

# Civil engineering structures (Railway)

**Civil engineering structures are built wherever the natural terrain needs to be altered to enable the completion of infrastructure projects. More demanding structural requirements, widely varying terrain and dynamic urban development make civil engineering structures of various kinds necessary. Civil engineering structures are exposed to intense levels of stress from traffic and numerous environmental factors. The upkeep and development of existing infrastructure therefore represents an ongoing challenge. We undertake design and planning work for a full range of infrastructure projects, whether these involve upkeep, renovation or new construction. Moreover, our services cover the entire service lives of the structures in question.**

We design, inspect and maintain a comprehensive range of structures, including:

- Bridges and overpasses
- Underpasses
- Retaining walls
- Cut-and-cover tunnels
- Tunnel control centers
- Wildlife passageways

In addition to accounting for basic structural and operational specifications, these structures need to meet an increasing variety of other demands. For instance, they are expected to be aesthetically appealing, environmentally friendly and cost effective. Construction phases have also become more demanding, for instance, when the infrastructure in question is expected to remain operational.

We always aim to identify solutions that optimally meet all of the relevant criteria. In doing so, we pay special attention to efficient design and planning, as well as to efficient on-site execution.

The challenges faced by project planners are complex and require input from various disciplines. EBP offers expertise that accounts for many specialist disciplines that are necessary for the successful design and realization of civil engineering structures – from the first project study to the building's final acceptance. We use our competence and experience, as well as our immediate access to the relevant information, to ensure sustainable solutions and smooth project execution in all phases. The social responsibility that goes with the design and planning of civil engineering structures, as well as the prospects of project success are powerful sources of motivation for us as we go about our daily work. This is reflected in the high expectations we have of ourselves – whether it is a matter of entire load-bearing structures or small design details.