MUSIC BRIDGE



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MUSIC BRIDGE

Location

Rome, Italy

Client

Municipality of Rome

Contractor

"Consta" Consorzio Stabile Soc. Cons. p.a. (consorziata Mattioli S.p.A.)

Scope of work

Design, fabrication and installation of steel structures

Period of execution

2007-2008

Weight

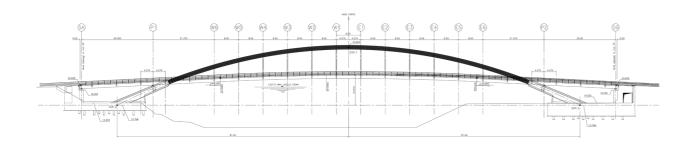
1.320 tons

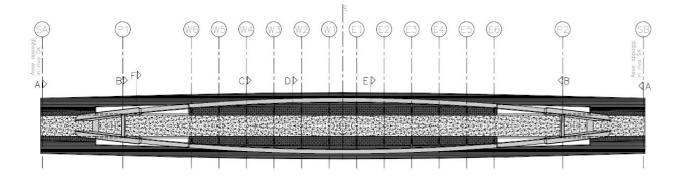
Length

190 meters

Planned since 1929, it had acquired an extremely high political and aesthetical relevance for the city: it is now the only modern steel bridge crossing the River Tiber in the historic centre of Rome. In case historical artefacts emerged during the works, site operations have been supervised by a group of archaeologists.

The Music Bridge has an overall length of 190 meters with a free span between the supports of 182 meters. The pedestrian deck, which has a variable width between 17 and 20 meters, has been installed on top of temporary towers until where shores made it possible, continuing then with a cantilever method. Using the same principle of a cable-stayed bridge, the central segments have been supported by steel cables connected to two temporary towers located on the ground, reaching





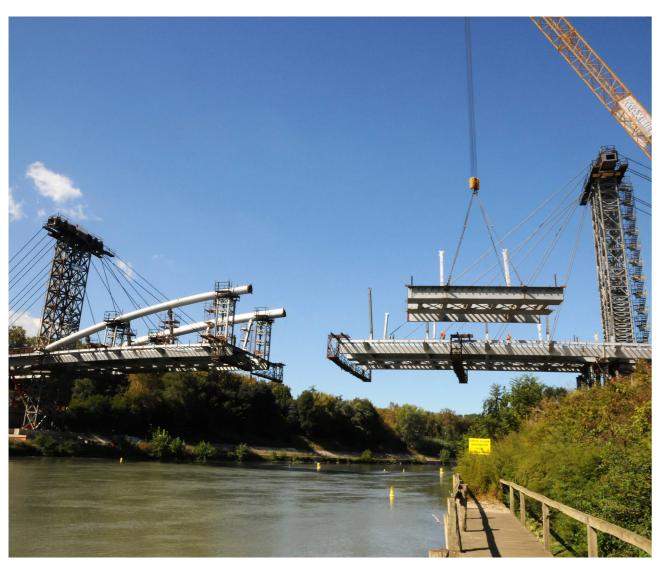
a height of 30 meters. After installation, the two diverging arches have been fixed on one side and left free to slide on bearing on the other. The peculiarity of the structure is the presence of six steel cables inside the deck supporting its weight: only when these cables were properly tensioned,

and temporary ropes loosen, the structure could support its weight changing its structural behavior into the arch type. This solution became necessary to support the weight of the considerable central span of the bridge while improving the seismic performance of the structure.

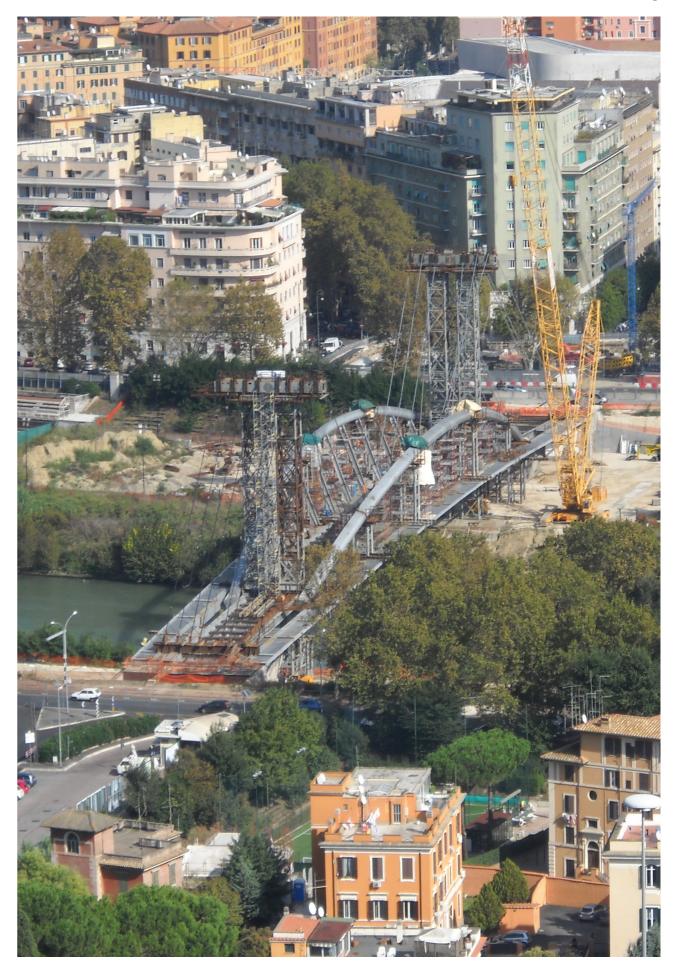




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