CONCRETE CANVAS®

CHANNEL LINING

Project information

- August, 2016
- CC8 & CC13
- 375 sq m CC8
  1,280 sq m CC13
- Channel lining
- Glacier National Park, BC
- 5 Persons
- 1,655 sq m of CC was installed in 5 days by a crew of 5

In August of 2016, 375 sq. m of Concrete Canvas (CC) 8mm and 1,280 of CC 13mm was used as a ditch lining at Rogers Pass Glacier National Park in BC, Canada. Every winter snow is regularly cleared from the roadways at the Glacier National Park by local maintenance crews and snow piles begin to develop at the sides of the roadways. During the spring thaw, large volumes of water begin to cause significant erosion issues around critical infrastructure such as road ways and nearby rescue helipads.

CC8 and CC13 were used as an erosion control solution to line 4 ditches that will hold heavy snow loads in the winter and high water flow in the spring. The main priorities for the client were the ease of clean-out for the ditches and the ability of the CC to hold the occasional vehicle traffic during the clean-out process. For this reason, CC13 was chose for most of the ditches at the site. Poured concrete was considered, however since the project site was located in an extremely remote location in the Canadian Rockies, CC was chosen for ease of installation and the only heavy machinery required was an excavator.

Rogers Pass is a National Historic site and CC also offers an environmentally friendly alternative to traditional concrete. Unlike most concretes, it is not classified as an irritant and is less damaging to the environment.

Prior to installation, all trees and vegetation were removed from the area, and the ditches were excavated and re-graded to the specific dimensions. 150mm anchor trenches were dug on either side of the ditch. The CC8 and CC13 rolls were unrolled in 3 longitudinal layers with an overlap of 100mm. The CC material under the 100mm overlaps were then hydrated and the overlaps were fixed together with an 8mm bead of SikaFlex 1A sealant and #8 1" stainless steel self-tapping screws at 200mm intervals. The CC fixed to the substrate on the outer edge with 12" ardox galvanized spikes every 2 meters along the crest of the CC material. The CC was then hydrated using a 275 gallon tote with a 2" pressure hose and re-hydrated an hour later due to high temperatures.

TITAN ENVIRONMENTAL CONTAINMENT

1.866.327.1957 info@titanenviro.com www.titanenvrio.com

CONCRETE CANVAS®

CHANNEL LINING

A total of 1,655 sq. m of CC was installed in 5 days. The installation rate was approximately 340 sq. m per day.

The project was successful and both the client and the contractor were extremely impressed with the speed and ease of installation. They are excited to see how the CC holds up over the winter season with heavy snow loads and temperatures as low as -40 degrees Celsius.

Top ditch - before

Lower ditch - before

Dispensing of bulk roll

Completed top ditch

TITAN ENVIRONMENTAL CONTAINMENT

1.866.327.1957 info@titanenviro.com www.titanenviro.com

Securing of the CC overlaps

Hydration of lower ditch

Completed top and lower ditches side by side

TITAN ENVIRONMENTAL CONTAINMENT

1.866.327.1957 info@titanenviro.com www.titanenviro.com