

## Test Piling New Mjøsbru

Moelv, Norway

### KEY ACHIEVEMENTS

5 pcs of Ø1000 and Ø1220mm driven piles with lengths of up to 125m and 65m water depth.

Work on a lake with modular barges and tugboat combined with a 400-ton crane.

Work in difficult conditions reaching minus 20 degrees Celcius.



## The project

Keller Geoteknikk has been commissioned by Nye Veier to carry out test piling for the new Mjøsa Bridge just outside Moelv. The purpose of the test piling was to investigate the ground conditions and load-bearing capacity of open and closed friction piles (steel piles) in Lake Mjøsa. Environmental experiments and environmental monitoring were also to be carried out. The planned road section E6 Moelv-Roterud includes a crossing of Mjøsa near Moelv. Two alternatives are being investigated in the planning work, where one alternative is a bridge that is parallel to the current bridge, and the other alternative is a southern alternative that crosses a little further south. This test piling was carried out to map the southern alternative.

## The challenge

- Pile driving from a lake – all equipment must be assembled in modules transportable onshore.
- Welding, lifting and transport of piles with lengths up to 125 meters from Tangenvika to Moelv.
- Long and heavy piles necessitated a large crane (400 tons), which was a challenge for the modular barges.
- Extensive environmental surveys at the same time and in close proximity to the piles.

## The solution

- Production area in Tangenvika with all necessary equipment for the production of steel pipes in designed lengths.
- Pile driving with 350 kJ hydraulic hammer and a 400-ton crane.
- Well-planned works and environmental surveys together with our subcontractor, Multiconsult.

## Project facts

### Owner(s)

Nye Veier

### Keller business unit(s)

Keller Geoteknikk

### Main contractor(s)

Keller Geoteknikk

### Engineer(s)

Technical manager Nye Veier  
Tor Heine Hvalby  
tor.heine.hvalby@nyeveier.no

### Solutions

Heavy foundations

### Markets

Infrastructure

### Techniques

Driven precast piles

**Email address**

info.no@keller.com

**Phone number**

+47 239 67120