

Project Info



13 / 03 / 2014



CC8™ Bulk Roll



80sqm



Longitudinal layers



Porirua, Wellington, New Zealand



Rasmax



CC8™ used remediate a culvert to eliminate washout



The completed project

In March 2014, Concrete Canvas® GCCM* (CC) was specified to remediate a culvert in Porirua, Wellington, New Zealand. The client was Porirua City Council and the installation was completed by Rasmax. Concrete Canvas® GCCM was selected due to the culvert being difficult to access, the installation speed and the cost effectiveness of CC. Sprayed concrete was considered, but the damp and cold conditions combined with the bed being lined with sediment would have made it exceptionally difficult to use this method.

To prepare the site, the drain was cleared and the area dammed with the flow diverted. A bespoke length was cut from a bulk roll of 8mm thick CC (CC8™) and delivered to site. This was then unrolled on the flat and cut to length, before being carried into the culvert. The CC8™ was fixed to the existing corrugated metal using 32mm hex self drilling screws at 200mm centres. Where CC8™ joints were needed, overlaps of 100mm were created and mechanically jointed with more hex screws. For hydration the CC8™ was submerged in water once work was completed.

In total 80sqm of CC8™ were installed by 3 people in just 6 hours (with 8 hours of site preparation) when the client had allowed for 2 days. Furthermore CC's low alkalinity and low wash out rate meant the works did not negatively impact the local ecology.

*Geosynthetic Cementitious Composite Mat





The culvert before work began



Unrolling the CC8™ to cut it to length



Fixing



32mm hex screws



The finished project