

OBERSCHEFFLENZ
OBERSCHEFFLENZ, BADEN-WÜRTTEMBERG, GERMANY

Soil Nailing

Problem

The slope along the railway between km 65.881 and km 66.019 in Osterburken in had to be secured against landslides and erosion.

The rehabilitation area is located on the right-hand side of the railway directly before the entrance to the Schefflenzer tunnel. The construction area is classified as an approx. 17m deep cut. The area to be rehabilitated had a total length of approx. 110m with a slope inclination of 30°-35°. The sloping length of the embankment was approx. 24m long in the heighest point and 14m in the shortest part.

As a result of heavy rainfall in early February 2022, a superficial landslide occurred in the area around km 65.980. The area of the landslide extended was 9.0m (parallel to the track) to approx. 5.0m (fall line).

Solution

Maccaferri's partner Secon Systems GmbH supported the designer Geobay in the pre-design phase of the soil-nailing to secure the slope. the checks were carried out thanks to the on-line software "Mac S-Design" and the support of Maccaferri's experts. Thanks to the properties of MacMat HS 100 8127G0 it was possible to reduce the number of soil-anchors needed and a final raster of 4mx4m of 1m long steel-anchors was planned. The installation phase took only 3 weeks during the month of April-May 2023.

Client: Secon Systems GmbH

Designer / Consultant: GeoBay

Contractor: FELDHAUS Bergbau GmbH & Co. KG

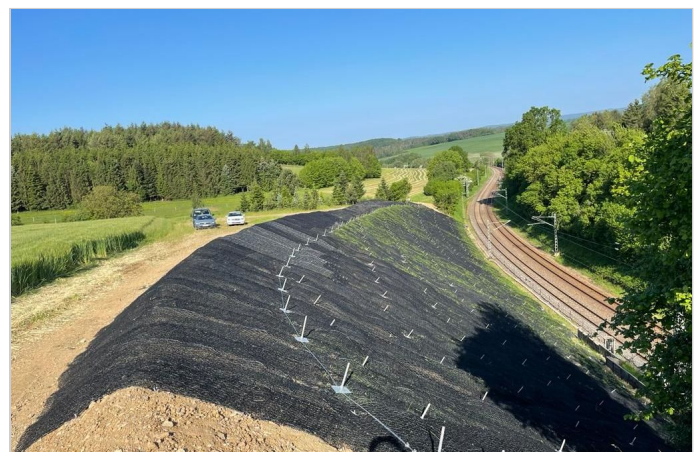
Products used (Qty.)

- Macmat Hs	3760 sqm
	MacMat HS100
	8127G0

Date of construction: 04/2023 - 05/2023

[Google Maps](#)

[Google Earth](#)



Overview of the slope



During the installation



Railway still working during the installation phase



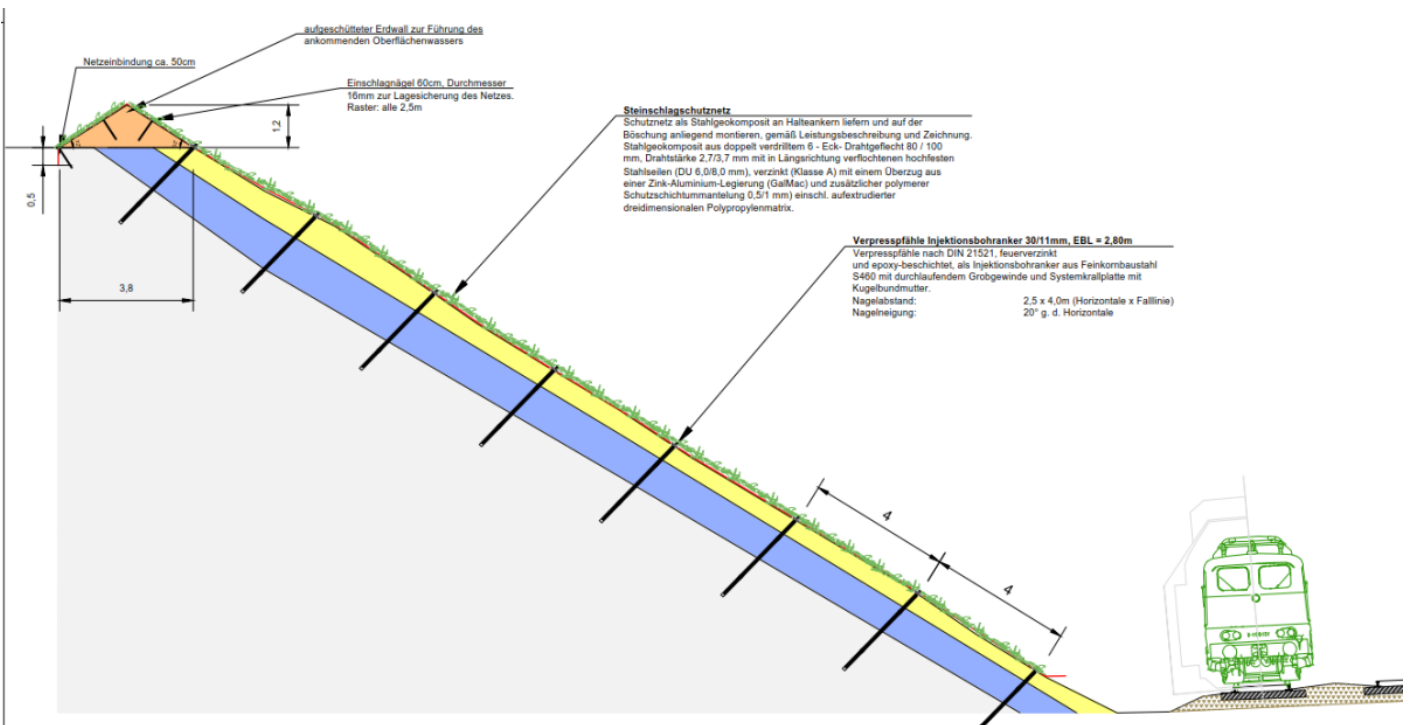
Slope re-greening



Detail of the MacMat HS 100



General view



Typical Section