Implenia

Reference

# Citybanan Project Odenplan and Vasatunnel









## SHORT DESCRIPTION

The Citybanan connects the northern and the southern part of Stockholm subterranean with two additional rail tracks and doubles the capacity of the rail connection which exists since 1871. The wider area of Stockholm increases by 20.000 inhabitants every year. To offset the estimated traffic volume, the project Citybanan was realized.

## THE PROJECT

The new rail connection „**Citybanan**“ consists of seven sections with two subterranean rail stations (Odenplan and Centralstation), about 500 m tunnel open coverage type, 5.000 m rock tunnel and 500 m immersed tunnel on ground of the Lake Mälaren. The segment B3-9509 Odenplan & Vasatunnel in the north of Stockholm comprises about 2.000 m rock tunnel with an underground station, which is connected to the subway station Odenplan.

## CHALLENGES

Because of the inner-city location, strict requirements respective noise abatement measures, Vibrations from detonations and dust emissions have to be observed. The work in the area of the existing subway station was processed while the usual operations continued without track possessions. Thereby special attention is given to forecasted vibrations while

blasting, as well as to the settlements of existing structures.

## SUSTAINABILITY

The blasted rock masses, recycled on site, could be reused as backfilling. In the field of occupational and environmental safety, regularly safety tours by line managers take place and new personnel on site receive safety and environmental training.

## FURTHER INFORMATION

**Key Figures**

- Realization 2009 – 2015
- Total length L = 1,9 km
- Excav. cross section A = 22 -338 m2
- Geology Granite

**Implenia on site**
Implenia Construction GmbH,
Civil Engineering
Landsberger Straße 290 a, D-80687 Munich

**Scope of works**
Technical and commercial management

**Performed services**
Tunneling works

**Construction methods**

- Railway tunnel in drill & blast method,
- L = 1,9 km, A = 22 – 339 $m^2$
- Consisting of rock cavern, tunnel, exit- and service tunnel, supply air tunnel and cross passages
- Total excavation length L = ~4,500 m

**Project Participants**

Client
Trafikverket, Stora Projekt

Planner
SWECO and Grontmij

Consortium
Implenia Construction GmbH

## FACTS

| | |
|---|---|
| **Location** | Stockholm , Sweden |

| | |
|---|---|
| **Status** | completed |
| **Construction volume (value of our services)** | 147 M EUR |
| **Start of construction** | December 2008 |
| **Completion** | December 2014 |
| **Blasting method** | ✓ |

## SERVICES

- Tunnelling
- Transport tunnels
- Service tunnels

https://implenia.com/en/references/detail/ref/citybanan-project-odenplan-and-vasatunnel/

Creation: 17.11.2026 08:16