellington
Date	May - July 2019
Client	Housing New Zealand
Consultant	A-Build, Johnsonville

The loose slope behind two residential properties on Blackrock Road, Wellington had experienced several slips resulting in the proposed shotcrete wall solution to secure the bank.

Abseil Access Ltd was successful in the tender process and completed the works within the allocated construction window.

The repair to the slope consisted of 17x RB25 anchors grouted to a depth of 5m in 100mm diameter holes. All steel was galvanized and all exposed steel got a double coat of epoxy paint. Ali-drain was installed under the shotcrete at 1.5m centres for drainage. A double layer of 665 galvanized mesh with extra reinforcement around the anchor bars was placed. A 120mm layer of 35MPa shotcrete layer was applied over the mesh onto the face to prevent any further slips.

One anchor was successfully tested to 200kN. Grout sample testing confirmed 70MPa strength was achieved after 28 days - well in excess of the design capacity.

The job was finished with the addition of new fences to comply with building consent requirements, as well as drains below the face.

All tests and quality assurance requirements were met, and the finished work exceeded design specifications.

