

Bridge over Torrent ravine

La Huerta de Valencia, Valencia, Spain / 1998

Owner Client Constructor Scope Generalitat Valenciana Generalitat Valenciana dragados obras y proyectos detailed design



The bridge over the Torrent Gorge is a historical bridge from the second half of the 19 th century. It is 106.69 m long and has nine vaults that can be grouped in two groups, six of them have a span of 3.00 meters and the other 6 have are 12 meter long. The layout of the new highway required the demolition of part the bridge, in order to substitute it with another one compatible with the characteristics of the platform, allowing the crossing of the highway underneath it, and also the enlargement of the existing bridge.

In order to enlarge the bridge, its structural capacity was studied, and a solution that uses the present capacity of the bridge was arrived at, minimizing the load increase. Prefabricated lightweight concrete slabs were used to maintain the value of the load in spite of the increase of the width of the bridge from 8.31 to 11.00 meters.

For the new structure, a new solution of an integral reinforced concrete bridge was adopted. The form of the new bridge is in sharp contrast with the existing one, showing the differences but lightlighting the historical structure



