



FCC

OCTOBER 2010 TO JULY 2011

Bletchley LTP Fabrication Works Case Study

This state of the art leachate treatment plant was designed and built by Phoenix Engineering (Phoenix) for FCC Environment (formally WRG). Located at the Bletchley Landfill Site in Milton Keynes, it is designed to treat 200m³/day of leachate from the landfill. Treated leachate is discharged to sewer under a strict consent from Anglian Water.

Fabrication Works

As part of the contracted works, Phoenix undertook the detailed structural design, developed fabrication drawings, fabricated and installed the complex access platform and gantry which spanned across all the concentric process tanks.

The access steps to the platform where a multi-staged tower connecting to a bridge section spanning over the treatment plant access road. The bridge connected to a 'star' shaped access platform and overhead gantry bearing on top of pre-cast concrete process tanks.

The access platform supported a central control and communications kiosk and various mechanical plant located in each of the process tanks via guide rail systems.

Various process instrumentation was also supported off the access platform.

The access steps, platform and gantry 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 and stainless-steel support structures and vessels for numerous items of mechanical plant and process equipment.



Installation

Phoenix undertook the full installation of the access steps, platform and overhead gantry.



Access Platform

The access platform and overhead gantry provided safe access to process plant, equipment and instrumentation.