

## MEADOWBROOK DRAINAGE

Fort Worth, TX

## SCOUR PROTECTION CULVERT OUTFALLS

### PROJECT TEAM

#### OWNER:

City of Fort Worth

#### JOB NUMBER:

#### ENGINEER:

City of Fort Worth Engineering

#### CONTRACTOR:

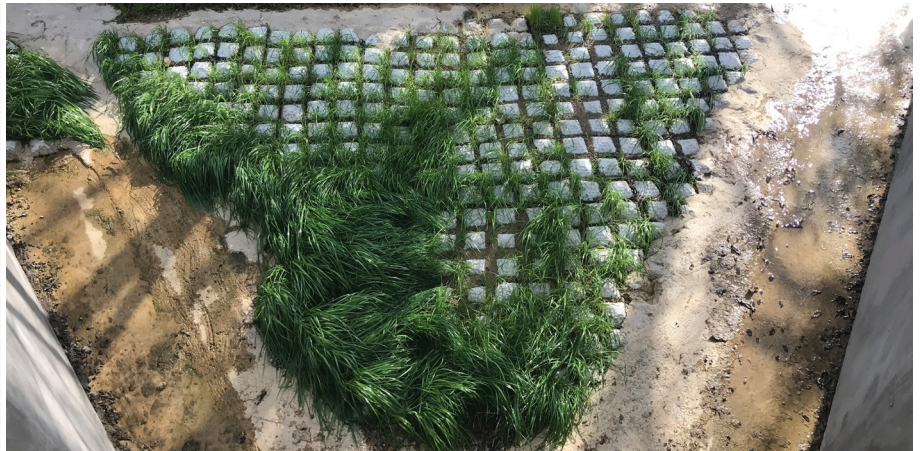
Circle C Construction

#### SUPPLIER:

Premier Concrete Products, Inc.

#### TECHNICAL DESCRIPTION:

Product: ShoreFlex®  
Underlayment: GS-50 TRM  
Square Feet: 10,000 SF  
Installation Date: May, 2018  
Completion Date: June, 2018



### PROJECT DESCRIPTION:

The City of Fort Worth Meadowbrook project, addressed some needed erosion repairs along drainages of Cottonwood Creek. After construction of new concrete box culverts was completed, it was necessary to armor the drainage channel side slopes and new culvert outfalls.

### PROBLEM:

The City of Fort Worth, TX. needed to address 6 different box culvert outfall areas on the Meadowbrook Project. Standard concrete slope paving is typically undermined and fails in a matter of years, as floodwaters undermine and erode underneath the concrete. Rock rip is oftentimes displaced during extreme storm events, leaving little or no protection. The challenge the City of Fort Worth faced, was to find a flexible composite erosion solution that offers the hard armoring of 5,000 psi concrete, while allowing the void areas to vegetate.

### SOLUTION:

ShoreFlex® Tied Concrete Erosion Mat was chosen to provide the erosion protection on the channel bottom and side slopes. ShoreFlex® was installed and all seams were grouted to protect side, anchor, and toe trenches. The ShoreFlex® system was successfully installed on various culvert outfall areas allowing for extreme erosion protection, while eventually soil filling the voids of the block, and allowing natural vegetation to establish.