

# CASE STUDY

## KATANIA HEIGHTS NELSON

STRATAWEB® GEOCELL & PLATIPUS® EARTH ANCHORS



CONTRACTOR	Higgins Nelson
ENGINEER	Land Dimensions
CLIENT	Subdivision Developer
LOCATION	Nelson
PRODUCTS USED	100mm SW445 StrataWeb Geocell, Platipus B6 Anchors

**ADVANCED  
GEOSYNTHETIC  
SOLUTIONS**

### PROJECT

Katania Heights is a newly completed subdivision on the Nelson hills with amazing views over the Waimea plains and the Tasman bay. As part of the subdivisions stormwater design, the steep spillways had to be protected from erosion during storm events. It was decided the lining these spillways with concrete was going to be a robust solution however the constructibility was a concern due to the steep gradients found on site.

### DESIGN

StrataWeb was selected as a innovative solution to allow the contractor to place the concrete on the steep spillways. Cirtex worked closely with Higgins to develop a Project Concept design that would suit the site and provided complementary CAD drawings and supporting calculations. Due to site constraints, Platipus B6 anchors were used to anchor the StrataWeb at the crest of the slope. Depending on the soil conditions, Platipus B6 anchors can achieve a typical load range of 30-100+ kN.

### INSTALLATION

StrataWeb was first applied to spillways and then concrete was placed into the cells using a concrete pump truck. Cirtex made multiple site visits during the key stages of the project to provide Higgins with installation assistance and ensure the process proceeded smoothly.

The products used provided the following benefits to the project:

- The use of StrataWeb allowed concrete to be applied to the steep spillway area in one single pour. To minimise ground disturbance, the Platipus B6 anchors were used instead of a traditional deadman anchor.
- Provided the contractor and consultant an engineered solution that could be applied with peace of mind.
- An 'off the shelf' system that could be delivered to site within a short timeframe.



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