

Project Info



06 / 01 / 2020



CC8™ Bulk Rolls



660m²



Transverse layers



Norwood Park, Southwell,
Nottinghamshire



Via East Midlands Ltd



CC8™ was specified to
line an existing drainage
channel to prevent erosion
following installation of a
super gully



Completed installation in Southwell

In January 2020, Concrete Canvas® (CC) GCCM* was installed as a channel lining solution for an existing 115m long by 4.18m wide (on average) channel which required erosion protection at Norwood Park in Southwell, Nottinghamshire.

The channel lining application was part of the Flood Alleviation Works on Halam Road in the town of Southwell to help protect up to 250 homes and businesses within the town. Five super gullies were installed in November 2019 to channel excessive water in storm events away from the Halam Road area of Southwell and into the drainage channel, which takes the water into the adjacent attenuation pond. The new super gullies and pipes can be up to nine times more efficient than standard road gullies in extreme rainfall and will help direct previously uncontrolled surface water into the pond rather than overland into the surrounding estates.

This scheme is part of the overall Southwell Flood Alleviation Project which is a £4.3million scheme to protect the town of Southwell with a number of mitigation schemes as well as natural flood defence management to improve the town's flood defences.

Via East Midlands acted as contractor and consultant on the project, which was carried out for Nottinghamshire County Council.

*Geosynthetic Cementitious Composite Mat





Channel prior to works



Existing concrete lined section of channel



Super gullies were installed to help channel excessive water during flood events



Reprofiling of the existing channel prior to installation



Flow exceedance route installed on site



CC used to line section of channel slope below outfall pipe from super gully



CC terminating against existing concrete channel section



CC lined spillway area leading from newly installed flow exceedance pipes



CC will prevent erosion of the channel

Prior to installation of the specified CC8™ material, the contractors reprofiled and regraded the channel and removed any loose soil and shrubs to eliminate any void space beneath the material.

The CC8™ was delivered in bulk rolls and cut to required length before being carried from the site compound to the channel and positioned by hand. The material was laid transversely with overlapping layers jointed using stainless steel screws.

The channel is located near a balancing pond on the Norwood Estate. The flow of water through the channel was dammed off prior to installation and the water pumped via sump pump into the balancing pond. When the installation was completed, water from the dammed section of channel was used to hydrate the CC.

Installation of 660m² was completed in just over a week, with a few days lost due to flooding on the site as a result of heavy rain. Despite delays, the project was a success and another channel in the area is due to be lined with CC on a similar project later in 2020.

"We were pleased with the speed and ease of the installation of the Concrete Canvas and how it could easily be adapted to suit different site requirements."

Steve Marston
Project Engineer
Via East Midlands Ltd