

# E18 Sjølystlokket

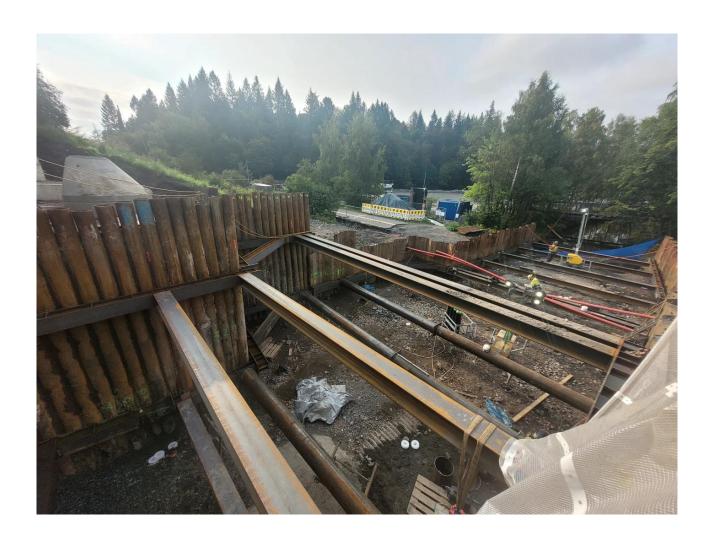
Skøyen, Oslo, Norway

### **KEY ACHIEVEMENTS**

The project included micropiling, jet grouting, sheet piling and bracing works.

Special foundation works on highway E18 day and night with two rigs, inside the Sjølystlokket tunnel with a 5.4m height restriction.

Keller's wide portfolio successfully put to the test.



## The project

An old culvert below Sjølystlokket in Skøyen needed to be replaced due to increasing water level during high precipitation periods. The culvert was demolished and renewed in sections. Few lanes of E18 were closed temporarily. Hence, micropiles and bracing works have been offered in order to allow for the main contractor to excavate the required space for the installation of the new culvert. Jet Grouting and sheet piles have been added to Keller's scope on short notice due to design changes.

# The challenge

- Difficult logistics due to very limited space and low headroom with two rigs.
- Day and night shifts due to very tight schedule. Good coordination with the main contractor's works required.
- Drilling works had to be executed right next to one or Norway's most frequented roads, which could not be closed under any circumstances.

### The solution

- Necessary equipment has been reduced to an absolute minimum inside the tunnel2.
- Simultaneous works with up to 3 rigs 2 inside and 1 outside to keep the tight schedule.
- Keller's wide product portfolio and flexibility allowed to quickly find a solution to leackage and erosion problems below the tunnel foundations.

## **Project facts**

#### Owner(s)

Statens Vegvesen

#### Keller business unit(s)

Keller Geoteknikk Keller Grundbau Keller Grundläggning

#### Main contractor(s)

**HAB Construction AS** 

#### Engineer(s)

Main contractor's Project Manager: Per Erik Nord per.erik@hab.no

#### **Solutions**

Heavy foundations

#### **Markets**

Infrastructure

#### **Techniques**

Micropiles Jet grouting Sheet piles

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