Mercado Branch

Fort Worth, TX

HPTRM REINFORCED SLOPE

PROJECT TEAM

OWNER:

City of Fort Worth, Texas

ENGINEER:

HDR Engineering

CONTRACTOR:

CD Builders

SUPPLIER:

Premier Concrete Products, Inc.

TECHNICAL DESCRIPTION:

Product: ShoreJax Interlocking

Concrete Units

Underlayment: Mirafi 180N Square Feet: 750 Units Installation Date: May, 2017 Completion Date: June, 2017







PROJECT DESCRIPTION:

The City of Fort Worth sought to address erosion forces along Mercado Branch. HDR Engineering designed this project with several cutting-edge erosion control products, available from Premier Concrete Products. The result was a project which incorporated a combination of reinforced HPTRM, and Concrete Hard Armor (ACB's and ShoreJax) to protect the embankments.

PROBLEM:

Due to increased urban construction, the velocities of the Mercado Branch have increased over the years, in this industrial section of Fort Worth. Several heavy rain events had eroded the embankments, making it necessary to reinforce the channel.

SOLUTION:

HDR Engineering specified several high performance products to combat the tremendous erosion forces of Mercado Branch. Propex HPTRM's were utilized on slopes, while Shoretec articulated concrete block, and ShoreJax Interlocking Concrete Armor Units were used at the toe of a retaining wall, and at the toe of the HPTRM reinforced slope. ShoreJax units were placed at the toe of the moderate flow channel to aide in reinforcing the toe of the slope, and protect the termination of the HPTRM in the channel bottom. The ShoreJax units were nested inside one another, and then cabled together. The resulting ShoreJax structure has accumulated sediment and, promoted natural vegetation in the area, reinforcing the toe of the slope and protecting the HPTRM termination.



