

B123B MAUTHAUSEN ROAD, BRANCH-OFF NEW DANUBE BRIDGE MAUTHAUSEN

Client: Provincial Governments of Lower/Upper Austria Development Period: since 2021

THE PROJECT ____

Due to traffic development in the districts of Perg and Amstetten as well as the necessity of a comprehensive refurbishment of the existing *Danube* bridge in Mauthausen, a new road connection between the B3 and the B1 with a *Danube* crossing 700 m downstream the existing bridge is planned. The new twolane route branches off from the B3 road north of the *Danube* towards the south, pans to west after the *Danube* crossing, later underpasses a railway line and the road bypass Pyburg and finally ties into the B1 road.

The total length of the project is 4.3 km. Relevant crossing objects are, besides the three-spanned *Danube* bridge with a total length of 360 m (maximum span 160 m), the floodplain bridge with 210 m and ten spans, the Pyburg trough (length 280 m) and three ramp structures in the area of the B1 junction with lengths of up to 160 m.

OUR FUNCTION __

For this project, BGG Consult handles the special fields of geology, geotechnics and hydrogeology since the planning for the building permit with Environmental Impact Assessment. Based on numerous underground investigations and soil mechanical laboratory tests, the expert's reports Geology-Geotechnics and Hydrogeology-Groundwater have been prepared.

Subsequently, the tendering project and the detailed planning is attended to in the respective fields.

Foundation Danube bridge:

Based on the general geology and the results of underground investigations in the vicinity, crystalline bedrock of the Bohemian Mass was expected along the new *Danube* bridge below the river gravel and the underlying older clay marl. However, it has not been encountered within the maximum exploration depth of 25 m below the river bed. Accordingly, the bridge piers and abutments will be founded by means of large concrete piles within the quaternary gravel and the older clay marl.

For the core drillings at the location of the bridge piers, an elaborate placement of the machines on floating pontoons with all the accompanying requirements pertaining to shipping laws was necessary.



Subsoil exploration in the Danube stream