



Key achievements

- Keller installed 67 pcs of Ø323 casings for a pile wall and 10 pcs of 19m anchors in 5 days
- All works were done during a 10-day shutdown of the railway line at Nittedal Station.

Application

Retaining wall

Technique

Pile wall

Market

Railroad, Infrastructure

Client

Bane NOR

Main contractor

NRC Norge AS

Geotechnical Designer

Rambøll

Keller companies

Keller Geoteknikk

Keller Grundbau

• The project

NRC have been contracted by Bane NOR to execute the construction works at Nittedal Station. The Station will be improved with a much longer 2 track line to be able to accommodate longer trains. In this regard it was necessary to construct a pile wall to be able to finish the remaining works. The pile wall will consist of Ø323 casings and will also have 2 rows of strand-anchors. Keller was contracted by NRC to execute the piling and anchoring works during the shutdown of the railway.

• The challenge

The challenge in this project were mainly the short available time to execute the works and the challenges with doing the pile wall and the anchors for the pile wall around the same time.

• The solution

The solution in the project was to mobilize our Comacchio MC40 drilling rig to be able to quickly establish enough of the pile wall to be able to do the anchors. The average length of the casings were 11m. All casings were drilled into solid bedrock with an air driven down the hole hammer. A total of 67 casings were installed in a short period of time. Excavation of the soil were done down to the first anchor row before the anchors were installed. 10 anchors of around 19 m each were installed. After finished production, the soil were put back and the railway lines and power lines were reestablished. The remaining works will be completed at a later time in another shut down.

Contracting project manager

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Project end date:

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