

Specialist Press Release

September 1st, 2021

Contact:
Wiebke Foellmer
BAUER Aktiengesellschaft
BAUER-Strasse 1
86529 Schrobenhausen, Germany
Phone +49 8252 97-3843
public.relations@bauer.de
www.bauer.de

Flood protection: Bauer involved in construction of a flood control reservoir

Feldolling, Germany – To protect the residents against flooding, a flood control reservoir with a capacity of approximately 6.6 million m³ (4.6 million m³ and 2 million m³ in the underwater basins of the Stadtwerke Muenchen) will be constructed in Feldolling, in the district of Rosenheim in the lower Mangfall Valley. BAUER Spezialtiefbau GmbH and its joint venture partner Josef Rädlinger Bauunternehmen GmbH were commissioned by the Free State of Bavaria, represented by the Rosenheim authority for water resources management, for a range of construction works.

The current project “Flood control reservoir Feldolling, BA8-11” is one of the largest initiatives in Bavarian water management. For this project, Bauer Spezialtiefbau will carry out sealing of the underground barrier as part of the future flood control reservoir, as well as various solid structures for its operation. The work executed by Bauer includes the construction of a mixed-in-place (MIP) wall of more than 21,000 m² as the base and interior seal for the underground barrier. “The construction of a MIP wall was a proposal of ours, since this was not originally planned in the tender,” explains Project Manager Daniel Junger. “This allows us to work not only more cost-effectively but also, above all, more sustainably.”

The excavation pit for the transfer building to the underwater basins of the Leitzachwerke will be constructed as a secant pile wall with approximately 1,700 m² using the double-head system and CFA method. A static diaphragm wall will also be constructed as an excavated single-phase cut-off wall up to a depth of 36 m, of which the top 10 m are reinforced. Out of the total of roughly 7,200 m² of diaphragm wall, approximately 800 m² are being constructed using a special “low head diaphragm cut-off wall” method under a power line. Various sheet pile wall structures are also being constructed and Bauer is carrying out jet grouting work to seal the dam in the area of an existing pipe.

“The work is being carried out under very strict requirements in terms of product quality, since the safety and functionality of the flood control reservoir is extremely important,” says Daniel Junger. The limited space for construction of the diaphragm wall, in part in order to preserve the existing natural plants and trees, also presents a challenge. An RTG RG 27 and a BAUER BG 39 are being used for construction of the secant pile wall, and an MC 64 duty-cycle crane with a K810 II rope grab for the construction of the diaphragm wall.

In addition, the software products of fielddata.io GmbH from Munich, which were specially developed for foundation engineering, are being used in this project. Among others, the applications make it possible to send planning data digitally to the drilling rigs, to record

construction processes directly at the construction site via tablet, and to create automated bored pile documentation. "We are very pleased to be able to support BAUER Spezialtiefbau GmbH in this project in the area of digitalization. Our goal is to establish standardized data management in specialist foundation engineering and to simplify workflows and documentation," says Jochen Maurer, Managing Director of fielddata.io GmbH.

The work began in February 2021 and will continue into 2023.

Images: 2021-09_BAUER_Feldolling flood control reservoir ...



(1) To protect local residents from flooding, BAUER Spezialtiefbau GmbH was contracted to seal a dam in South Germany



(2) A BAUER BG 39 rig is in use to construct the secant pile wall.

All images: © BAUER Group

About BAUER Spezialtiefbau Group

BAUER Spezialtiefbau GmbH, the original parent company of the BAUER Group, has been a major driving force in the development of specialist foundation engineering. It carries out all of the customary processes of foundation engineering, primarily for excavation pits, foundations, cut-off walls and ground improvements on a worldwide basis. In doing so, BAUER Spezialtiefbau GmbH works closely together with their over 50 subsidiaries and branches across the globe. Regional networks around the world allow for the quick and flexible application of machines, teams and expertise. Bauer Spezialtiefbau offers their customers individual, creative and economical specialist foundation engineering solutions for demanding construction projects, from planning through to execution. More at bst.bauer.de

About Bauer

The BAUER Group is a leading provider of services, equipment and products dealing with ground and groundwater. With over 110 subsidiaries, Bauer can rely on a worldwide network on all continents. The Group's operations are divided into three forward-looking segments with high synergy potential: Construction, Equipment and Resources. Bauer profits enormously from the collaboration of its three business segments, enabling the Group to position itself as an innovative, highly specialized provider of products and services for demanding projects in specialist foundation engineering and related markets. Bauer therefore offers suitable solutions to the world's greatest challenges, such as urbanization, the growing infrastructure needs, the environment, as well as water, oil and gas. The BAUER Group was founded in 1790 and is based in Schrobenhausen, Bavaria. In 2020, it employed about 11,000 people in around 70 countries and achieved total Group revenues of EUR 1.5 billion. BAUER Aktiengesellschaft is listed in the Prime Standard of the German Stock Exchange. More information can be found at www.bauer.de. Follow us on [Facebook](#), [LinkedIn](#) and [YouTube](#)!