



WATER & UTILITIES

Project:
Tunnel Reline
Wraysbury Reservoir Inlet

Location:
Staines, Middlesex

Barhale Business Unit:
Southern
Tunnelling

Client:
Thames Water

Value:
£0.83m

Excavation of a large diameter access shaft onto an existing tunnel together with tunnel relining in an area of high water table and to a demanding programme.

Barhale was appointed as Principal Contractor for the Wraysbury Reservoir inlet tunnel relining scheme, part of Thames Water's award winning Datchet project. The project required construction works to be completed against a demanding completion programme despite known challenging site conditions that included a very high level of ground water.

Barhale constructed the 9 metres diameter shaft using concrete segments which were sunk to a total depth of 45m to facilitate access to the existing tunnel. The first 11metres of excavation dig were in water-bearing river terrace gravels which necessitated the use of a wet caisson method. Below this level, Barhale's site teams encountered traditional London clay which enabled work to proceed using conventional underpin work to complete the shaft.

The existing 2.54m diameter tunnel was then re-lined with insitu concrete over a length of nearly 3km.

Because of the time constraints and the demands of the construction programme, Barhale's site teams worked around the clock: 24 hours per day and 7 days per week. This ensured the project was completed on time and within budget.