

CASA VERDE DEVELOPMENT RIO GRANDE, PUERTO RICO

REINFORCED SLOPES

Products: Green Terramesh[®], MacMat[®], MacGrid[®]

Problem

The main contractor of a residential housing project in Rio Grande, PR contacted Maccaferri in August 2012 when faced with a lack of space for stable slopes along the access road to a section of the project. The project had a funding requirement that obligated a minimum yard area for each housing unit. With the slope recommendations provided by the geotechnical engineer, there was not enough space for this requirement along the back yards of eight houses along the access road. The problem was aggravated by the fact that the housing unit had already been constructed, with grade levels established, when the problem was discovered.

Solution

Maccaferri proposed the construction of Green Terramesh[®] reinforced slopes along both sides of the road with a 70° angle to obtain the required yard space. The Green Terramesh[®] varied in height to a maximum of 10' and offered the added advantage of providing a more natural look to project surroundings. The project was located near El Yunque National Rainforest, which has a very green lush environment. A special detail was developed in collaboration with the geotechnical engineer for the excavation of the reinforcement length so the standing structures would not be affected. The Green Terramesh[®] unit facings were covered with MacMat[®] N, in place of a temporary rolled erosion control product typically used, to provide greater stability to the face, in conjunction with the root system once the facing became vegetated.

The Green Terramesh[®] slopes were completed in approximately a month, despite the frequent rainfall common to the area.

Main Contractor

INTEC GROUP

Subcontractor

VITAL ENERGY

Products Used

GREEN TERRAMESH[®], MACMAT[®], MACGRID[®]

Date of Construction

OCTOBER 2012 — DECEMBER 2012



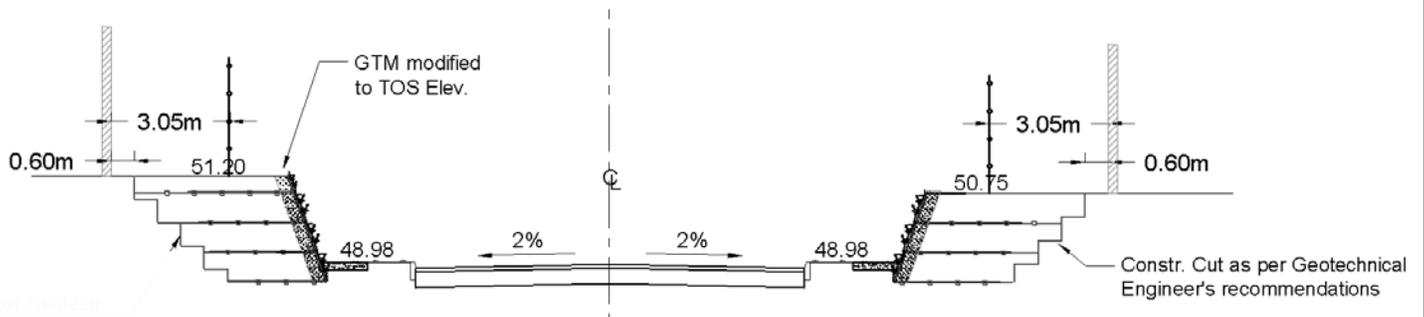
Green Terramesh[®] During Construction



Completed Project – March 21, 2013



Jobsite before Green Terramesh® Construction



Proposed Typical Green Terramesh® Cross Section