

## Project Info

 25 / 03 / 17

 CC5™ Batched Rolls

 100m<sup>2</sup>

 Vertical layers

 Hámori Lake, Miskolc, Hungary

 SZOMOR ÉS TÁRSA Kft.

 CC5™ used to provide temporary slope protection during reconstruction of a collapsed roadside retaining wall.



Completed temporary installation

In March 2017, Concrete Canvas® GCCM\* (CC) was used to provide temporary protection of a slope during the reconstruction of a collapsed retaining wall at Hámori lake, Miskolc, Hungary.

A 30m section of the outer part of a road slipped, along with its supporting wall on a hillside. Although a wider part of the road remained intact there was a serious risk of further slip. The road couldn't be closed for works to be carried out, and one lane had to be available to traffic throughout the works. The slipped section was excavated until the wall construction but the resulting temporary slope had to be protected against rain and debouce while the supporting wall was being built.

CC was specified for this project due to its quick installation times, ease of use and its ability to be installed without heavy equipment, specialist training or knowledge. The possibility of removing CC in the future, and therefore being able to use it as a temporary measure was also important for this project. The CC would be able to be easily removed with an angle grinder as the work progressed with building the new retaining wall, and additionally, would not require special storage for hazardous waste storage areas.

The works were carried out by SZOMOR ÉS TÁRSA Kft. for Magyar Közút Nonprofit Zrt.

\*Geosynthetic Cementitious Composite Mat



The remainder of the collapsed supporting wall



The substrate prior to installation



The CC was delivered in batched rolls



The CC was installed down the steepest section of the slope



The CC was secured using ground pegs



The CC was hydrated using a hose



View of the completed temporary installation from across Hámori lake



Building new supporting wall in front of CC installation



Partially dismantled CC installation

CC was delivered to site in batched rolls of CC5<sup>™</sup>, which was then laid down the slope and fixed to the substrate using ground pegs, while the upper edges of the CC were glued to the road foundation. Each subsequent layer overlapped the last by 100mm, and the ground pegs were inserted through the overlaps at intervals of approx. 200mm. Once the CC was laid, hydration was given via 1000L bowser.

100m<sup>2</sup> of CC5<sup>™</sup> were installed in one day by a team of 5 people. The project was a great success, and both the contractor and client were pleased with the outcome.

There was a period of heavy rain shortly after the installation which would definitely have caused further slip or caused the road to collapse if the works had not been carried out; however, the slope protection provided by the installation of the CC prevented any further issues.