

Railway project, four-track expansion of Westbahn, Hubertendorf – Blindenmarkt section, Burgstaller tunnel, contract section 02

Client:

ÖBB-Infrastruktur AG

Location:

Austria, Vienna

Project duration:

from July 2009 to December 2010

Services of iC:

Geotechnical support, geotechnical engineer (underground)

Project objectives

Construction of the Burgstaller tunnel along the high-capacity section of railway between Ybbs and Amstetten.

Project description

Geotechnical support for the tunnel 115+150 km to 115+528 km marks, which was produced with the cyclical tunnel boring method. The nature of the project includes the excavation works of the tunnel tubes and alcoves.

Project data

Length of planning section Contract section 02: 378 m two-track tunnels:

Total length: 378 m, excavation cross-section: 115 m², overlay: 5 m – 20 m 1 large alcove as well as technical and rescue alcoves

Project specifics

The tunnel was bored mostly with low overlay in a cyclical method, partly under construction in a stable mountain (gneiss), and an erosion gully comprising of quaternary gravels and sands was crossed in the centre of the construction section. This therefore involved the consideration of tunnelling methods that ensure low-settlement boring and guarantee an appropriate level of safety (partial areas, core, preliminary safeguarding & exploration measures, tilting-foot prop widening)

Services of iC

Following services rendered: Evaluation, analysis and interpretation of the geotechnical measurements; geotechnical support for the tunnelling works as well as the support of long-term measurements; advising the local construction supervision

