



Thames Tideway Sewer – Central (UK) Waterproofing

Country

United Kingdom

Type

Sewer

Client

Tideway (Bazalgette Tunnel Limited)

Main Contractor

FLO JV (Ferrovial Agroman, Laing O'Rourke), Barhale

Execution of the work

Renesco UK Ltd.

Designer

Jacobs, Aecom, Cowi, OTB Engineering

Construction Period

2019 - 2022

Project Description

The 25km tunnel beneath London, the 'super sewer', will run from the Acton Storm Tanks in West London to the Lee Tunnel at Abbey Mills in East London, with most of the tunnel being under the River Thames. The flow from over 30 combined sewer overflows (CSOs) will be diverted from the sewerage network into the main tunnel, where it will flow by gravity to the existing Lee Tunnel. From there it will run to the Tideway Pumping Station, to be pumped to Beckton sewage treatment works. The main tunnel construction uses Tunnel Boring Machines (TBMs). Additional works will intercept the CSOs and connect them to the main tunnel.

With a total length of 12.7km, the central main tunnel will be driven with 8.8m diameter Earth Pressure Balance (EPB) TBMs and will run up to 60m deep between Fulham and Bermondsey. In addition, the works include the construction of eight shafts, interconnecting tunnels and pumping stations.

Scope of Service

Supply & Installation of waterproofing sheet membrane system under pressurized water conditions for the connection culvert, tunnels and CSO drop shafts at Falconbrook Pumping Station (FALPS), Cremone Wharf Depot (CREWD), Chelsea Embankment (CHEEF), Kirtling Street (KIRTL), Heathwall Pumping Station (HEAPS), Albert Embankment Foreshore (ALBEF), Victoria Embankment Foreshore (VCTEF) and Blackfriars Bridge Foreshore (BLABF).

- Sheet waterproofing, PVC-P, 2mm & BA-Anchor Installation for the Connection Tunnel and Shafts
- 1'200g/sqm PP protection geotextile
- PVC-P water barriers, 500/30/6
- Contact grouting injection tubes
- Termination at TBM segments and pre-castconcrete-elements
- Vulcanization/ Jointing of elastomer (rubber) based waterstops







- 1. Victoria Embankment Foreshore (VCTEF), shaft waterproofing
- 2. Albert Embankment Foreshore (ALBEF) job-site
- 3. Tideway interconnecting tunnel