



CASE STUDY:

EROSION CONTROL

**TASMANIA
SEPTEMBER 2017**

CONCRETE CANVAS

Concrete Canvas is a flexible, concrete impregnated fabric that hardens when hydrated to form a thin, durable, water proof and fire resistant concrete layer. It is the original concrete on a roll.

Concrete Canvas allows concrete construction without the need for plant or mixing equipment. Simply unroll and position Concrete Canvas, and then just add water (any type of water, including sea water).

Concrete Canvas has no impact on the pH of runoff water. Concrete Canvas is widely used as a cheaper alternative to non-structural shotcrete.

Concrete Canvas is used in a variety of civil infrastructure applications, such as ditch lining, slope protection and capping secondary containment bunds.

In September 2017 there was a small project in Tasmania for a local government authority, where the client required a quick repair to an eroding inlet to an existing drainage pit. Initially the solution was going to be a poured concrete slab, however the contractor was aware of GCCMs following discussions with local supplier Geotas and was interested to trial the product in an innovative solution that would be time and cost effective for their client.

Following discussions with Geofabrics, including installation methodology and specific details to attaching to existing Concrete structures, the contractor decided to utilise two handy rolls of Concrete Canvas CC8 which contain 5 m² per roll. This would mean little wastage and would be easy to handle on such a small project.

As the soils were dispersive in nature this excluded other erosion control options such as turf reinforcement mats or erosion control blankets.

The profiling of the channel and installation of Concrete Canvas took less than a day to complete and the contractor was impressed by the performance of the product before and after hydration, and the technical advice that was offered in terms of installation guidelines and site specific advice. The GCCM was laid transverse to the channel in continuous lengths and in a roof shingle formation in the direction of water flow. Anchor trenches were created either side and pinned using 380 mm anchor pegs. Adjoining rolls were overlapped 100 mm and mechanically joined using a combination of an adhesive sealant approved by Concrete Canvas Pty Ltd and stainless steel screws at 200 mm centres. Due to the success of this project the local council is looking to continue its use of Concrete Canvas on a longer section of the same drain.

Whether it is a large project or a small project Concrete Canvas can be the perfect solution when you require rapid installation, easy installation or a cost effective solution compared to traditional cementitious solutions.