

The New Cable Stayed Bridge in Bari, Italy

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Summary

The municipality of Bari, in the SE of Italy, had long been waiting for the completion of an important existing road axis, connecting the North and South ends of the city through its densely populated precinct. Hence the necessity to overpass both the large railway area and the urban district nearby with a bridge. Its function will not only be that of providing an important facility for transport, but it will also be an outstanding landmark, in the effort to improve the outlook of the urban territory.

Hence the new cable stayed bridge was conceived to be the right answer not only to the requirements of vehicular circulation but also a fine architectural implant for the requalification of the urban tissue beneath. The structural, logistic and aesthetical choices always took into account the links between each other.

Keywords: cable-stayed bridge; post-tensioning; seismic isolators; pylon; railway.

1. Overview and main features

As it is self evident by the figure below, the construction site is located in an area of transition between the south directional and residential precinct of the city and the beginning of the suburban



Fig. 1: The construction site in Bari

district, a less urbanized area which is to be requalified by the administration. The northern ramp corresponding with the part of the deck that approaches the cable stayed bridge is also characterized by the presence of a secondary viability which was to be preserved and effectively embedded into the final road configuration.

As a fence in the delimitation between these two components of the city that wait to be effectively linked up with the completion of the North-South road axis, the railway tracks lay wide in their East-West main direction. The effect of physical separation is made even more powerful by the presence – in the central portion of the crossing to be overpassed – of a large area with railway facilities like sheds, banks, and a certain number of sidings with skew orientation that made the preliminary placement of the deck's