

Walthamstow Wetlands

KEY PROJECT DETAILS

Client	Thames Water Utilities Ltd		
Value	£530K		
Project Start	August 2019	Project Finish	January 2020
Location	Walthamstow, London		
Works	Design, construction and commissioning of a new pumping station and associated rising main at The Wetlands Centre		



The Wetlands Centre is Thames Water’s flagship visitor location in the heart of Europe’s largest urban wetland nature reserve. The reservoir is home to a huge variety of bird species and is London’s largest recreational fishery, with a wide array of wildlife to be enjoyed by walkers and visitors.

The visitor centre in the facility has many thousands of visitors per annum and before this project it did not have access to mains drainage which historically had led to regular tankering visits (3 x week) and associated cost and vehicle movements.

As part of the solution to introduce an appropriate drainage solution in such an environmentally sensitive area, J Browne designed, constructed and commissioned a new pumping station and associated rising main at this location included two pipe bridges, 100m under river horizontal directional drill, a new submersible pumping station and 300m of rising main installed in open cut.

Delivering in a Sensitive Environmental Location

Working in such a richly diverse environmental location meant we had to carefully consider all aspects of our methodology at the design stage. Working closely with the Thames Water project team were able to effectively design environmental, health, safety and well-being risk out of the process.

We ensured that noise was monitored carefully and used well-serviced and maintained equipment and selected based on the lowest practical noise output.

Selected excavated material was used for trench backfill, and the bricks from a small pumping station building demolished as part of the works were retained on site for re-use. These measures reduced waste to landfill to meet the 90% target.

Customer & Community Interface

Pre-Construction

We worked closely with Thames Water and the Wetland Centre Management at ECI and design stage to ensure that we had considered the requirements of visitors to the Centre and that we minimised disruption to guests and residents

living locally. This approach helped contribute to zero complaints being received on the Wetlands project.

During Construction

We consulted with the Thames Water project team and the Centre management to agree an appropriate printed façade for use on the fencing erected for the works. By using this screening, we minimised the negative aesthetic impact that can sometimes result from unscreened civils construction work.

We employed local labour; just over 50% of our direct workforce, supply chain and SMEs lived within a 10-mile radius of the site helping boost the local economy and minimize vehicle movements and parking in the vicinity of the site.

We prioritised pedestrians and vulnerable users at all times. We ensured that our deliveries and site movements did not conflict with pedestrians, visitors, horse riders, dog walkers or any other users of the Centre and surrounding facilities. We clearly identified pedestrian routes past the works and where it was necessary for our equipment to cross any pedestrian routes, we arranged this via a set of gates and under the strict control of a banksman.

Post Completion

We have contributed towards building a new green roof on the site and have provided a wildflower reinstatement area, both initiatives leading to further improvements on site.

A 4,000-gallon tanker historically visited the Centre three times per week to remove the waste flow. The cessation of this tankering activity has reduced weekly CO2 emissions by c500kg. The construction of the new pumping station has significantly reduced the risk of pollution to the Coppermills Stream, protecting this strategic raw water feed into Coppermills WTW.