

HAB-FOLLOLINE K147

Oslo, Norway

Execution of steel core piles with lengths up to 50m in a restricted access area. Many underground service lines in working area existing, which were obstacles to drilling and lead to high abrasions of drilling equipment. High requirements on quality, safety and tolerance on site.



The project

For the phase K147, which is part of the Folloline Project in Oslo, it was necessary to execute a deep foundation for the slab of the tunnel. The project is part of the Inter City development, where the Folloline is a key project for the Oslo region.

The challenge

The foundation had to reach a load bearing soil layer, which was in this case deeper than 50m, represented by bed rock, larger 200Mpa. All piles were drilled at least 1m into solid bedrock. Above the bedrock, moraine and sensitive clays were present. An additional challenge was the existing sheet pile wall and unknown concrete foundations in the area where the piles were executed.

The solution

Due to the requirements for the deep foundation the KRCD (Keller Reverse Circulation Drilling) method was applied. This technique ensured the necessary quality and accuracy for the foundation works carried out in sensitive clay and embedment in hard bedrock. The piles had a casing of 273mm and a load bearing element of 150mm. Keller also executed the deviation measurements of the piles using state of the art drilling deviation technology.

Project facts

Owner(s)

Bane Nor Infrastructure

Keller business unit(s)

Keller Geoteknikk AS
Keller Grundbau GmbH

Main contractor(s)

HAB Construction AS

Engineer(s)

Gard Mogen, Site Manager HAB

Solutions

Bearing capacity / settlement control

Markets

Infrastructure

Techniques

Micropiles

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