

MEERHOUT BRIDGE 34
MEERHOUT, VLAANDEREN, BELGIUM

Reinforced Soil Walls and Slope Reinforcement

Problem

With almost 40 million tons of goods transported, the Albert Canal is the most important waterway in Flanders from an economic point of view and a crucial hinterland connection between the port of Antwerp, Limburg, the Antwerp Kempen and the Liège region. The Albert Canal has already been given a major facelift over the years to cope with growing traffic. And a further upgrade is now underway to make the Albert Canal even more attractive for businesses in the near future, thus encouraging a move to waterborne transport. In this way, inland navigation contributes to the solution for traffic congestion in Flanders.

To make this possible, De Vlaamse Waterweg nv is putting a lot of effort into upgrading the Albert Canal. Today, the vertical clearance of the current bridges is still too limited. All bridges will therefore be systematically raised to 9.10 meters. The width under the bridges will also be increased. At the end of April 2019, De Vlaamse Waterweg appointed the nv Via T Albert to rebuild another eight bridges over the Albert Canal. These are the bridges in Beringen, Paal-Tervant, Meerhout-Vorst, Lummen, Oelegemll (Ranst), Herentals (Herenthoutseweg), Kuringen, Hoogmolenbrug (Schoten).

Solution

The design of the reinforced soil structure has been carried out following the Eurocode 7 in combination with the Belgian Annex.

The possibility to modify the units to follow the exact shape of the bridge has been very well appreciated by the contractor FRANKI, that later chose the same system for the next bridges on the Albert Canal, like in Hoogmolenbrug and Kuringen.

In this case, the original plan was to have a slope inclination equal to 70°. to respect this design requirement Maccaferri prosed to use 70° Green Terramesh element installed on both sides of the bridge embankments.

Client: Texion Geosynthetics NV

Designer / Consultant: Arcadis NV / Sweco

Contractor: FRANKI / HYE

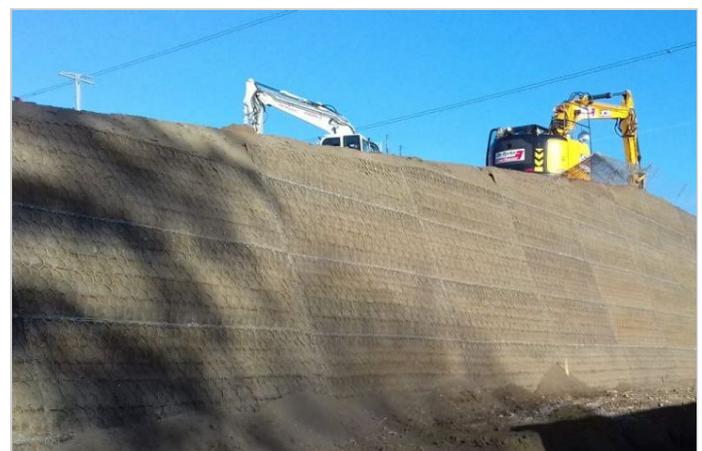
Products used (Qty.)

- Green Terramesh 1400 sqm of facing

Date of construction: 02/2021 - 04/2021



Start of the installation phase



During the installation



During the installation: detail of a GTM unit



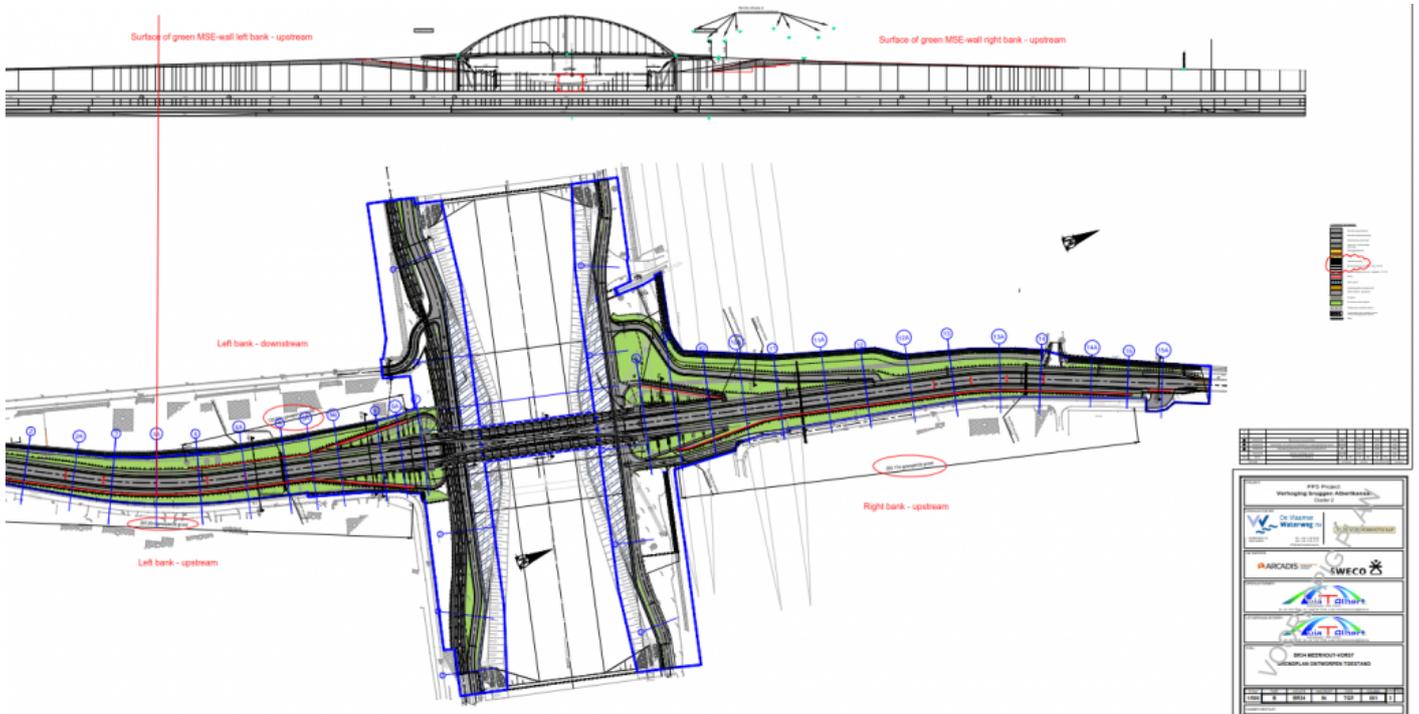
End of installation



End of the construction: abutment detail



End of construction



Design of the bridge

Maccaferri Balkans Sh. P. k.
 Autostrada DR-TR; KM 6, SH2, Xhafzotaj, Durrës, Albania

E-mail: info@al.maccaferri.com