

WHY WILL THIS €105M GERMAN BRIDGE LOOK LIKE A WAVE

The engineering behind the new
Hochbrücke Bayreuth



DE CE VA AVEA ACEST POD FORMA UNUI VAL?

Hochbrücke Bayreuth - Germania

563 M
LUNGIME TOTALĂ

105 MIL. €
INVESTIȚIE

2028
FINALIZARE

TOTAL LENGHT

SO, WHY THE WAVE?

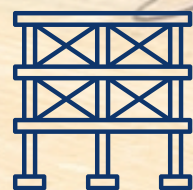
The B2 is one of the main gateways into Bayreuth, so the bridge was designed with particular attention to its architectural appearance.

The wave-shaped design creates a more balanced relationship between the spans, superstructure and piers.

Engineering, with the cityscape in mind

7 DESIGN ALTERNATIVES WERE CONSIDERED

The final concept had to balance:



STRUCTURE



SITE
CONSTRAINTS



URBAN
ENVIRONMENT

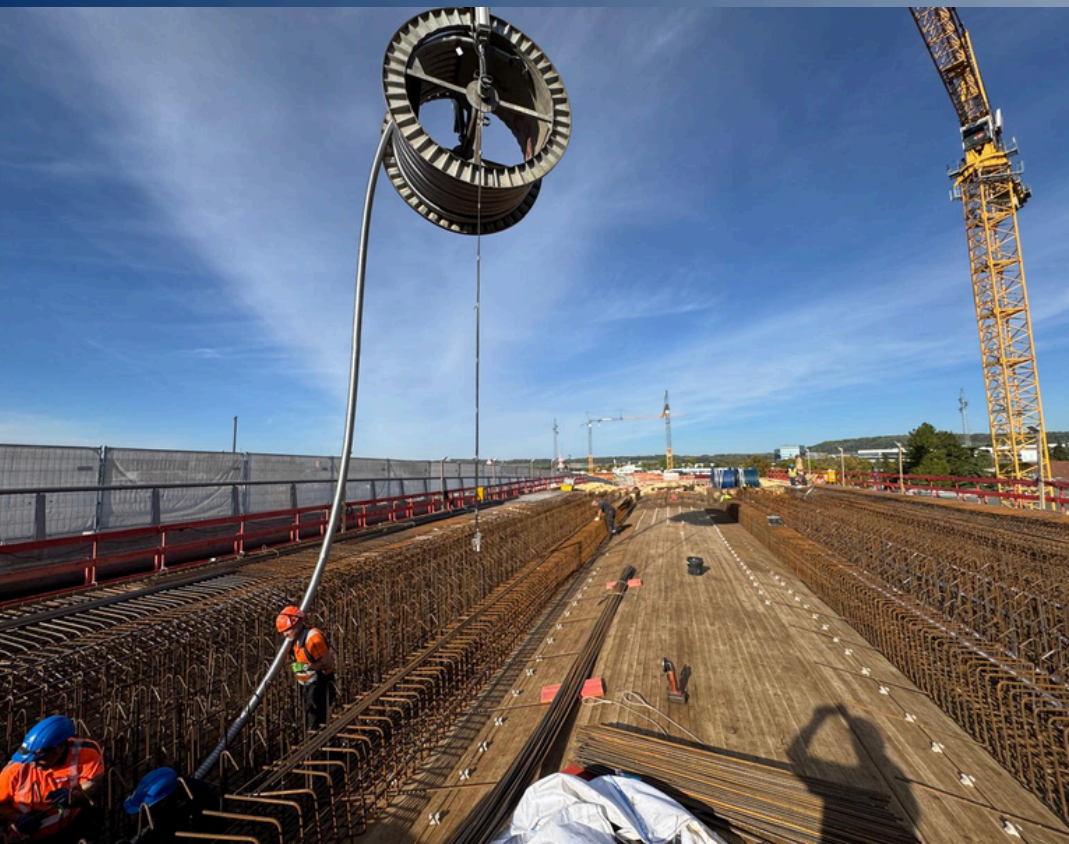


DESIGN

The result?
THE WAVE

Source: Official planning documentation
DieAutobahn.de

ONE BRIDGE, TWO STRUCTURAL SYSTEMS



POST-TENSIONED CONCRETE

Concrete compressed by tensioned steel tendons, allowing longer, more slender spans. The wave-shaped structure used across most of the bridge.



STEEL-CONCRETE COMPOSITE

Steel and concrete connected to work together as one structural system. For the areas where the bridge crosses the A9

Different conditions, different engineering solutions

Source: DieAutobahn.de

HOW DO WE BUILD THIS OVER A LIVE MOTORWAY?

01

The steel superstructure is assembled and welded in the “on-site fabrication shop” beside the A9.

02

They are then moved into final position above the motorway.

Meanwhile, the wave-shaped post-tensioned concrete sections are constructed using temporary supporting structures



**Building around traffic,
not simply stopping it**

THIS IS WHERE WE COME IN

RCBB Gruppe has been working on the Hochbrücke Bayreuth project together with Max Bögl since April 2026. RCBB's scope of work: two ramps and the main bridge structure.

We make the drawings and engineering plans take shape on site.



TODAY, A CONSTRUCTION SITE. TOMORROW, PART OF BAYREUTH'S LANDSCAPE

Hochbrücke Bayreuth
Planned completion: 2028

Follow RCBB Gruppe
to see it take shape →

