Floodable Bridge: A Catalyst for Leisure, Culture, Sports and Educational Activities https://urbannext.net/floodable-bridge-a-catalyst-for-leisure-culture-sports-and-educational-activities/



FLOODABLE BRIDGE: A CATALYST FOR LEISURE, CULTURE, SPORTS AND EDUCATIONAL ACTIVITIES

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Categories: Contributors, Densities, Formats, Middle Density, Project, Sau Taller d'Arquitectura, Territory and mobility, Topics, Urban Paradigms

Tags: Active Public Spaces, Agriculture, Barcelona, Design strategies, Ecosystem, Environment, Industrial context, Landscape, Leisure, Pedestrian realm, Project, River, Spain, Territory, Urban catalyst, Water Territory

The main aim of the project is to serve as a catalyst for leisure, culture, sports and educational activities around the Ter River in Manlleu. The design can be explained through three approaches. First, based on the territorial perspective aimed at enhancing the riverbed as a space of interest in landscape terms; second, from the standpoint of urban strategy, to consolidate the green leisure/cultural axis alongside the river; and finally, based on the technical solution adopted, a very targeted action with a low environmental impact.

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The Territorial Logic, the Supra-municipal Scale: the Riverbed

The project aims to restore the activity along the riverbeds. By definition, riverbeds have always been magnificent ecotones, i.e., spaces that depend on the river's ecosystem and that of its immediate surroundings, in-between areas. These spaces are rich in terms of landscape and environment. In their pass through urban centers, they are often abandoned; the river is channeled and comes to form a boundary between floodable and non-floodable areas. Our proposal is founded on the idea that, if we bring activity back to these places and blur the boundary between river and city, they will be improved, in turn promoting their maintenance and forging a sense of belonging among users.

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Municipal Logic, Urban Strategy: Green Axis and the Forest

Manlleu has lived by and from the river: agricultural and industrial activities have benefited from the course of the Ter. Looking at the urban structure, we find that, during periods of major urban development, the town has ignored the river. In recent years, the area has been enhanced with open spaces, cultural facilities, sports installations, etc. As a result, a new ludic-cultural axis tangent to the river on the left bank is emerging. This axis should be promoted. It begins at the railway station, at the westernmost end, and continues through the sports area, the children's playgrounds and the Promenade of the Ter until it reaches the Museum of the Ter, at the easternmost end. Just at this point, where there is a kiosk and a small pier for kayaks, the course of the river forms a loop and

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generates a large meadow covering about 30 hectares on the right bank.

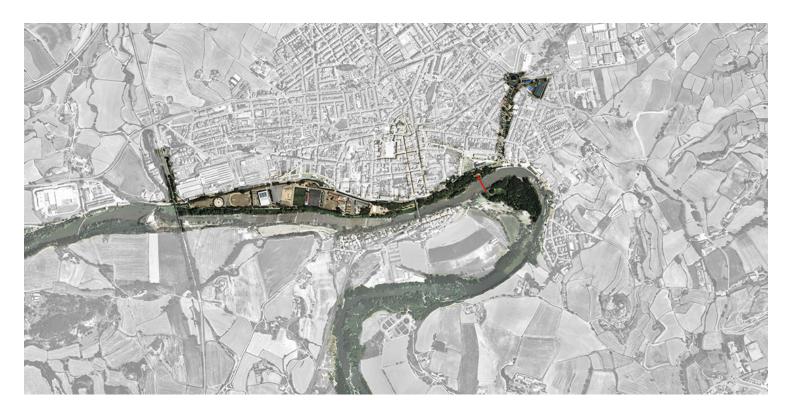


The main aim of the project is to provide a crossing from the left riverbank to the right, extending this recreational-cultural axis into a large, previously residual area. In this way, Manlleu gains 30,000 m2 of open space. A space full of opportunities, from the purely contemplative (walking through the meadow is a luxury) to sports-related (creation of new natural spaces for the practice of environmentally friendly sports).

Educational activities can also be promoted, almost like an extension of the Museum of the Ter, an open-air museum where you can not only understand and explain the importance of the river and the ecosystems that surround it, but also the heritage value of the industrial fabric: locks, canals, etc.

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The Constructive Logic, the Technical Solutions Adopted: the Ecotone

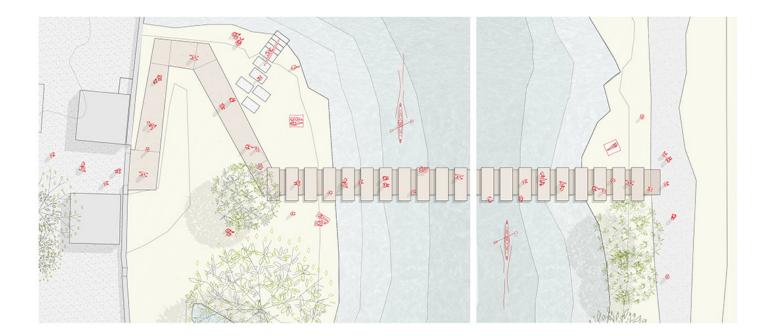
Among all the different possibilities, the design opted for a *passallis* (low-water crossing), a lowimpact infrastructure. A *passallis*, by definition, is a floodable element. In that sense, it is naturally incorporated into the river's own dynamics. The project proposes a series of concrete platforms that remind us of the old river crossings where you could pass from one riverbank to the other by jumping from one stone to the next.

The form responds to the needs of working in a river environment. Thus, there is no formalism, but rather an effective response to the hydraulic and functional demands of the crossing. Concrete walls 25 cm thick, perpendicular to the flow of the river and a distance of 2.25 m, guarantee the hydraulic capacity for the average daily flow of water. Above, and cantilevered, concrete platforms measuring 1.5 m x 3.95 m and only 10 cm high minimize the impact. The platforms do not touch one another and so the structure remains open, improving the hydraulic behavior of the *passallis* in episodes of high water. Between the platforms, the metallic rails, aside from providing the passage with the necessary accessibility even for service vehicles, help with maintenance as they can be

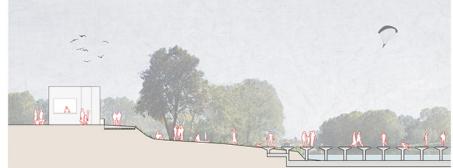
disassembled.

When crossing from one riverbank to the other, the pedestrian is outside the comfort zone of the urban ecosystem and, unprotected, becomes aware of the power of the river. The noise of the water lapping against the walls, the humidity, the change in temperature... everything immerses the pedestrian in the river ecosystem.

Over the years, the flood bridge will progressively evolve: the color of the concrete will change depending on the water levels, the walls will show the scars of stones and logs brought on by episodes of flooding, the metal framework will darken in the sun... In this way, the *passallis* will be transformed, like the banks of the river, into an ecotone: a transition zone between two ecosystems: urban and fluvial.



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