

Lartington WTW

Contract Value	£6.86M	Commenced	Feb 2007
Contract Period	106 Weeks	Completed	Ongoing

Features

- Refurbishment of existing operational works
- Sludge holding tanks
- Dewatering Plant
- Demolition Works
- New Electrical & Mechanical plant
- New Laboratory effluent transfer system
- NEC ECC 2nd Edition Contract – Option C

Brief Description

Lartington Water Treatment works (WTW) is situated 4km west of Barnard Castle in Co. Durham.

Sludge from Lartington WTW is currently pumped to Cotherstone Moor, where it is dewatered by centrifuge before spreading on adjacent landfill site. A feasibility study concluded that this was not sustainable. The report concluded that thickening and dewatering of the sludge on the Lartington WTW site, with off-site disposal or reuse provided a robust long term solution.

Byzak are also concurrently undertaking the progressive restoration of the Lartington WTW Sludge Disposal Area (Cotherstone Moor) and this schemes completion will coincide with sites closure and return of the area to match its SSSI moorland surroundings.

- Refurbishment of the existing pumping stations to transfer the flotation sludge and the washwater sludge to the new sludge holding tanks.
- Two WRc thickeners including feed pumps and desludge pumps
- Thickener supernatant transfer and disposal
- Containerised dewatering plant including feed pumps, centrifuges, cake conveying and discharge system.
- Polyelectrolyte preparation units for the sludge thickening and sludge dewatering plants.
- Pumphouse Building
- Polydosing Building
- Automation of the contact tanks outlet valves and incorporation into the site SCADA system
- A new laboratory effluent transfer system diverting laboratory effluent into the backwash water system for treatment / discharge.
- A new analyser buffer discharge transfer system, feeding into the new laboratory effluent system
- A new polyelectrolyte dosing system for the washwater settlement tanks
- Water and power supply
- MCC and instrumentation
- Additional SCADA and PLC hardware and software



The scope of the Lartington WTW works are construction, manufacture, factory acceptance testing, certification, supply and delivery, installation, site testing & commissioning and performance testing of the following elements:

- Demolition of the four existing glass lined steel sludge holding tanks
- Construction of three sludge holding tanks within the disused sand filter – one to be used as an unthickened sludge tank and two as thickened sludge holding tanks
- Automation of the clarifier desludging system

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