



The iconic tower of the pumping station



The Waddon steam engine in the museum

HISTORIC PROJECT

LONDON MUSEUM OF WATER AND STEAM

London

CLIENT:

KEW BRIDGE ENGINE TRUST

ARCHITECT:

DANNATT, JOHNSON ARCHITECTS

COST:

£500,000

Water Supply in London

In the early 19th century, public concern about sewage in the lower Thames convinced the Grand Junction Water Works Company to pump drinking water from a new site by Kew Bridge. Kew Bridge Works started supplying water in 1838, using a Maudsley beam engine to deliver water to the company's customers at Paddington. In 1840 and 1842 the two Boulton & Watt engines, which had worked at Chelsea, were re-erected at Kew Works and supplied water to Ealing as well as Paddington.

Minimum standards of water quality set by the Metropolitan Water Act of 1852 forced the water company to take water from even higher up the Thames, above the tidal limit at Teddington Weir. The GJWWC built new intake and treatment works at Hampton and the water was then pumped to Kew Bridge Works, which became an intermediate pumping and treatment station.

The Metropolitan Water Board took control of the private water companies in 1902. The beam engines at Kew Bridge continued working until 1944, when they were replaced by diesel and electric powered pumps.

The London Museum of Steam and Water

With commendable foresight, the massive beam engines were preserved at the site. The present Museum Trust took over the works in 1974, and one by one restored the huge engines to working order, starting with the Boulton & Watt engine in 1975 and lastly with the Bull engine in 2008.

As water companies ceased to use steam engines, a number were offered to the museum and are now located in the Steam Hall, at one time the boiler house.

Project Aquarius

A major project to increase public awareness and use of the Grade 1 listed museum has just been completed. EngDesign were appointed as consulting mechanical and electrical engineers, to design new lighting and power supplies, upgrade the main electrical intake, and coordinate specialist AV equipment and exhibition design.

The redevelopment was supported by the Heritage Lottery Fund, London Borough of Hounslow, Thames Water and numerous charitable trusts, sponsors, and individual donors. The project included new educational displays across all areas,

bringing the history of the pumping station and its engines to life, and a major new gallery exhibition on London's past, present and future water supply, the water-for-life exhibition.

Building Services

A fan convector and radiator heating system has been designed and installed for the new exhibition, shared with the free-access entrance café. A gas-fired unit heater provides warmth in the industrial setting of one of the new exhibition rooms, while re-used cast-iron radiators are included in the separate heating system for the adjoining new education room.

Exhibition lighting uses LED fittings for crisp spotlighting and to reduce the maintenance problems with the high-level lamps, particularly in the Steam Hall and water-for-life exhibition. More traditional light fittings are used to fit in with the steam-age ambience elsewhere.

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