

# A9 Visp South Bypass Road

## Eyholz and Visp Tunnels and Staldbachbrücken Bridges

### Client

Department of Mobility, Spatial Development and Environment of Valais Canton  
 Office of National Road Construction

### Consultant

IUB Engineering Ltd. in consortium

### Construction period

2005–2015 Eyholz Tunnel  
 2005–2020 Visp Tunnel  
 2004–2006 Staldbachbrücken

### Construction costs

Eyholz Tunnel CHF 722 million  
 Visp Tunnel CHF 425 million  
 Staldbachbrücken CHF 15 million

### Scope of service

- Feasibility study
- General design/preliminary project
- Detailed design/construction project
- Input for the detailed project for construction
- Implementation project
- Construction supervision
- Commissioning and completion

### Description

The Visp South Bypass is part of the A9 road completing the national road network in the communities of Visp and Eyholz. It consists of both the Eyholz and Visp tunnels as well as Staldbachbrücken bridges, which pass over the Vispa Valley and connect the two tunnels.

Eyholz Tunnel consists of two tubes each with two lanes as well as underground junctions connecting the entrance and exit tunnels with the cantonal road in the Vispa Valley. Visp Tunnel is composed of a new dual lane tube as well as the underground half junction of the national road with the Vispertäler. The existing Vispertal Tunnel will be incorporated as part of the south tube of the A9. The half junction consists of 3 underground junctions, an overpass tunnel and the existing Vispertal Tunnel as the exit to Zermatt. Cross connections to the adjacent tube serving as escape routes for pedestrians and vehicles are integrated into the tunnel.

Both tunnel tubes have operation and ventilation stations at the tunnel portals as well as underground technical rooms to house operation and safety system components. The new tunnel tubes have intermediate ceilings above which there is an exhaust air duct.

In the existing Vispertal Tunnel the intermediate ceiling will be rebuilt and adapted to the new ventilation system with jet fans in the tunnel and air will be extracted via controllable air flaps in the intermediate ceiling. An accessible service duct will be integrated into the tubes.

The tunnels cross the Rhone-Simplon fault line, which is characterised by strong tectonic stress and squeezing rock conditions. The tunnels were blasted and excavated in loose rock zones with machine-aided propulsion. In the loose rock sections the tunnel was advanced under the protection of a pipe umbrella system.

### Main technical data

<b>Eyholz Tunnel</b>	<b>Visp Tunnel</b>
South/North tubes 4,255 m /4,231 m	North tube 2,645 m
Entrance tunnel 368 m	South tube new build 922 m /1,694 m reconstructed
Exit tunnel 256 m	Exit to Zermatt 1,224 m
Junctions 443 m /280 m	Overpass tunnel 1,641 m
	including junctions: 435 m /241 m /131 m

