

K11 Securing Embankment in Wolhusen - Menznau

Client

Department of Construction, Environment and Economy, represented by the Department for Transport and Infrastructure (vif) and BLS Netz AG

Consultant

IUB Engineering AG in consortium

Construction period

2009–2010

Construction costs

CHF 0.52 million

Scope of services

- Topographic measurements
- Alternative study for bored piles
- Dimensioning, statics
- Construction and implementation project
- Tendering
- Construction supervision and finishing works

Description

In 2009 the edge of the K11 cantonal road (Menznauerstrasse) in the municipality of Wolhusen subsided on the embankment side. In this area the cantonal road runs along the crest of the embankment of the BLS railway cutting. The unevenness was levelled out numerous times by applying surfacing. To secure the embankment a bored pile wall consisting of unreinforced primary piles (length 8.00 m) and reinforced secondary piles (length 3.00 m) was constructed. A top plate was placed on top of the bored pile wall and a crash barrier was fixed in the middle.

Main technical data

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|---------------------------------|----------------------------|
| – Length of top plates | 70.6 m |
| – Primary piles DN 900 concrete | 44 210 m ³ |
| – Secondary piles DN 900 | 44, 70 m ³ |
| – Top plates | 80 m ³ concrete |

