Newly-build high-speed railway line
Beijing-Wuhan (China)
- Shijiazhuang City Tunnel -

Project data:
Railway line:
New construction of 1200 km high-speed line using ballast-less design (CRTS II) with 75% bridge, 20% subgrade and 5% tunnel

Shijiazhuang City Tunnel:
10 km inner-city section, 5 km up to 7-track line tunnel within open cut, mined and cut & cover section, 5 km subgrade, including a new station (30-track line terminal, overcrossings of passenger tunnels and technical equipment structures, soil-improvement with PHC-piles and preloading areas)

Execution: October 2008 to March 2012
Client: MOR Ministry of Railway, China
Contracting entity: PEC+S GmbH, Joint Venture with CREEC Co. Ltd

Scope of services:
Team: Foreign Quality Management, superior supervision, checking suitability of the ground, on earth as well as bridges and in tunnels, as well as technical equipment in the context of using ballast-less track as substructure, survey.

BBB: Foreign Quality Representative, Tunnel Expert, supervision and consulting during the construction of tunnel and the measurements within the subgrade section, interpretation of survey and geotechnical evaluation of interaction geology - construction.

Geology: Cohesive, fine size, silty to clayey, stiff to very stiff, fluvial soils with interbedded cohesion-less, sandy, partly fine gravelly layers, with cross bedding and medium dense to dense layering, as well as a loess covering with loose layering, which is weathered to loam at the surface and different fillings.

Geotechnic: Interbedded layers of poorly graded, cohesion-less soils and mostly silty layers of less consistency and high affinity to settlements.