

Victoria Embankment Water Main

Client:	Thames Water/Thames Tideway Tunnels
Location:	Victoria Embankment, London
Value:	£1.3m
Duration:	7 Months

The project along Victoria Embankment was advanced works for the prestigious Thames Tideway Tunnel scheme (TTT). This meant that it was imperative that a positive impact, image and reputation was established from the start of the project and maintained right through to completion. The Barhale team ensured they set high standards at Victoria Embankment which will go on to be the hallmark of the TTT project.



In Brief...

This project involved the installation of two new valves and two Syrinix trunk main monitoring devices on to an existing 30" cast iron water main in Victoria Embankment, central London. The works were required to prevent customers losing their clean water supply during the construction of a new shaft as part of the Thames Tideway Tunnel project. The works also included the design and assembly of a 200m long, 400mm diameter rider main installed above ground. This was to be used as a contingency plan in case there was any disruption to the 30" main during the shaft sinking works.

Location Details...

The site had two working compounds: Horseguards Avenue and Victoria Embankment. This is an incredibly busy area of London; with events taking place throughout the year and a constantly high volume of tourists visiting nearby attractions including Buckingham Palace and Downing Street. The Victoria Embankment works were mainly located within the central reservation of the road itself, which runs parallel to the River Thames and is one of the busiest roads in central London.

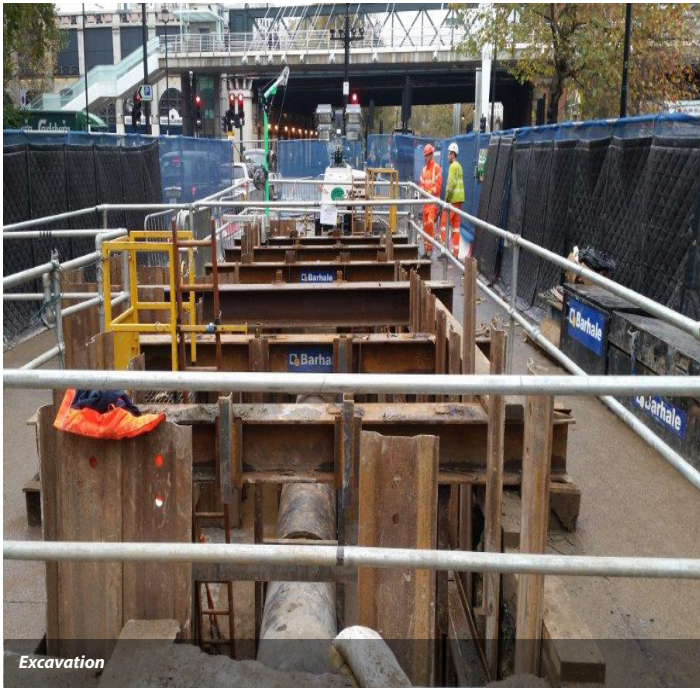
Technical Features...

Due to the location, a permit system had to be undertaken before works could begin, involving street notices and the closure of one lane of traffic at significant cost, meaning there was no room for error from the team. To insure against time delays, the team altered the programme to enable extended working times of; 20 hours a day, 6 days a week. Barhale were supported by The Westminster Noise Team, and after 8 months of work in the area had received zero noise complaints.

During the installation of the rider main the team developed an innovative idea to use bespoke pipe attachments. These attachments acted as a cradle which prevented the pipe from moving during both installation and operation, and ultimately provided an ideal solution to potential a safety risk to the public.

The installation of new pipework was done over three working phases, which involved closing the footpath along Victoria Embankment in sections. It was neither plausible nor safe to divert pedestrians across the busy four-lane road to the opposite footpath; therefore the Barhale team suggested diverting the flow of pedestrians through the adjacent Whitehall Gardens to mitigate the risk of pedestrian interface with traffic flows. Organisation of this diversion meant the team had to uphold constant communications with the park keepers from Whitehall Gardens to ensure they were aware of the proposed diversion, and kept up to date with any subsequent alterations. In early December, the existing water main on Victoria Embankment was isolated. Previous research suggested that water supplies would be lost for:

- Two boats moored on the Thames
- A nearby Yacht Club
- (and) local life boats



Technical Features Cont...

However, the team successfully provided a supply of fresh water to these customers through the use of water bowzers which were continuously filled every few hours throughout the isolation.

The team also received plaudits from the local council by successfully reinstating the excavations and completely demobilising from site for the Christmas period to ensure the safety of some 250,000 people who attended the Capital's New Year's Eve celebrations in 2014.

Customer Benefits/Feedback...

The Barhale team went the extra mile to ensure the impact on the local community and other stakeholders was kept to a minimum throughout the works. This involved collaboration with various third parties to guarantee the safety of road and foot passengers as well as the workers.

The site received numerous positive recognitions in delivering the project, ranging from; high scoring audits from Thames Water to individual letters of praise, including one from a neighbouring business for whom the team helped to maintain access as they staged weddings and corporate events.