

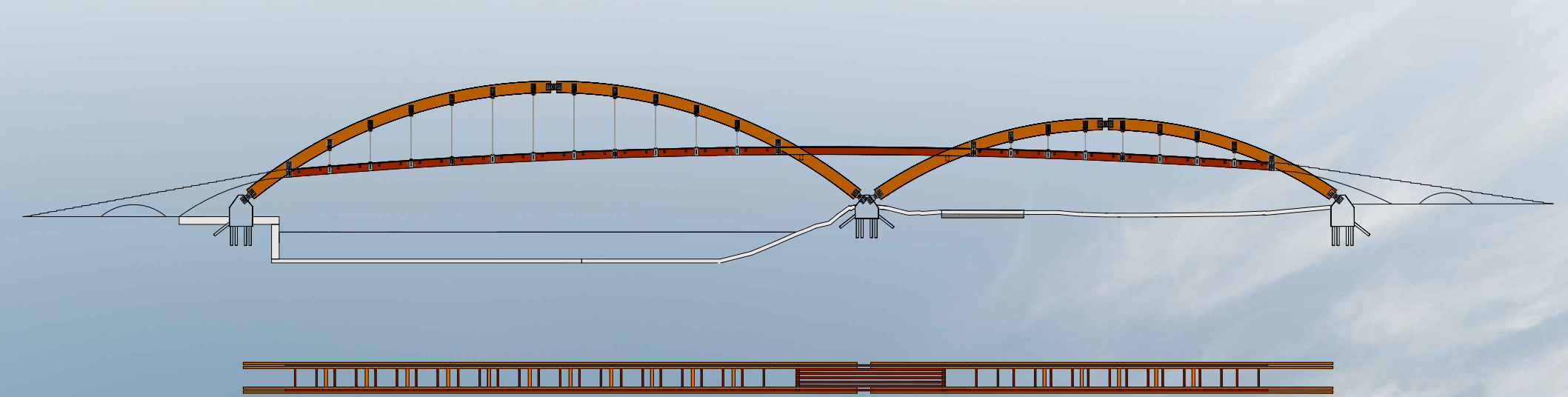
XILEMA

Χύλον (ξύλον): Wood, Structure, Essence

A Structural Harmony Between Form and Meaning

The project responds to a natural context of high landscape value, where water and vegetation draw fluid, silent lines. The concept arises from the desire to respect and enhance this delicate balance by proposing a lightweight, elegant, and minimally invasive structure.

The bridge is articulated in two main spans, crossing a total length of approximately 140 metres: An initial 80-meter span and a second 60-meter one, separated by a central support on the ground. This design choice allows for an optimal distribution of loads, reducing the impact on foundations while ensuring a strong visual and formal momentum.



The structure is based on two curved glulam load-bearing arches, positioned laterally to the deck and connected by vertical steel hangers. The deck, also made of glulam, is designed as a composite slab with secondary crossbeams and main girders, capable of absorbing horizontal actions and transferring them to the arches. The hangers, regularly spaced and optimized in number, ensure an efficient distribution of vertical loads, while the curvature of the arches gives the structure a natural and dynamic form, in harmony with the surrounding landscape. The result is a balance between engineering performance, sustainability, and aesthetic quality.

