

<b>Project</b>	<b>Unterstein Railway Tunnels</b>
<b>Client</b>	Austrian Federal Railways
<b>Consulting Services</b>	consulting, feasibility study, preliminary design
<b>Total Cost</b>	~ 1.7 Mio US\$
<b>Technical Data</b>	Two existing single track railway tunnels, 851 and 464 m length New escape gallery, 150 m length



<b>Description</b>	<p>To increase safety of the Unterstein Railway tunnels a couple of measures are being planned. Main part of the project is an escape gallery, which serves as an additional access gallery to the 851 m long Unterstein tunnel II. The cross section of the access gallery will be designed big enough to allow access with emergency vehicles. Driveable access to the tunnel portals are also being designed.</p> <p>Geologically the Untersteintunnels are situated in the very south of the greywacke zone and within the influence of the Salzach fault. The slopes of the narrow valley of the Salzach are characterized by various mass movements due to the poor quality of the rock, resulting in various anchored retaining walls.</p>
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