

Erosion Control Products on Network Rail Site



Menzi Muck Spider Machine placing Rock Mattresses over Coconet 800 on river bank

Salix's soil and river bank erosion control products and Menzi Muck Spider were essential for this work on a Network Rail embankment which was being undercut by the River Biss.

Salix were brought in by CAN as specialist contractors. CAN's works at Laurels Farm consisted of the stabilisation of both sides of a 140m length of rail embankment with the installation of over 1100 soil nails and a Deltax facing system.

Historic undermining of the toe of the embankment on one side of the track by the river posed a particular problem.

The design solution was to install a soil nail reinforced scour protection system comprising Rock Rolls and Mattresses over a section of 40m of river bank. The flexibility of the Rock Rolls and Mattresses meant that the undulations of the river bank and the tree stumps could be easily accommodated.

Very tight access prohibited using traditional plant, and the initial plan to utilise crane lifts to carry out the works during possession provided scope for an innovative solution to be found to value engineer the works.

Products Used

- **Rock Mattresses**
- **Rock Rolls**
- **Coconet 800**



The difficulty around access was solved with the flexible nature of the Rock Mattresses and the adaptability of the Menzi Muck Spider machine

Rock Rolls and Mattresses as preferred erosion control products

Our Menzi Muck Spider excavator could install the scour protection working within the river itself.

With the machine running on **bio oil** and silt traps/surface booms in place downstream of the site, this solution allowed the works to be carried out efficiently, in an environmentally safe manner and during normal train running without the need for possessions.

Following installation of the Rock Rolls and Mattresses, the rock netting facing system was extended over the top of the scour protection and secured with head plates to the soil nails previously installed to provide a robust long term solution to the scour.

To encourage regrowth, top soil and river bank seed mix were then applied to the area.

The methodology used allowed this element of the works to be completed **within budget and over a shorter programme** than originally allowed



Protective Rock Mattresses installed at toe of embankment

