

Project Info



13 / 01 / 2014



CC8 Bulk Rolls



250sqm



Longitudinal layers



Cunningham's Gap,
Queensland, Australia



McIlwain Civil/
Hydrovac Excavations/
Burdens Australia



CC8 used to remediate eroded concrete channels collecting and discharging water run-off from hillside adjacent to highway.



Section of ditch immediately following hydration

In January 2014, Concrete Canvas (CC) was used to remediate a section of concrete channel adjacent to Cunningham Highway in Aratula, Queensland. The channel had suffered erosion and damage, which was impairing its ability to collect and discharge water run-off from a hillside adjacent to the highway. This had the potential to cause issues with flooding and damage due to the washout of fines, as the channel was often exposed to high flow rates during wet weather. Shotcrete had been considered for the project, but the associated rebound risked damaging existing road infrastructure, whilst the equipment required for such an installation would have an impact on vehicular traffic utilising the highway. There was also limited access to the installation site due to the placement of roadside barriers.

Prior to installation the site was cleared of vegetation and debris, and several cuts were made into the existing channel to allow CC to be fixed with grout at the top end of the water flow. Bulk rolls of CC8 were then delivered to site and unrolled into the channel using a crane truck and spreader beam. The CC was cut to length and fixed in place using ground anchors and concrete screws. Adjacent layers of CC were fixed together using stainless steel screws and Sika Pro adhesive. The interface between CC and the cuts in the channel made during preparation were filled with a non-ferrous, non-shrink grout, which ensured no undermining of the CC during heavy water surges. CC was then hydrated using a water truck and spraying equipment.

A series of channels using a total of **250sqm of CC8** were able to be **completed in four days by an installation team of 5**. The installation was very successful, allowing the remediation work to be completed rapidly in average temperatures of 28°C with **very low impact on the vehicular traffic** utilising the highway.





The site was cleared of vegetation and debris before installation



Bulk rolls of CC8 were dispensed using a spreader beam and crane truck



CC was fixed to the channel base using concrete anchors and screws



Grout was used at the end of the relined channel to prevent water ingress



CC was hydrated using a water truck, pump and hose