



BIFFA

# Westmill Leachate Treatment Plant Fabrication Works

JULY 2014 TO FEBRUARY 2015

## Westmill LTP Fabrication Works Case Study

The Westmill Leachate Treatment plant was designed and built by Phoenix Engineering (Phoenix) for Biffa Waste Management. Located at the Westmill Landfill Site in Hertfordshire, it is designed to treat 75m<sup>3</sup>/day of leachate from the landfill and 75m<sup>3</sup>/day of leachate imported from other nearby Biffa operated landfills.

### Fabrication Works

As part of the contracted works, Phoenix undertook the detailed structural design, developed fabrication drawings, fabricated and installed the interconnecting galvanized steel access platform for the process treatment tanks.

Due to the limited space on site the process tanks were constructed adjacent to each other with very limited space between them. The control and plant room was located between the two process tanks.

This provided an opportunity to engineer a vertical access tower, with landing supported off the top of the control and plant room, connected to an access bridge which spanned between the two process tanks. Keeping to the compact nature of the site and using this to the benefit of the design.

The galvanized access platform was self-supporting to ensure that there were no loads transferred into the adjacent tank structures. It was fabricated at the Phoenix Fabrication Unit and sent for galvanizing at a local galvanizing company.

It was then transported to site where Phoenix undertook the full installation involving cranae and working at height procedures and equipment.

Lifting equipment was mounted on top of the access platform for use in maintaining mechanical plant within the process tanks. The lifting equipment and access platform installation was load tested and certified.

Phoenix undertook designs and fabrication of galvanized support structures for numerous items of mechanical plant.



### Pump Support Skids

Phoenix design and fabricate galvanized support skids for mechanical pumps and equipment.



### Installation

Phoenix undertook full installation of the galvanized steel access platform.