



# Castiel Viaduct

New structure

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### Starting situation and idea

The road section between the Calfreisen sewage treatment plant and the entry into Castiel village was to be widened due to risk posed by rockfall, snow avalanche, narrow radii and ultimately the large linear gradient.

### Challenges

The new viaduct rises in a gradual curve at the Calfreisen plant with the bridge centre roughly 70m above ground and leads to the steep ascent towards Castiel. Due to space constraints in the connecting areas, construction activity was to be planned so that at least one lane was open to the traffic at the narrowest point.

### Approach

The four-field beams with spans of 62m, 77m, 77m and 55m respectively have a width of 1/27th of the main span due to the supports arranged above the struts. The foundation was built by driving shafts into the rock and can absorb deformations to the 8m-thick gravel layer to avoid compressive forces in the bridge.

Developer: Tiefbauamt Graubünden

Completion: 2005

Project type: New structure

Project author: Fanzun AG

Construction costs: CHF 13,5 Mio

Scope of services: Project Management in cooperation with WRS, Preisig AG, Civil Engineering

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