

Project Info:

Southampton Railway
Batter Ditch Lining



11 / 04 / 2016



CC8™ Wide Rolls



130sqm



Longitudinal layers



Southampton, UK



Raymond Brown
Construction Ltd.



CC was used to line outfall drainage channels on a railway batter and direct water into the existing ditches at the toe of the embankment.



Completed installation

In April 2016, Concrete Canvas® GCCM* (CC) was used to line a series of outfall drainage ditches on a railway batter in Southampton, UK. CC Wide Rolls were chosen as they would significantly increase the speed of installation by reducing the number of joints required on site. The prefabricated rolls use a seaming process that creates a flush butt joint between layers. This has the benefit of reducing the net material usage as well as providing a smoother overall surface. Installation was carried out by Raymond Brown Construction Ltd for Network Rail, with consultation from Hyder.

A V-bucket was used to excavate the ditches and shallow anchor trenches were cut into the shoulders. 2.2m Wide rolls of 8mm thick CC (CC8™) were mounted onto a spreader beam and unrolled down the length of the ditches. Pegs were inserted through the CC into the anchor trenches at 2m spacing, before the anchor trenches were backfilled and the CC hydrated.

130sqm of CC8™ were installed in 3 days by 5 people. **CC Wide Rolls provided much faster installation rates and a 10% material saving.** The client was impressed with the speed of installation and is considering using CC wide rolls for other similar works.

"We were pleased with the speed of installation achieved by choosing the 2.2m wide rolls of CC, which also reduced material wastage. CC provided plenty of site support to ensure that installation went smoothly and we will look to use the material on future projects."

Colin Borrell,
Site Agent,
Raymond Brown Construction Ltd

*Geosynthetic Cementitious Composite Mat





Excavating the ditch and digging a shallow anchor trench



Start of CC deployment



CC deployment



Pegging into the anchor trench



Backfilled anchor trenches



The finished project