

LLANFOIST
AVERGAVENTNY, WALES, UNITED KINGDOM

Simple Drapery

Problem

Llanfoist is a village near Abergavenny in Monmouthshire which is located near the Brecon Beacons. The River Usk flows through the village and flows for 63 miles to Newport. The Monmouthshire & Brecon Canal roughly follows the line of the River Usk through the Usk Valley but passes Llanfoist through the side of a wooded hill.

The canal is located at the crest of an embankment which had started to show signs of instability and also had suffered an erosion of the face of the embankment.

Work needed to be undertaken to protect and consolidate the embankment below the canal to safeguard the canal so the Canal and River Trust alongside contractors CPC Civils and Vertical Access introduced a soil nail solution to offer deep-seated stability to the embankment.

A high punching mesh drapery system was required to link the soil nail heads but also protect against falling debris if further erosion of the surface occurred.

Solution

The solution provided by Maccaferri was that SteelGrid HR 30 was fit for the consolidation works.

The system is a drapery high strength mesh with high stiffness which is BBA (design life of 120 years) certified and secured to the face in conjunction with anchor plates, U-bolts and mesh connectors. Maccaferri's Steelgrid HR is a breakthrough in composite mesh technologies—it offers high stiffness: high tensile strength at low strain and high puncture resistance with low deformation.

Steelgrid HR is rapid and easy to install reducing overall job times and it comes in a variety of strengths making it a versatile solution.

Over a small amount of time, the hillside will progress vegetatively giving it an aesthetically pleasing green appearance which will not affect the performance of the Steelgrid HR mesh. With this solution in place, it ensures this World Heritage riverside will be enjoyed for years to come.

Client: Canal & River Trust**Designer / Consultant:** Kier**Contractor:** CPC Civils/Vertical Access**Products used (Qty.)****Date of construction:** 07/2018 - 08/2018[Google Maps](#)[Google Earth](#)

The Monmouthshire and Brecon Canal



Steelgrid HR in place stabilising the face of the embankment



Soil nails and Steelgrid HR



Steelgrid HR system securely in place, with vegetation starting to establish