

Fernando Reig Bridge refurbishment

Alcoy, Spain / 2018

Structural type Owner Client Constructor Scope

cable-stayed bridge Ministerio de Fomento D.G. Carreteras Comunidad Valenciana FCC e IMESAPI



The Ministry of Public Works, under the direction of Mr. Ismael Ferrer and Mr. Emilio Peiró, carried out the Emergency Operation of the Fernando Reig Bridge, including rehabilitation works.

FHECOR has provided the Technical Assistance and has elaborated the reference document for the emergency.

When the Fernando Reig Bridge was inaugurated in 1987, it introduced the precasting in construction of long span bridges. constituting an innovation in Bridges Engineering not only in Spain, but all over the world.

Fernando Reig Bridge is a cable - stayed bridge of 273 m long with a single tower. In the first section of 108+132=240 m the deck is supported by the cable stayed system, followed by second section of a 33 m access span. The pylon, with a total height of 90 m (almost 40 m from the base to the deck and 50 m from the deck onwards), constitutes the highest structure ever built in Alcoy. From it, 19 pairs of cables support the deck.

In 2016, after 30 years in service, emergency works related to platform functional requirements were initiated. In August 2016, while performing these works a rupture of one of the stay-cables occurred. Due to it an exhaustive analysis of the entire stay cable system was carried out by FHECOR and it was determined the necessity of its replacement.

From September to December, FHECOR developed the documentation in order to guarantee structural safety during the replacement of the stay cables.

This cable system replacement operation, unprecedented in Spain, lasted 10 months (May 2017-February 2018). It required a great technical work in order to perform it in the shorter time possible but always fulfilling safety requirements for the workers and the structure itself.



