

Project information

 April, 2017

 CC5 Bulk

 600 sq. m

 Channel lining

 Grassy Lake, AB

 8 Persons

 Test scenario
case study by
SMRID



In April 2017, 600 sq. m Concrete Canvas (CC) 5mm bulk was installed at the St. Mary River Irrigation District (SMRID) in Grassy Lake, Alberta. The original channel was lined with poured concrete which had been failing due to substrate slumping in certain areas. CC was chosen to be assessed in a test scenario case study by SMRID.

CC had been considered in the past and it was determined that quantifiable results were needed to decide whether CC would be a wide-scale viable solution. Site access, cost of material, labour, adaptability to existing surface conditions were very important considerations. A "Gep-Web" product will also be tested by the SMRID.

The CC was installed over existing damaged concrete surface where cracks had previously been sealed by the SMRID. An anchor trench had been prepared to secure the cloth at the edges along with using 12" spikes. CC was then laid transversely, sealed with SikaFlex 1A and fixed with 1" SS self-tapping screws.

The CC was hydrated using a 500 gallon tank and hose with light pressure. The installation took approximately 8 hours to complete using 7 laborers and 1 excavator operator.

The SMRID verbally stated that they consider this installation a success. They were pleased with the speed and simplicity of the installation. A testimonial will be given after a couple of seasons worth of use and full judgement is being reserved until performance data on both CC and Geo-Web material has been accumulated.



Fixing the first shingle of CC to the old existing concrete



Unrolling of the CC bulk rolls



Transverse CC layup



Overhead wires posed an installation challenge



Bird's eye view of the CC installation process otop of the existing damaged concrete channel