

Concrete Cloth™

Geosynthetic Cementitious Composite Mat (GCCM)

CASE STUDY:

Florence, SC
Paved Drainage Swale

Project Overview

A decommissioned manufacturing facility owned by ESAB was being monitored by Roux Associates, Inc. to ensure the property would be kept up to designated standards and proper condition. There is an on-site landfill surrounded by drainage swales at the facility that needed to be relined. The asphalt-paved swales had deteriorated over the years and there was no concern of project disruption since the facility was closed. The site had limited access, however, which also limited the type of material that would be easy to maneuver through the small gate for the swale repair.

Solution

Previously, Milliken Infrastructure Solutions (MIS) presented on Concrete Cloth GCCM to Roux Associates, Inc. at its office in New Jersey. When Roux Associates, Inc. was asked to take on the manufacturing facility job, it called on MIS for engineering support. After discussing the options with both Roux Associates, Inc. and EC&M, it was decided by all parties that Concrete Cloth GCCM would be the ideal solution for the project. The sensitivity of working around the landfill cap and the limited access prevented alternative repair methods from being considered, but the flexibility and mobility of Concrete Cloth GCCM allowed the crew to cut and carry the material on foot to be installed at the swale.

Results

The team of about five crew members dug a trench to anchor the GCCM the first day, and then installed the material for the next two and a half days due to weather conditions. Because Concrete Cloth GCCM cannot be over-hydrated, the material was not affected by the storm. The south and east sides of the swale were lined for 650 linear feet.

Project Details

Location: Florence, SC

Application: Paved drainage swale around a landfill cap

Client: ESAB

Contractor: Electrical Controls and Maintenance Integrated Solutions (EC&M)

Subcontractor: Stormwater Operations Specialists

Engineer: Roux Associates, Inc.

Installation: May 2018



Newly covered swale using Concrete Cloth GCCM

Licensed from



MILLIKEN INFRASTRUCTURE 

A *Milliken* COMPANY

infrastructure.milliken.com | 855.655.6750

Concrete Cloth™

Geosynthetic Cementitious Composite Mat (GCCM)

CASE STUDY:

Florence, SC
Paved Drainage Swale



Asphalt swale before rehabilitation



The team digs a trench to help anchor the Concrete Cloth GCCM into the ground



The material is adhered together using water-resistant caulking



The material is anchored to the existing asphalt channel using four-inch nails



Newly covered swale using Concrete Cloth GCCM



The contractor used the weather conditions to his advantage to hydrate the Concrete Cloth GCCM because it cannot be over-hydrated