



Case Study

application Permanent Erosion Control
location I-10 Cherry Ave. - Fontana, CA
product Miraweb® 20

job owner California Dept. of Transportation
engineer CalTrans, District 8 Office
contractor Bel-Air West Landscape, Inc.

TenCate™ develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

THE CHALLENGE

The California Department of Transportation, District 8, San Bernardino County, needed to eliminate the surface erosion at the bridge abutments on Interstate 10 through the Fontana area. The desert climate does not foster adequate growth of vegetation to prevent wind and water erosion of the soil. Miraweb® cellular confinement system provided by Mirafi® Construction Products was chosen to prevent the erosion of the slopes.

THE DESIGN

CalTrans was searching for a permanent solution to fight the soil erosion which compromised the abutments' stability. The attempts at vegetating the slopes had failed numerous times. The amount of water needed for continued growth of vegetation was too costly. CalTrans wanted a material which would blend into the landscape. The tan colored cellular confinement system was used in the design of the project.

THE CONSTRUCTION

Construction began by grading the rilled slopes into a smooth surface. Water lines were installed in the soil for future drip irrigation to the trees. Woven monofilament Mirafi® Filterweave® 404 geotextile was placed on the surface of the slopes before placement of the Miraweb®. The 10 cm (4 in) depth, perforated Miraweb® 20 was expanded then held in place with rebar "J"-hook stakes. A natural colored tan rock was then dumped, spread, and slightly compacted into the cells of the Miraweb®. The contractor then cut circular pieces within the MiraWeb® and planted bushes and small trees.



Microweb® provides a solution for erosion control without vegetated slopes.



After the slope is graded, Filterweave® woven geotextile is placed. Micraweb® is expanded over the Filterweave®

THE PERFORMANCE

The Miraweb® has been in place for some time now and is working as designed. There is no erosion of the abutments. The rock is in place and the selected plant life is maturing. CalTrans is very satisfied with the results of this project and hopes to design future projects with Mirafi® Miraweb® products.



Microweb® is easily installed with J-hook stakes.



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