Landscaping with BioD-Block™ coir block system

RoLanka International, Inc. 2004

This unnamed tributary of Peavine creek in DeKalb County, Georgia drains a 4 acre wetland, as well as handles large amounts of storm water periodically. This stream bank restoration project required the grading and stabilizing of approximately 150 linear feet of stream on both sides. Prior to construction, the stream bank profile was severely undercut and numerous places exhibited bank failure. The stream experiences periodic high water and overflow of banks in heavy rains. The goal of this project was to establish an appropriate slope on both sides of the stream that would allow stabilization of banks using boulders and plantings, and at the same time maintain the current hydrology of the area.

Eroded creek

We chose the BioD-Block coconut fiber block system manufactured by RoLanka International to use to rebuild the stream banks and establish a 3:1 slope. The 16" tall, flexible coir block made installation much quicker and more uniform. We were able to maintain the appropriate elevation during installation, as well as the natural meanders of the stream much more easily. We were also able to overlap and connect the rolls securely with the male and female end of coir blocks. In addition to the BioD-Block coir block system, we used many tons of small and medium size boulders throughout the length of the stream to add a more natural look and to add protection to vulnerable erosion areas. We used BioD- Mesh60 woven mattress coir blanket on the upper half of the stream bank in order to help hold the soil while plants establish.

During installation

After installation

Once the stream bank work was completed, the area was planted with herbaceous plugs and woody plants up to 1 gallon in size. The project was finished in May of 2004. Through heavy and unseasonably abundant rains this spring and early summer, the coir blocks and blankets have held up well and the plants are becoming well established.