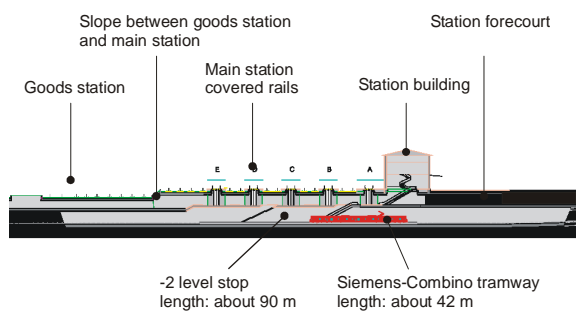
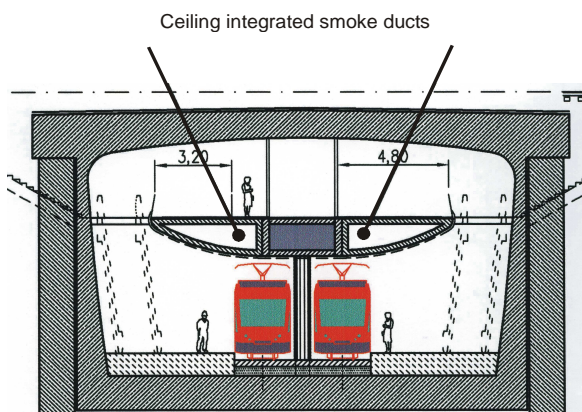


Situation of the streetcar stop in the city center of Augsburg (Conceptual design)



Side view of the station with the -2 level stop



Cross-section of the station with ceiling integrated smoke ducts in the -2 level

Description

The public services of Augsburg are planning the so called "Augsburg Mobility Hub". The project consists of an extension of the Augsburg main railway station with a complex underground crossing for light rail.

The core of the project is the city railway stop under the main station at the -2 level as well as the nearby extension tunnel. It also comprises a distribution level (-1 level) with ramps and an optional pedestrian link towards the west.

Services

HBI Haerter Consulting Engineers provided the following services:

- Project management in the areas of ventilation, structural fire protection and evacuation simulations
- Definition of the ventilation objectives in agreement with the awarding authority
- Preparation and evaluation of different smoke extraction and ventilation concepts in order to meet the ventilation and evacuation objectives
- Elaboration of an integral fire safety concept with the awarding authority and the professional fire brigade of Augsburg
- One-dimensional, aerodynamic and thermodynamic calculations for the verification and optimisation of the proposed ventilation concept
- Three-dimensional numerical analysis about the smoke propagation in the underground station
- Design of 2 ventilation systems for different smoke extraction concepts
- Consideration and adaptation of structural fire protection measures
- Safety evaluation of the tunnel regarding ventilation and rescue
- Documentation for the safety authorities