

# Rte 50 Osage County Channel Stabilization Case Study



The Midwest's Most Trusted Site Solutions Provider

Project: Route 50 Osage County, MO

Location: Approx. 15 miles East of Jefferson City, Missouri

Application/Solution: Channel Stabilization / Flexamat

Market Sector: Transportation

Salesperson: John Warren

Owner: Missouri Dept. of Transportation (MoDOT)

Engineer: MoDOT

Contractor: JLA Construction, Brookline, MO

Installed: July - August, 2013

case study



case study

## Challenge

Stabilization and revegetation of a high flow channel adjacent to new highway construction in a very rocky and steep terrain. MoDOT was looking for an option that would not only work, but a solution that would increase the safety of the motorist should a vehicle leave the highway and enter the adjacent ditch.

## Solutions

Flexamat, a tied concrete block mat delivered in 8' x 50' and 10' x 50' rolls and installed with 1 operator in a track hoe and 1 person on the ground. The mat is placed directly onto the finish graded soil that has been broadcast with the specified seed and fertilizer. The combination of the excelsior erosion control blanket, geogrid and the concrete blocks provides an erosion resistant barrier and vegetates quickly.

## Results

The Flexamat was installed in 2 standard widths, 8' and 10' Mats to provide 18' of protection in the channel with a seam in the bottom. After the installation of the first 10 mats on the far side of the channel the jobsite was inundated with a typical July popup thunderstorm which caused a flow depth of approximately 1' in the bottom of the partially completed channel. The day after the event the Flexamat that was already installed was in perfect shape, the unprotected side of the channel had to be re-graded and reseeded. Just a few weeks later the channel was sufficiently vegetated and resistant to further erosion. The entire 18' x 1,300' Channel was completed in about 5 working days.



1 Flexamat Rolls off-loaded and staged along the channel.



2 Flexamat installation with 1 track hoe operator and 1 worker in the channel.



3 Flexamat rolls laid by nudging them with the track hoe bucket.



# Rte 50 Osage County Channel Stabilization Case Study continued



## Products

Manufacturers included in solutions and product:

Product: Flexamat

Manufacturer: Motz Enterprises, Inc.



4 Sudden downpour with only 1/2 of the channel protected.



5 Upstream toe of the Flexamat buried in an anchor trench to prevent undercutting.



6 Final adjustments are made with the teeth on the bucket.



7 Partially vegetated channel after approximately 45 days.

## Company Information

ASP Enterprises, Inc. and Quick Supply Co. For more than three decades, A.S.P. Enterprises and Quick Supply Co. has served the erosion control industry with integrity and expertise. We provide engineers and landscape contractors the exceptional value for their money and have grown to become the Midwest's full-line distributor of erosion-control, geosynthetics, storm water management products, wall block, landscape pavers, and drainage products.

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