

**KURINGEN BRIDGE 19**  
**KURINGEN, 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, OelegemII (Ranst), Herentals (Herenthoutseweg), Kuringen, Hoogmolenbrug (Schoten).

**Solution**

The new bridge in Kuringen is built according to the principle of "generic bridges" used at various locations along the Albert Canal. The bridge has been raised about 2 meters to 9.10 m clearance height. The canal has been widened from 50 m to 86 m.

Characteristics of the new bridge Length of bridge: 123 m  
 Height of arch: 22 m above the road surface  
 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 the bridge embankment.

**Client:** Texion Geosynthetics NV

**Designer / Consultant:** Arcadis NV / Sweco

**Contractor:** FRANKI / HYE

**Products used (Qty.)**

- Green Terramesh 1350 sqm of facing

**Date of construction:** 07/2021 - 09/2021



Start of the installation phase



During the installation



Construction phase: side view detail



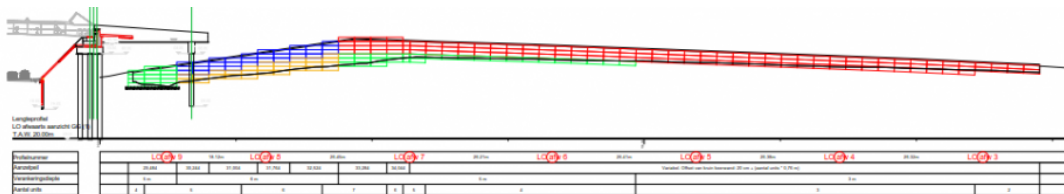
Bridge arch before the positioning phase



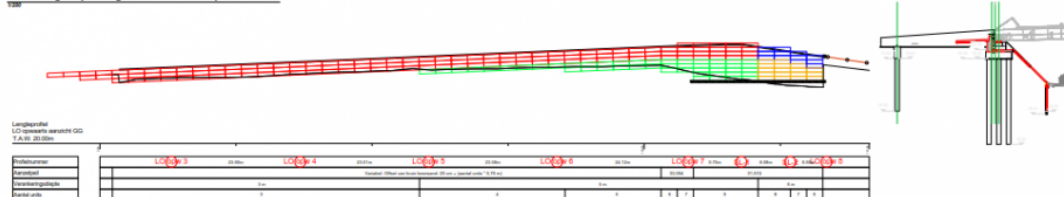
Bridge arch positioned



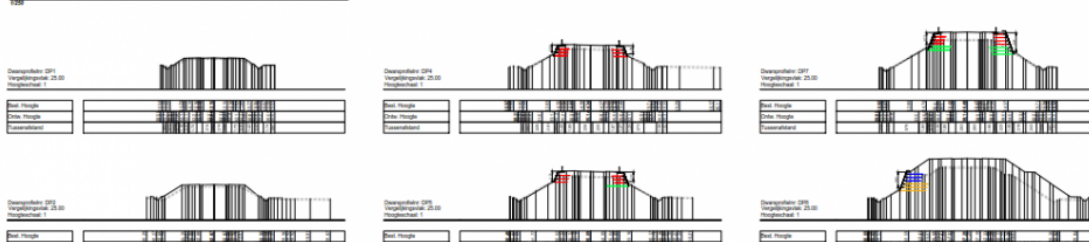
During the installation



Aanzicht gewapende grond linkerover opwaarts



Dwarsprofielen gewapende grond Overdemerstraat - linkerover



Schematic front view

**LEGENDE**

- Gewapende grond - verankeringdiepte 3 m
- Gewapende grond - verankeringdiepte 4 m
- Gewapende grond - verankeringdiepte 5 m
- Gewapende grond - verankeringdiepte 6 m

**REFERENTIE**

- De Vliet en de Overdemerstraat
- 2010-2012-2013-2014-2015

**NOTAS:**

- Maakt gebruik van de laatste versie van de tekening.
- Alle afmetingen in meter.

PPS Project  
Verhoging bruggen Alberikanaal  
Cluster 2

De Vlaamse Waterweg nv

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