



Interstate 94 Erosion Control



GeoRidge® and Turf Reinforcement Mat solve erosion control problem.

LOCATION:

Lawrence, Michigan

PRODUCT:

GeoRidge®, Turf Reinforcement Mat

PROJECT PARTNERS:

Owner

Michigan Department of Transportation

Supplier

Nilex Environmental Inc.

Completion Date

2003

Challenge

High storm water volume and velocity originating as run-off from a nearby overpass caused heavy erosion along a 250 foot section of drainage channels on Interstate 94 near Lawrence, Michigan. The erosion problem was compounded by the site's sparse vegetation and sandy soils.

Solution

GeoRidge check dam was installed to reduce water velocity, thereby reducing soil erosion and allowing vegetation to become established. In conjunction with GeoRidge, Turf Reinforcement Mats (TRMs) and biodegradable Erosion Control Blankets (ECBs) were installed to provide additional erosion protection and long-term reinforcement of the vegetation.

ECBs are temporary products intended to degrade once vegetation is established. TRMs contain a permanent net structure that reinforces vegetation at the root and stem level, allowing vegetation to grow in areas where flow conditions exceed the limits of natural vegetation.

Installation

Eroded channel areas were reshaped, dressed, and seeded. The TRM was rolled down the center of the channel where water flow was most concentrated and long-term plant reinforcement was required.

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Biodegradable straw blankets were placed on the upper sides of the channel where flow was less severe.

Results

The GeoRidge/TRM protected channel was subjected to heavy rains shortly after the installation and demonstrated no further erosion. In addition substantial vegetation growth was observed within two weeks.

The goals of initial soil stabilization, vegetation establishment, and long-term erosion control were achieved with an easily installed, cost effective solution.



The Nilex Advantage

Nilex is committed to unearthing better results. Whether it's for a civil, resource or environmental project, we offer the latest engineered and technically superior materials and techniques to save our customers time and money, and minimize the need to move or remove earth, and reduce the need for granular materials.

With over 30 years experience, a long-standing commitment to the environment and highly qualified staff, Nilex delivers the products and technologies that give clients an economic advantage with environmental benefit.

