

H27 Punt Ota, Brail

New structure

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Starting situation and idea

A new bridge was to replace the Punt Ota bridge dating back to 1852 at the boundary between Upper and Lower Engadin as part of the realignment of Engadinerstrasse between Cinuos-chel and Brail. The new bridge was to end 25m farther downhill.

Challenges

Topography and geology posed special challenges. The abutments rotated by 45-50° to the bridge axis rest on compact moraine while the foundations of the two pillars rest on steeply inclined rock. The "Val Punt Ota" and especially the "Lavinier da Brail" avalanche paths exert severe horizontal strain on the structure.

Approach

The Val Ota valley was spanned by a 76m long, three-field, T-beam bridge with widths of 24m, 31m and 21m. The partly pre-stressed cross section of 1.5m height was monolithically connected to the two narrow columns roughly 15m long. The superstructure rests on the abutments and is fixed in the transverse direction and flexible in the longitudinal direction.

Developer: Tiefbauamt Graubünden

Completion: 2015

Project type: New structure

Project author: Fanzun AG

Construction costs: CHF 2,5 Mio

Scope of services: Project Management, Civil Engineering

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Wir erwecken Ideen zum Leben.

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