

New Prague footbridge connecting the districts of Holešovice and Karlín

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Abstract

The paper provides current information on the development of the construction of the footbridge connecting the Prague city districts of Holešovice and Karlín.

In 2017, an international footbridge competition took place. This was followed by the design phase of the building permit, which was issued on 6 May 2021. Simultaneously, project work was carried out on the tender documentation, on the basis of which the contractor, the company SKANSKA, was selected by the contracting authority. These days, design work on implementation documentation and construction preparation work is being started, which we should have by the end of the year. The footbridge should be completed at the end of 2022.

The concept of the bridge is a spatial curve winding through the landscape and reacting to the height and floor plan requirements of the assignment. The fine spatial curve is constructed as a smooth path based on the dynamics of pedestrians and cyclists. The curve is formed by straight lines and circular vertical and horizontal arcs. A cross section of the U-shaped bridge is extruded along the spatial curve.

The bridge is designed from high-quality ultra-high performance concrete (UHPC) with a surface corresponding to glossy white marble. The bridge consists of prefabricated segments, which are connected by means of prestressing cables. The UHPC application is a contemporary progressive and innovative architectural and construction solution (several bridges have recently been built, eg in France, Germany and the Netherlands). Ultra-high performance concrete is currently a professional topic and its application gives the opportunity to realize a unique architectural and engineering work.



Figure 1. Longitudinal view on footbridge