Title: Highway Bridge Project

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Text

The objective for this project was to propose a structural solution in order to replace the current existing road along Vjal it-28 ta April, Il-Fgura, also known as Il-Benniena. The goal behind this project is to rehabilitate the valley floor and clear it from any existing construction. Therefore, the proposed highway bridge required a clear span across the valley without any intermediate supports down to the valley floor.

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Linking Paolo to Fgura directly, Vjal it-28 ta April was constructed in order to reduce travel times between the central and south of Malta, forming part of one of the islands main arteries within the Maltese Islands road network. Unfortunately, such a development came at a cost, separating a public garden from the rest of the valley. This project aims to rehabilitate the valley while still maintaining and efficient road network.

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Due to the location of the bridge, reducing disturbance was an important aspect of the conceptual development of the bridge. Minimal disruption to road traffic, as well as, reduced disturbance to the valley’s natural environment were important factors when considering the choice of structure and material. Being in such close proximity to residential buildings it was established that quick construction as well as a visually bold yet light structure would be best suited for this project.

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In this project the adopted system was that of a single plane cable-stayed bridge, resulting in the bridge having minimal visual impact on its surroundings with a ‘transparent’ and lightweight steel structure above the deck.