

Project: Piako Rd
Date: December 2013
Client: Waikato District Council
Location: Gordonton



Tensar TriAx®

The area of Waikato between Hamilton and Morrinsville suffered from very deep peat deposits making road construction in the area very difficult and harder to maintain. Over the summer of 2013, the area suffered from shrinkage due to the drought and subsequent heat which caused damage to several roads through this area. Waikato District Council had tried many solutions, including chemical stabilisation and various reinforcing and stabilisation geogrids to address this ongoing issue with mixed success.

The Waikato District Council had prior experience of using Tensar geogrids with a high degree of success in comparison to other systems. With this in mind, the international performance testing data available and the technical support assistance offered by Geofabrics New Zealand Ltd, a suggested design to address these issues being experienced on a section of Piako Road that runs between Morrinsville and Gordonton as well as some other roads in the area was sought.

With the information provided from the Waikato District Council, Geofabrics were able to arrive at a cost effective solution. The design not only minimised the use of aggregates, which provided cost savings and reduced the weight loading produced on the underlying peat base, but also provided a reliable solution based on real performance testing data.

Tensar TriAx® 170 was chosen for the lower layer due to its increased robustness which was needed over such soft underlying soils. This overlaid by 300mm depth of GAP65, followed by **Tensar TriAx® 160** before the final 200mm base layer of TNZ M4 was installed.

The design for the project was produced using the Tensar Pave software which is free of charge and available for download following registration through Geofabrics New Zealand Ltd.



Piako Rd prior to construction



Laying of bidim® and Tensar TriAx®



Tensar TriAx® being laid with aggregate



Completed Piako Rd in use

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