CENTRAL SHUNTING YARD VIENNA-KLEDERING, CONNECTION EASTERN RAILWAY LINE - AIRPORT RAPID TRAIN RAILWAY

Client: Austrian Railways Infrastructure AG
Development Period: 2010 to 2014

THE PROJECT

The new railway section between the Eastern Railway Line and the Airport Rapid Train Railway (S 7) connects the Vienna Airport with the new main railway station and therefore with the whole high-ranking railway infrastructure of Austria.
The centrepiece of this 2.1 km long, double-tracked section is the bridging of the central shunting yard Vienna-Kledering with 19 bridge spans and a total length of 582 m. Two of these spans were designed as network arch bridges (steel construction). The span length of the longer field is 113 m and its height above terrain 30 m.

OUR FUNCTION

For this project, BGG Consult has been commissioned with the compilation of the expert contribution "Geotechnics and Hydrogeology, Polluted Areas and Areas of Potential Concern" for the environmental impact declaration, with the preparation of a Geotechnical Expert's Report for the tendering documents and with the geotechnical and hydrogeological supervision of the construction.
Furthermore, a hydrogeological preservation of evidence was carried out.
In preparation of the environmental impact assessment, subsoil explorations were planned, supervised and evaluated.
In addition, the relevant hydrogeological data have been collected from the responsible government authorities and on site.

Bridge Foundations:
Along the connection loop line, cover layer material with a thickness between a few metres and 10 metres was found below superficial fill materials. Locally, these materials were replaced by deep reaching artificial fill. Below, the quaternary gravel sets in, holding a structure typical for the Danube valley. A deep foundation by means of cast-in-place concrete bored piles was therefore planned from the beginning and implemented without problems.

Bridge chain across the shunting yard