

Pedestrian bridge over Najerilla river

Nájera, La Rioja, Spain / 2010

Structural type Characteristics Owner Client

suspension footbridge composite deck , lateral cables on an inclined plane 18 ° with the vertical Ayuntamiento de Nájera Ayuntamiento de Nájera detailed design and construction monitoring



The footbridge over the Najerilla river connects the two banks of the town of Nájera in La Rioja (Spain).

The structure is located downstream of the medieval bridge in a not too urbanized area. The footbridge is set through a low profile, fitting without stridencies in a sector for walking and recreation for people of Najera.

The main constraints on the connection between both banks of the river were on one hand a slender deck to avoid any interference with flooding of the river. On the other hand, the desire expressed by the City Council that the bridge had no masts or components overly visible from distant views.

The length must be 39 m which spanned the permanent river bed and allowed passage of the service banks roads under the structure. With those conditions were ruled out solutions as bowstring arches, cable-stayed or suspension footbridges requiring very visible elements from the medieval bridge and the old town of Nájera.

The chosen solution was a suspension bridge with a low relationship height/length. The cables are anchored to only 2.00 m above the starting level of the footbridge.

The footbridge is suspended from two lateral cables with a parabolic layout. Moreover, the deck has also a parabolic layout, which provides a slight arch type operation, thanks to the fixing of the deck in the anchor blocks. This configuration unloads cables and also increases the rigidity of the system. This increased rigidity is necessary due to the low relationship height/length of the suspension system.



