Using finesse to handle the complex Genferstrasse-6 Renovation Project

Renovation work is to be carried out on two buildings at the Genferstrasse 6 site to ensure compliance with future usage and safety requirements. As the engineering firm responsible for the project, EBP drafted the renovation plan and developed the corresponding earthquake-safety measures.

The Genferstrasse 6 Renovation Project centers on two office buildings whose structures couldn't be more different. Built from 1947 to 1948, the building on the site's northern end was designed by the Halas Architectural Firm as a solid construction. In contrast, the building on the southern end is an extremely light steel-frame construction with composite steel and concrete floors, a temporary solution designed in 1968 by the Stücheli Architectural Firm. Both structures are built on extremely sensitive ground and are situated in the direct vicinity of landmark-protected buildings.

Improved access and more floor space

The project's main structural measures included joining the two buildings "Halas" and "Stücheli" and relocating the main utilities shaft to the center of the buildings. These measures enabled more efficient access and increased the overall floor space. The planning for the measures was preceded by a comprehensive structural evaluation. The scope of our work also included planning the renovation of the concrete floors and developing earthquake-protection measures for the resulting ensemble.

Protecting vulnerable building structures

When designing the new utilities shaft, the architect made

Client

Zurich Insurance Company Ltd.

Facts

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provision for a shaft pit that would extend deeper into the foundation, which was anchored in the rather sensitive layers of subsoil. The planned expansion of the foundation and the installation of new substructure elements required extensive know-how in the area of special structural engineering in tight urban spaces. Owing to the weakness of some important structures and numerous, parallel construction measures, we needed to closely coordinate all of the construction phases and introduce various safety measures. We flexibly coordinated the demolition work and all of the new construction with corresponding temporary support measures.

Success factors

The crucial factors that contributed to the successful completion of this demanding renovation project included a sound understanding of the existing load-bearing structure, flexible solutions and continuous site monitoring.