



# **OBERAU TUNNEL PROJECT**

## **GARMISCH-PARTENKIRCHEN (DE)**

### **CLIENT**

Autobahndirektion Südbayern, DE-80335 München  
(Road Administration Region Bayern South)

### **DESIGNER**

PSP Consulting Engineers, DE-80686 München

### **SITE SUPERVISOR**

ILF Beratende Ingenieure, AT-6063 Innsbruck

### **CONSTRUCTION PERIOD**

09.2015 - 07.2020

### **CONTRACT SUM**

CHF 103 Mio. (€ 99.4 Mio.)

### **JOINT VENTURE COMPANY**

ARGE Tunnel Oberau

### **JOINT VENTURE PARTNERS**

Marti GmbH Deutschland, DE-705647 Stuttgart  
Marti Tunnel AG, CH-3302 Moosseedorf  
TuCon a.s., SK-010 04 Žilina-Bánová  
Marti GmbH Österreich, AT-8045 Graz

### **LEAD COMPANY AND TECHNICAL LEAD**

Marti Tunnel AG, CH-3302 Moosseedorf

### **COMMERCIAL LEAD**

Marti GmbH Deutschland, DE-705647 Stuttgart

# OBERAU TUNNEL PROJECT

## GARMISCH-PARTENKIRCHEN (DE)

### PROJECT DESCRIPTION

The Oberau tunnel project comprises the new construction of a twin tube road tunnel using conventional methods close to Garmisch-Partenkirchen, which aims to divert the existing road that crosses the town of Oberau. The excavation was performed with horizontal surface injections in order to prevent surface settlements due to low overburden. The ground water control was part of the scope of works.

The main parts of the project consist of:

- 2'750 and 2'830 m long (95 m<sup>2</sup>) twin tube road tunnel
- Cross connections every 500 m (14 to 36 m<sup>2</sup>)
- Shallow shafts for elevation-injections

### WORK DESCRIPTION

Underground excavation, rock support and grouting work

- Excavation methods: drill & blast (80%) in hard rock, excavator advance (20%) in loose material
- Excavated length and volume: 5'580 m, 500'000 m<sup>3</sup>
- Grouting method: elevation-injections from the surface, sealing rings
- Standard rock support: shotcrete (60'000 m<sup>3</sup>) and systematic rock bolts (50'000 pcs)
- Additional rock support: spile umbrella and lattice girders

Underground water and frost protection work

- Umbrella seal and perimeter waterproofing systems: 160'000 m<sup>2</sup>

Surface- and groundwork

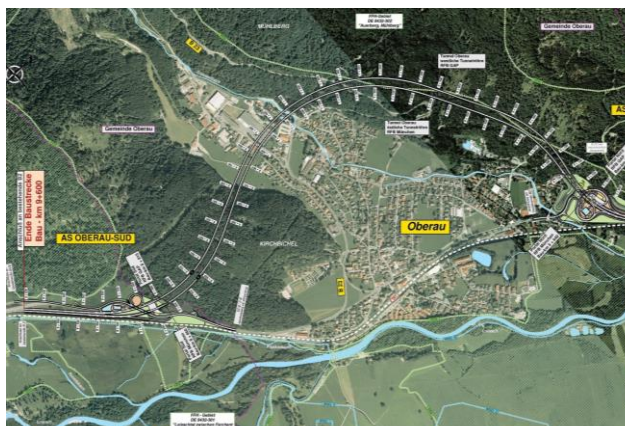
- Vibro pile column construction for 9'300 m
- Site access roads and main road works including extension of existing tracks
- Collection basins including design
- Roadway separation walls including design
- Tunnel excavated material: dumping and processing services

Concrete work

- Tunnel concrete lining
- Four concrete portals totally 312 m long

### GEOLOGY

- Dolomite, Limestone
- Gravel deposits (loose material)



01.07.2020



**Marti Tunnel AG**

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