New construction bridge park Gries, Volketswil

2009





In order to offer the public more recreational and sports opportunities, the political municipality of Volketswil realized an expansion and redesign of this sports and recreational facility.

The project

The park area was extended with playgrounds, a pond area and rest areas. To provide access to the opposite banks, an access footbridge was built at the park entrance. The centerpiece is the parking deck, which spans the pond and stream and connects the two banks. It consists of two crossings (connected by a deck) that invite visitors to stroll and linger. The access bridge consists of three beams HEA 240, span about 12 m. The decking was made of larch wood planks (dim. 160x100 mm). Neoprene bearings were used as a separating support between the plank and the steel girder, bolting was done from below. On the bank, strip foundations were made for the purpose of foundation. Concrete columns (dimensions 300/300 mm) were placed in the middle. The columns were staggered in a grid of about 5.0 m.

The construction method

The primary load-bearing structure above the concrete columns consists of steel girders, which were supplemented by continuing elements. Secondary load-bearing elements are glued laminated timber beams with glued-on oak planks, which also form the floor and bench. Structural wood preservation was taken into account by keeping the floor beams at a distance with 78 mm inserts. The oak planks (dim. 100/40 mm) protrude 30 mm on both sides of the beams and are water-nose milled. For aesthetic reasons, the beams on the benches were chosen to be the same width as the usable decking. Neoprene bearings are also used here as a spacer between the steel and wooden beams. The bridge is dimensioned to allow maintenance (snow removal, etc.) with maintenance vehicles weighing up to 1000 kg.





Bridge park access



Front view

Construction Data

- Primary support structure: Three beams HEA 240
- span 12 m
- Secondary load-bearing parts: glued laminated timber beams
- Floor covering: larch wood planks

Services of Timbatec

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- Site management and site inspections



Detail



General view parking deck

Client

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Timber Construction Engineers

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