GEOFABRICS®

NEW GOODMAN FIELDERS INTERNATIONAL FACTORY

CIVIC & LANDSCAPING

CASE STUDY

MARKHAM CULVERTS

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Sales countrywide.

PRODUCTS USED

GRASSROOTS®

Grassroots is an erosion control matting designed to protect underlying soil in steep slopes and channels from moderate to high velocity water flows, rain splash and other erosive conditions, while allowing seeds to germinate successfully and grow through the matting providing permanent vegetative reinforcement.

Grassroots is made in Australia by Geofabrics from heavy synthetic UV stabilised fibres which are needle punched together into an open weave synthetic scrim creating a three-dimensional structure which holds vegetation in place in extreme environmental conditions.

The fibres used in Grassroots contain high levels of stabilisers which help the polymer from photoxidative degradation.

Grassroots has been proven to provide a 555% biomas improvement by providing a stable environment for seeds to establish.

PROJECT DESCRIPTION

A new processing plant in Lae was under development in the Morobe Province in Papua New Guinea.

The lead contractor on the project noticed an opportunity to create a green area around the offices that were to be constructed.

After reviewing the project scope, the lead contractor recommended erosion control in the area.

The client required a solution that assisted with reducing erosion, was semi permanent, and also environmentally friendly.

CHALLENGE

Due to the rainy climate, the area that the new processing plant was being constructed experienced high flooding causing the plain soil ground to erode.

The slope was not stable and was prone to a high level of erosion, which could cause blockage to a spoon drain that needed to be dug at the foot of the slope causing the area to experience high flooding. In the site plans, it's also proposed that an office driveway will be located a meter away from the slope.

Without any control or water filtration, the top soil won't be protected from water and wind erosion. This would result in a lack of soil stability and land that's not fertile for vegetation regrowth.

SOLUTION

After an assessment, Grassroots Synthetic Erosion Control Mats were recommended due to the angle of the slope and the climate.

Grassroots was selected as it protects underlying soil from erosion and provides a reinforcing matrix for vegetative root growth.

The client was provided with free technical support and training on site to ensure a smooth installation process.

CLIENT TESTIMONIAL

The client was impressed with both the product and the end-to-end support from Markham Culverts for continuing to show interest and checking in on the progress of the site long after material was laid.

"It looks very appealing & has proven to protect the under-lying soil on steep slopes from moderate water flows, whilst allowing seeds to germinate successfully and grow through the matting providing permanent vegetative reinforcement."

"I know it's a process to see the full potential of the product after six months or a year. However, I have great trust in geosynthetic products as they last longer. I cannot wait to see the results and make recommendations for other sites to use the same"

GEOFABRICS®
Smarter Infrastructure

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