

CASE STUDY:

PYMBLE LADIES COLLEGE

**GEOWEB STABILISED SLOPE
SYDNEY, NSW
SEPTEMBER 2017**

Geoweb Geocell Cellular Confinement System

The Geoweb geocell cellular confinement system is the most advanced soil stabilisation technology available. It was initially developed by Presto Geosystems together with the US Army Corp of Engineers to allow heavy vehicles to travel over soft ground. It is widely used in Australia for load support, erosion control, slope stability, retaining structures and high velocity channels.

The Geoweb system consists of a robust three-dimensional structure housing a network of interconnected cells that confine and compact soil. The confinement action prevents erosion and improves the structural performance of the soil or aggregate infill providing an alternative to reinforced concrete or armour. The Geoweb cellular confinement system comes in collapsed, lightweight panels which can be handled easily and safely onsite.

Pymble Ladies College in Sydney had previously used the Geoweb cellular confinement system to stabilise a grater than 2:1 slope adjacent to a car park.

The Geoweb system had been installed by ADCO constructions in 2016. ADCO had infilled the Geoweb cells with top soil and finished with jutematting. Poor maintenance however had seen the slope fail to effectivley vegetate, and the appearance of the slope had deteriorated. However the structural integrity of the Geoweb was still apparent.

Pymble Ladies College, with advice from Geofabrics, decided to refurbish the slope and attempt to establish vegetation. The jutematting was removed. Then the Geoweb cells were topped up with top soil and a broad leaf ivy was planted. The bottom of the Geoweb slope was finished with sandstone blocks. The result is an attractive slope with a low maintenance requirement. This Case study shows what is possible using Geoweb to secure top soil on a steep slope steeper than 2 to 1.



BEFORE & AFTER

The image left shows the poor appearance of the slope, whilst the image left shows how correct infill and plant selection can create an attractive landscaping feature.