

Project Info



11 / 03 / 14



CC5™ Bulk Rolls



900m²



Transverse and Longitudinal layers



Brignoles, Var department, Provence-Alpes-Cote-d'Azur region, France



Eiffage Travaux Publics



CC5™ used to line a ditch at the top of a road embankment



Completed basin and ditch

In March 2014, Concrete Canvas® GCCM* (CC) was used to line a ditch and basin at the top of a road embankment in Brignoles, France, to prevent rainwater infiltrating the slope and causing slip. The close proximity of the crest of the steep embankment ruled out conventional concreting methods. A geomembrane on top of an anti-puncture geotextile was considered, however CC was chosen due to its cost effectiveness and ease of installation. The works were carried out by Eiffage Travaux Publics for the City of Brignoles.

Prior to the installation, the bucket of a mechanical digger was used to grade the ditch and smooth the inverts as much as possible. Bulk rolls of CC5™ were then delivered to site and suspended from the mechanical digger using a spreader beam. The CC was cut to length using hand tools, avoiding any wastage. It was then laid transversely along the inverts of the basin and across the ditch, with 3 longitudinal layers along the base. A 100mm overlap was created between each adjacent CC layer before ground pegs were used to fix the CC to the substrate, and the overlapped joints were screwed at 200mm intervals. Hydration was completed using a water truck and hose and the edges of the CC were buried at the crest of the ditch and basin to create a clean finish.

900m² of CC5™ were installed by a team of 3 in just 2 weeks. The drape characteristics of the CC meant that a natural looking finish was created and necessary infrastructure, such as pipe work, was easily accommodated.

*Geosynthetic Cementitious Composite Mat





A section of the ditch



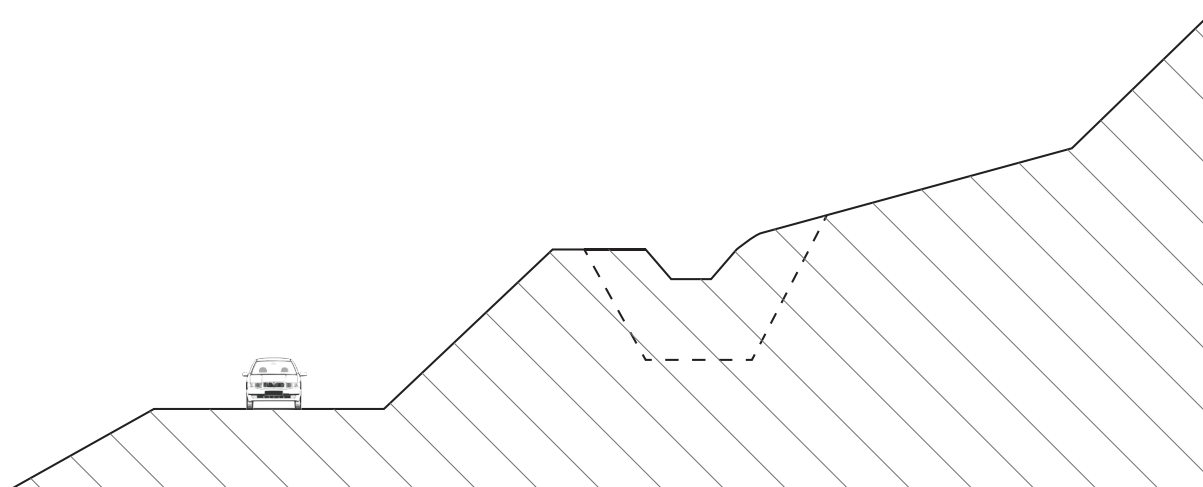
Transverse and longitudinal layout



The join between the ditch and basin



Integration with existing infrastructure



Sketched section showing the location of the ditch (and dashed line basin) relative to the road