

# **RAILWAY BRIDGES UNDER VYŠEHRAĐ**

## **Verbal evaluation of Concepts**

### **CONCEPT NO. 3**

#### **TRANSPORT SOLUTION**

The solution of platforms, platform edges and track layout of the Výtoň stop is without any comments, with good and short transfer links and direct connection between the platform and the bridge over the Vltava River. Appropriate and transparent design of pedestrians' movement in the entire area under consideration – safe and intuitive access of pedestrians to individual modes of transport is designed, without the need for complicated transfer routes. Similarly, the design of bicycle transport in the area under consideration can also be assessed as an appropriate and transparent solution.

#### **ARCHITECTURAL AND URBAN DESIGN**

An architecturally elegant design with an effort for an authentic material and functional solution, that strives for a harmony between old and new construction. Completely inappropriate expression of the Výtoň bridges' forecourt, which significantly interferes with the monument protection. Preservation of the current structure - the only one under consideration to continue to serve its original traffic function.

#### **FUTURE OPERATION**

The contactless track solution is not documented. Although the new design meets the minimum maintenance requirements, the old structure would have significantly higher requirements, which is assessed as a negative. A significant disadvantage is also keeping the traffic on the old structure – it encounters the limits of load-bearing capacity and noise, the solution of which is not documented in any way, and in the case of keeping the elemental bridge deck when designing the location of the bridge in the new position it seems too difficult to be realistic.

#### **TECHNICAL PARAMETERS**

Two separate bridges in 2+1 layout are suitable in terms of traffic closures. The structure of the new bridge appears to be structurally undersized – especially the two outer spans without the upper arch. The question of the reconstruction of the old bridge is undocumented and the declared rate of replacement of elements would probably be much higher.

#### **RESTRICTIONS DURING CONSTRUCTION**

The two separate structures allow for phased construction with relatively shorter time of zero-track traffic; comparable to other concepts in 2+1 layout.