

DB ABS 29/1 Augsburg – Munich track upgrade section 4-track extension over 44 km

In order to increase efficiency and improve operational quality, the existing mainline route between Augsburg and Munich has been expanded to four tracks over a distance of 44 km in order to separate high-speed traffic designed for speeds of 230 km/h as well as for local rail traffic and freight traffic designed for speeds of 160 km/h.

This means that two separate operating routes are now available following the work. These are controlled from the Mering electronic signal control unit (ESTW), which is operated from the control center in Munich. The overhead line equipment, tracks and substructure were completely renewed as part of the project.

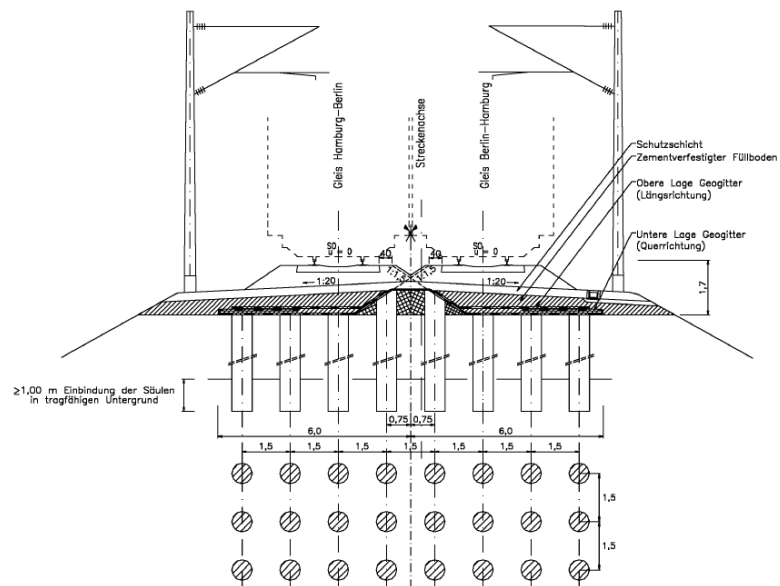
Range of services:

- **Earthworks and special foundation engineering:**
1.2 million cubic meters of earth removal/filling
625 m embankment remediation near Büchen station: "Column – geogrid – cushion construction method" (mixed-in-place/MIP)



Geogrid installation using the MIP method

- **Engineering:**
52 railway bridges
19 flyovers
- **Permanent way:**
116 km of track
104 switches
140 km of overhead lines
- **Control and safety systems:**
Construction of 4 electronic signal control units
Adjustment of 1 rail plan pushbutton signal unit (SpDr Stw)
- **Platform facilities:**
9 island platforms and 3 outdoor platforms



Embankment body remediation using the "Mixed-In-Place" (MIP) method

- **Active noise protection:**
50 km of noise barriers
- **Passive noise protection:**
Eligibility for around 5,000 homes

Services provided by sfirion AG:

sfirion AG was commissioned by DB ProjektBau GmbH to perform project completion services.

Coordination, design and management tasks were required for this.

The core of the assignment was to create a filling structure building on the work breakdown structure that has been in place for a number of years, taking the provisions of RIL 809 into account.

Coordination between the

- Client representation
 - Project management
 - Purchasing
 - Settlement and
 - Site Supervision
- as well as IZ Plan (Information Center Plan) and the DB Netz Central Archive were required for this.

The sfirion archiv software was used for document quality inspections and job tracking.

sfirion is also currently handling the costs and financing adjustment of PB6.

Client

DB Netz AG

Contracting authority

DB ProjektBau GmbH
Regionalbereich Süd

Reference persons

Karl Hamberger
DB ProjektBau Project Manager

Construction time

1998 - 2012

Construction cost

approximately EUR 756 million

Contract value

EUR 300,000 (docu.)
EUR 270,000 (financ.)

Services provided by sfirion AG

Services and software for financing and project completion

- Costs and financing adjustment
- Project completion
- Compilation of construction documents based on RIL 809
- Use of sfirion archiv DMS

Work phase::

LPh 8