

PROJECT: RAW WATER RESERVOIR IMPROVEMENTS, BARROW GURNEY, BRISTOL.
SERVICE: CIVIL ENGINEERING



Reservoir wall and revetment before the works.



A completed section of the reconstructed wall.

Project Summary

Client : Bristol Water
Value : £564,000
Role: Civil Engineering Main Contractor

Tercon won the contract under a selective competitive tender. The contract required the upgrade of a near 1km length of the perimeter masonry wave wall to the reservoir as a part of an improvement scheme to improve water retention when the reservoir is full. The reservoir was originally built around 1880 to service Bristol.

The contract required very careful planning as all access was via a single track crest road with limited space for plant movements.

The water level was lowered in the reservoir to enable the access to the work. The project required the construction of a concrete retaining wall cast to the back of the existing stone wall with the masonry then removed and re-built to maintain the stonework face to the wall.

Key Elements of work

- The project was logistically challenging and the carefully developed methodology considered the restricted access to the works and safety and environmental conditions. To achieve the required programme meant a large number of masons and operatives on site at any one time.
- To ensure that structural integrity was maintained the work had to be completed in hit and miss sections as directed by the engineers.
- 480m³ of concrete cast into a retaining structural wall behind the new masonry.
- Over 1250m² of masonry rubble wall removed and re-built, fitted with over 950m of heavy stone copings with new concrete and masonry access steps.
- Reconstruction of the hardcore access and crest road on completion to the perimeter of the reservoir.



Almost 1,000m of level access scaffolding.



Works progressed in controlled sections.