

Location:	Auckland, New Zealand
Contractor:	Manukau Waste Water Services
Date:	September, 1998
Product type:	Enkagrid TRC 30
Quantity:	8.000m ²



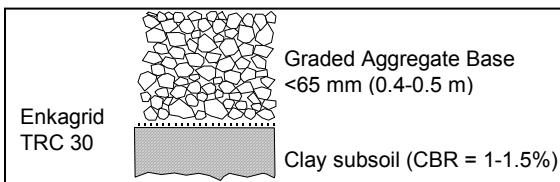
The Manukau Waste Water Services, a joint venture consortium that includes Fletcher Construction as a principal partner, has been upgrading the Mangere Waste Water Treatment Plant.

The site is situated adjacent to the Manukau harbor to the south of Auckland. Part of the project required the construction of a haul road over areas of peat/organic silt soil layers. During the rainy season the CBR value of this soil type can decrease to a low as 1.0 %.



The customer asked Colbond local partner Maccaferri NZ Ltd for a design proposal for the temporary unpaved road. The design had to be based on the extreme soil conditions and a ground pressure of 187 kPa from a fully loaded 30t MOXY dump truck.

Maccaferri NZ Ltd proposed a design based on a geogrid composite to reinforce the road structure and to prevent contamination of the sub-base.



Enkagrid TRC provides the reinforcement properties of a grid with the separation function of a non-woven geotextile and was successfully utilized in this project.

The design is based on the Enkagrid TRC Design & Installation Manual. The fill used was quarry stone, graded aggregate base of 65 mm. After the construction of the haul road the contractor was pleased with the ease and the speed of the installation of the Enkagrid TRC.

Enkagrid TRC 30 has a strength of 30 kN/m in both lengthwise and crosswise directions.

The data set forth in this photo leaflet reflects our best knowledge at the time of issue. It is subject to change pursuant to new developments and findings, and a similar reservation applies to the properties of the products described. We do not undertake any liability for results obtained by usage of this information or the products mentioned.



Colbond bv
P.O. Box 9600
6800 TC Arnhem
The Netherlands
Tel. : + 31 26 366 46 00
Fax : + 31 26 366 58 12
E-mail : geosynthetics@colbond.com