

Project Info



10 / 2013



CC8™ Bulk Rolls



675sqm



Longitudinal layers



Northampton,
England, UK



Moulding Contracts
Ltd.



CC8™ used to
protect two bank
sections of a tertiary
landfill lagoon.



Bank protection installation

In October 2013, Concrete Canvas® GCCM* (CC) was used to protect two sections of bank that are part of a Dredging Waste Temporary Storage Area (DWTSA) at a landfill site in Northampton. The client was Augean South, the contractor was Moulding Contracts Ltd., and there was design consultation with the Environment Agency (EA). The DWTSA lagoon was constructed on the in situ low permeability clay, which provides secondary containment to the engineered containment structure. The life of the DWTSA is limited because the area in which it was constructed will eventually be excavated to create a landfill void. CC was specified because of the risk of erosion through tipped debris and minor maintenance trafficking. Furthermore, it will be easier to de-construct and provide a lower mass of material to recover at the end of the lagoon's life compared to in-situ concrete. A protective geotextile will be installed on the remaining sides to prevent any other forms of erosion such as weathering.

The clay substrate was formed by the excavation of an approximately 41m x 76m area at ground level to a depth of approximately 4.5m, with a bank gradient of 1:3. This has provided a holding capacity of roughly 5000m³. 8mm thick CC (CC8™) was installed on the southern and part of the eastern side slope, as filling and emptying activities will only be carried out along these edges. The CC8™ will protect the clay liner from erosion and accidental impact when material is placed and removed from the DWTSA. The CC8™ was anchor trenched at the toe of the bank, and mortar jointed at the crest to a concrete loading platform which was built to provide access to the lagoon. Metal peg fixings were used at regular intervals to fix the CC8™ along its length.

675sqm of CC8™ in bulk roll format was installed in 5 days by Moulding Contracts Ltd.

*Geosynthetic Cementitious Composite Mat





Corner detail



Metal fixings attaching the CC8™ to the clay substrate



Anchor trench at the toe of the bank



Mortar joint



The finished instal