

# Road Tunnel

## Uetlibergtunnel

Zurich, Switzerland

### Gjuch Soft Ground Section

#### Object

National highway tunnel, new construction

#### Construction Costs

Total costs Uetliberg tunnel: CHF 1'120 million

#### Project Schedule

Planning: since 1981

Construction duration: February 2002- March 2003

#### Project Description

2-tube tunnel: each tube with 2 traffic lanes and one shoulder.

Length Gjuch SGS: approx. 210 m

Diameter: 12.70-14.70 m

Cross section: approx. 148 m<sup>2</sup>

Slope: 1.6 % (downward)

#### Driving Method

Driven downward by core boring with steel installation. Some large-scale support measures will be necessary.

#### Geology

Highly heterogeneous end moraine. Consisting of loamy, sandy gravel. The water table rises from the centre of the tunnel profile at the start to the tunnel roof in an easterly direction.

#### Construction Details

- The excavation support consists of steel segments and 25 cm steel-fibre reinforced shotcrete layers
- Waterproofing with plastic membrane
- Cast concrete final lining

#### Our Services

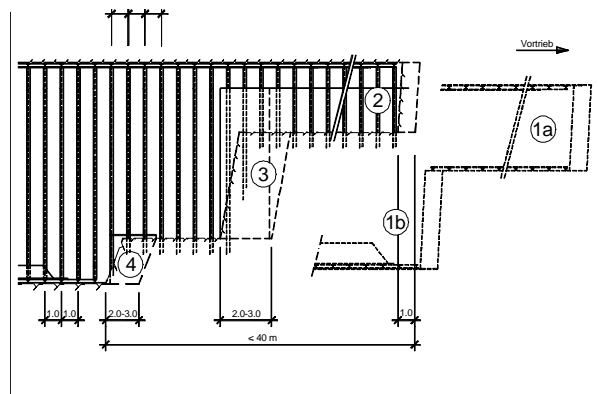
- Complete detail and construction design, tender documents of the underground works
- Partial design of the cut-and-cover sections
- On-site construction management for underground construction
- Support project management of client

#### Client

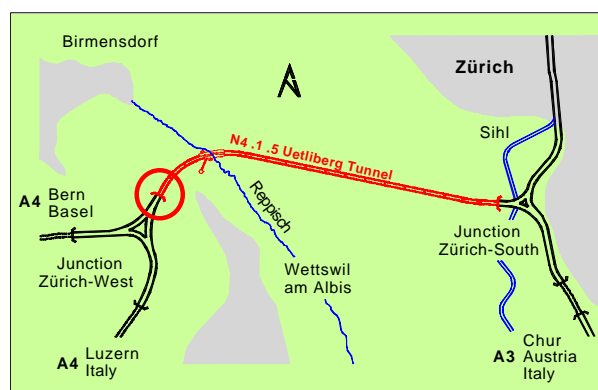
Tiefbauamt des Kantons Zürich, Mr. O. Schnell



Core boring with steel installation



Longitudinal section of the core boring



Site plan

For further information:

[www.uetlibergtunnel.ch](http://www.uetlibergtunnel.ch)

Amberg Engineering AG  
Trockenloostrasse 21  
CH-8105 Regensdorf  
Telefon +41 1 870 91 11  
Telefax +41 1 870 06 20  
info@amberg.ch  
www.amberg.ch

Niederlassungen in:  
Sargans  
Chur  
Brünn, CS  
Singapur, SG  
Madrid, ES

