



## PROJECT CASE STUDY

ShearForce™10 Provides Cost-Effective Alternative to Tied Concrete Block Mats for Drainage Channel Protection.



### PROJECT OVERVIEW

## Addison Farms Subdivision

**Location:** Delaware, OH

**Owner:** Addison Properties

**Civil Engineer:** Watcon Consulting Engineers & Surveyors

**Regulatory Agency:** City of Delaware, OH

**Installation Date:** May 2024

**Product:**



### BACKGROUND:

Addison Farms is a 270 acre residential development located in Delaware OH just north of Columbus. With over 380 single family homes and townhomes on site, stormwater drainage from rooftops and roadways would be significant. One 65 ft x 165ft drainage channel constructed to convey runoff through Section 1 of Addison Farms North was due to be armored with a tied concrete block (TCB) mat upon completion. However, a representative with Meredith Brothers, the Primary Distributor for InstaTurf® Soft Armor erosion control products based in Columbus, recommended a much more cost-effective permanent erosion control solution to the site contractor, Trucco Construction.

*"The contractor was able to save time and money versus the specified tied concrete mats"*

**- Wm.Victor Meredith  
President, Meredith Brothers**

Addison Farms: Pre-Install



## **SOLUTION:**

Meredith Brothers proposed using InstaTurf's ShearForce10 hybrid-turf instant armor mat in place of the specified tied concrete block mat, as the ShearForce10 would offer a significant cost savings. The ShearForce10 would also be quicker and easier to install without the heavy equipment needed to move and place the TCB mats, and provide a smoother, easier to maintain surface with standard mowing equipment. Following approval of the ShearForce10 by the City of Delaware as an alternative to the TCB mats, the site contractor started installing ShearForce10 in late May. After fine-grading the channel surface and preparing a suitable seed bed for grass growth, a turf-type grass seed mix was planted. Following seed application, the site contractor began rolling out and anchoring the 6ft x 45ft rolls of ShearForce10, wrapping up the entire installation process within a few days. The channel at that point was ready for just about any storm Mother Nature might pour into it.



**ShearForce10 Channel Installation**

## **RESULTS:**

Through several late spring and early summer heavy storm events, the ShearForce10 did its job by effectively holding the surface soil and seed in place and preventing any channel scour or washouts from occurring. New grass growth up through the simulated turf structure of the ShearForce10 mats (hence the term "hybrid-turf") was apparent within a few weeks of installation. Even after the early season rains dwindled into a summer drought, the ShearForce10 remained nicely vegetated in mid August. Trucco Construction, being a first-time user of the ShearForce10, was so impressed with its ease of installation and performance, now plans to use it for other projects requiring "rock-like" erosion protection.

But the ShearForce10's job still isn't finished, as it will remain in place to reinforce and enhance the natural grass's erosion resistance, helping to stabilize the channel surface and prevent scour for years to come.



**ShearForce10 Post-Installation**

**For more information,  
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