LINZ MAIN RAILWAY STATION, INTEGRATION OF THE 4-TRACK WESTERN RAILWAY LINE, EAST SIDE

Client: ÖBB-Infrastruktur AG (Austrian Railways Infrastructure AG)
Development Period: since 2005

THE PROJECT

In the course of the development of the railway line Vienna - Salzburg into a four-track high performance line, the eastern section of the main railway station Linz has to be remodelled over a length of 1.7 km.
The necessary works comprise extensions of embankments and considerable retaining structures in connection with the widening of the railway bed as well as the enlargement or reconstruction of three road underpasses. Additionally, the tracks have to be relocated, a drainage system established and the base layer reinforced.
The location in the centre of the city of Linz requires a continuous operation of the road and rail traffic on all routes.

OUR FUNCTION

For this project, BGG Consult has been commissioned with the consulting in the fields of geotechnics and hydrogeology. Bases on subsoil investigations by means of drillings, dynamic probings and exploratory pits, geotechnical and hydrogeological expert's reports were compiled for the permit application in compliance with railway law and for the detailed project.
During construction, consulting is provided for geotechnically relevant works. This includes, among others, an on-site supervision, the management and evaluation of the geotechnical monitoring and the dimensioning of securing measures for building pits.

Railway Bridge over the Friedhof Road:
The objective bridge is being renewed and extended from eight to ten tracks. In order to keep at least six tracks under operation, several auxiliary bridges are used, resting on anchored sheet pile walls. The retaining measures parallel to the tracks are carried out by means of shotcrete and soil nails (grouted self-drilling anchors).
For the foundation of the middle pillar, a soil improvement in form of jet grouting was necessary.

Railway bridge over the Friedhof Road, building pit for the establishing of the bearing structure no. 3