

Silver Lakes Ranch - Low Water Crossing

Bowie, Texas

HARD ARMORING OF EMERGENCY SPILLWAY

PROJECT TEAM

OWNER:

Silver Lakes Ranch HOA

CONTRACTOR:

Lahey Inc. Construction

SUPPLIER:

Premier Concrete Products, Inc.

TECHNICAL DESCRIPTION:

Product: ShoreTec® BD Series

Underlayment: Geotex 801 8 oz

Square Feet: 10,000 SF

Installation Date: December, 2017

Completion Date: December, 2017



PROJECT DESCRIPTION:

The Silver Lakes Homeowners Association was in need of a strong guard for a spillway attached to a private lake. The spillway served a secondary purpose as a roadway for other residents in the area. The residents evaluated a number of alternatives to find the highest quality permanent solution to armor the spillway.

PROBLEM:

Silver Lakes Ranch HOA was searching for a method to armor the emergency spillway structure of a private lake after flooding had eroded the spillway. The emergency spillway additionally served as a roadway to several homes on the other side of the lake. Several hard armor systems were evaluated before ShoreBlock BD Series Articulated Concrete Block was chosen.

SOLUTION:

Reconstruction of the eroded area and roadway was undertaken, and a drainage layer of aggregate and geotextile fabric was placed prior to placement of ShoreBlock ACB Mats. After placement and mat connection was completed, each mat was anchored in place using ShoreTec ACB Flex Anchors. The closed cell block system was filled with a granular material which was compacted and swept into the voids, creating a smoother driving surface for vehicular traffic. This system offered dual purpose solution to Silver Lakes Ranch by armoring the roadway and protecting from high velocity flooding while offering a smooth ride for residents across the spillway protection structure.