



LAND & WATER

Innovation. Inspiration. Results.

“One-stop” dredging solution keeps Iconic Thames Tideway Tunnel project on track

WHAT WAS NEEDED?

Bringing urgent and much needed protection to the River Thames, Thames Tideway are delivering an Super Sewer in Central London to combat the pollution that the current sewage system creates in times of heavy rainfall.

BMB jv, the team appointed to deliver the western section of the monumental tunnel, needed help mobilising the Carnwath Road Riverside site. The Carnwath Road site suffered from restricted marine access during tidal windows which would significantly compromise the projects desired outputs. To work with the projects strict deadlines, BMB jv required 24/7 access so that construction works could continue at pace.

The far-from-straight-forward enabling project for Land & Water had several considerations. Alongside the challenge of the tides and working hours limited to the night, the biggest test lay in the immediately adjacent river bed, where the late winter/early spring timeframe meant that the fish spawning season was impending.

Aware of the significant environmental and time constraints, BMB jv needed an expert they could trust to provide a solution. They were aware of Land & Water's expertise of dredging on the Thames, and they knew they could rely on us to provide an efficient and environmentally compliant solution to the fish spawning and logistical issues they were facing.

Land & Water's specialist knowledge of complicated regulations means that fully compliant solutions can be found to environmental constraints such as fish spawning.

LAND & WATER'S SOLUTION

From the outset, it was determined impracticable to complete the project in the short time frame before the fish spawning season began. Recognising BMB jv's need to sustain continual barge movements during this period to the keep the project on track, Land & Water worked on finding a workable and bespoke solution to ensure that Tideway's programme could be maintained.



We are delighted to have been able to offer a timely solution that has enabled Tideway to continue with their project.. At Land & Water, we understand the complexities that the river environment can produce and pride ourselves on providing workable and one-stop solutions to these issues.

James Maclean,
CEO of Land & Water Services Ltd





The solution was to complete temporary dredging work along a pile line opposite the tunnel shaft. The rapid operation, with no compromise on quality, created depth at the Carnwath Road area of the River Thames so that barges could access the river side and load spoil generated from the tunnel shaft excavation works.

To ensure the tunnel shaft excavation works could continue at pace, BMB jv required full site access during the day. This required Land & Water to utilise specialist knowledge and expertise to operate throughout the night on a high tide; contesting tidal

changes until the water became too shallow to operate in.

Unavoidably, this significant dredging project created large amounts of dredged material. However, working with our strategic partner, GPS Marine Contractors Ltd, the material was taken down river where it was reused at Land & Water's Rainham Marshes Habitat Creation scheme in Essex.

Land & Water's unique capacity to re-use and dispose of waste quickly, safely and efficiently meant that BMB had one less problem to manage as Land & Water can provide a "one-stop" solution on the Thames which handles everything from gaining compliance to safely removing waste materials.

The project required the use of specialist equipment including a long reach excavator (fitted with a GPS controlled, 3D machine control dig system) and a spud leg pontoon. With immediate access to a wide portfolio of plant, Land & Water were able to deploy directly from other project sites on the River Thames, which provided a very competitive solution to BMB.

Land & Water have now returned to the site to complete the dredging project, following successful completion of other projects for Tideway Central at Chelsea Embankment.

THE RESULTS

- A workable and competitive solution completed within a very tight window of just 17 days.
- The phased and sensitive approach to the works meant the fish were protected while Tideway could still meet their tight working deadlines. Other solutions would have been a compromise.
- Land & Water managed the challenges of the tide during the night so that Tideway could have full access to the site during the day.
- Land & Water were able to offer a "One-Stop" dredge and disposal solution

