

Metro Projects

Underground Metro Line U9, New Metro Station and Crossing Lines S-Bahn Railway & U4/U5 Metro in Munich-Germany

Munich, Germany

Project

Feasibility Study & 3D Model Design of Underground Metro Line U9, New Metro Station and of Crossing Lines S-Bahn Railway & U4/U5 Metro in Munich-Germany

Project Owner: Stadtwerke München

Construction Cost

Total Cost approx. ~ € 250-360 mil.

Project Schedule

Detailed Design (estimated): 2018 - 2022

Construction (estimated): 2020 -2025

Project Description

The Engineering Scope of the project includes the following items:

- BIM development (Building Information Modelling) of the new Metro Line U9
- BIM development of the Metro Station
- BIM development of crossing lines & structures
- BIM development of the proposed retaining measures, geotechnical input and surface layout
- BIM surveying and development of surface layout

Geology

Sandy Gravel and Quaternary Gravel, continuing alternation of tertiary Sands and tertiary Clays, Rock layers in intermediate parts

Our Services

1. BIM development of Metro Line U9
 - 3D Reproduction of the alignment of the new tunnel of Metro Line U9
 - 3D Reproduction of the new Station Box of Metro Line U9
 - 3D Reproduction of the alignment of the existing crossing metro line U4/U5 and the existing railway line S
 - 3D Design of the tunnels' sections across the alignment; single, double sections and trumpets' intersections
 - 3D Reproduction of the existing stations and structures of crossing lines S-Bahn & U4/U5
 - 3D Reproduction of the above structures' layout
2. BIM development of the geotechnical retaining measures
 - 3D Reproduction of the existing and proposed additional tunnel shafts, grouting and ground freezing methods, infill material, drainage measures etc.
 - Provision of alternatives based on the designed geometry
3. BIM surveying
 - Simulation of soil data and layers based on geological and geotechnical input
4. BIM with extraction of design drawings and report's output. Creation of 3D PDF, providing overall as well as detailed views of structures and respective design & construction phases
5. Technical support and related engineering services
6. Provision of an engineer based in Munich

Client

EDR GmbH, Munich, Germany

