



S 7 FÜRSTENFELD MOTORWAY, RIEGERSDORF - HEILIGENKREUZ SECTION

Client: ASFINAG (Motorway Financing GmbH)

Development Period: since 1/2009

THE PROJECT

The 29 km long new construction of the S 7 Fürstenfeld motorway is connected in the West to the A 2 Southern Motorway at Riegersdorf and runs Southeast to the Hungarian border at Heiligenkreuz.

The substantial goal of the project is - besides the improvement of the connectivity of great economical regions - the traffic reduction along the existing federal road B56 / B319.

The project, which will be implemented progressively in two sections, comprises - besides earthworks - the tunnel Rudersdorf (length 2.9 km), build partly by cut-and-cover, and partly by closed construction methods with adjacent trough sections at both sides (total length 1.2 km), the cut-and-cover tunnels Speltenbach (length 1.0 km) and Königsdorf (length 0.7 km) as well as 47 bridges, of which eight hold a length over 100 m.

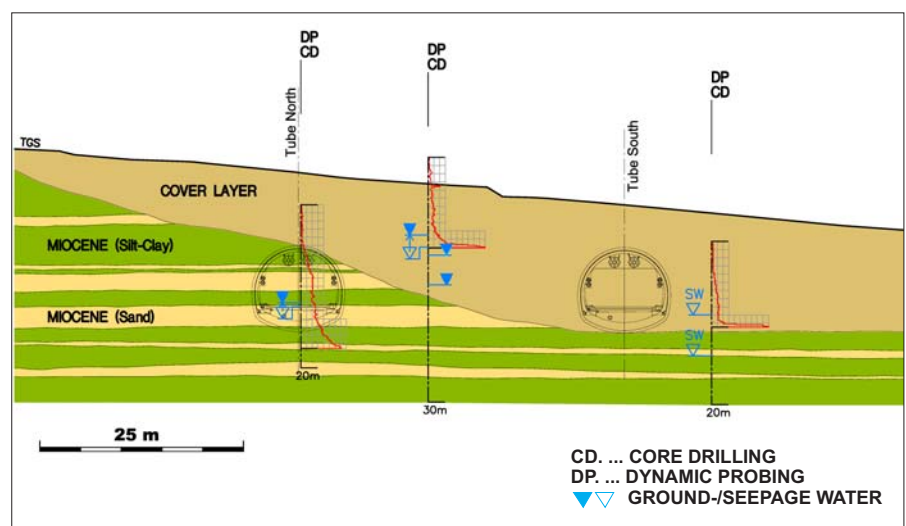
OUR FUNCTION

For this project, BGG Consult attends to the fields of engineering geology, hydrogeology, geotechnics and geomechanics during the tendering phase. For the enlargement of knowledge after the building permission phase, subsoil explorations in form of core drillings (141 pieces), dynamic probings and exploratory pits were planned, supervised and evaluated. Soil mechanical and rock mechanical tests were conducted on samples. Furthermore, 28 dilatometer tests were run in the boreholes. Six of the drillings were developed into inclinometers. Based on the results of these investigations, the expert's opinions and reports are currently compiled for the tender project.

Tunnel and Trough Sections Rudersdorf:
 The Northeastern bypass of the village Rudersdorf requires a route below terrain over a length of 2.9 km and trough sections at both sides. Each of the two tunnel tubes planned in closed construction method feature lengths of 1.8 km. The overburden is locally reduced to only several metres.

The structures are partly situated within the cover layer, and partly in intensely layered miocene sediments. Over long sections, the ground water level was found significantly above the future street level.

The supervision of the construction project in the fields of geotechnics and hydrogeology is therefore of great importance with regard to the tunnel advance, the ground water lowering measures and the securing of the construction pits.



Example of a Cross Section in the Area
 of the Closed Construction Method
 Tunnel Rudersdorf