



Remediation and enabling works on a former landfill site

West Bromwich, Midlands

Client: Countryside

Value: £3.5m

Site area: 7ha

Timeframe: 40 weeks (over two phases)

End use: 232 private and affordable homes

Challenge

Remediation and enabling works to prepare this former landfill site for the construction of 232 private and affordable homes.

Site investigations had uncovered extensive physical and chemical contamination of soils, including gassing from landfill waste that had been broken down by bacteria.

The site's location – next to a canal and surrounded by a residential area – meant ecological and considerations were key.

Solution

We designed a concurrent programme of remediation and enabling works, making phased release of the site possible.

Extensive environmental monitoring was put in place, which provided real-time data on dust, VOCs, vibration, and noise, minimising disruption to local residents.

Our team dug out soils to 4mbgl as part of full-site turnover, tracking dig locations and materials movements for verification using our in-house 3DMC plant.

We sustainably processed and reused 240,000m³ of material onsite. This included production of 6F2, which was used within piling mats.

Contaminated soils were remediated using a treatment-train approach of bioremediation and Stabilisation/Solidification, while impacted groundwater was treated with one of our in-house pump-and-treat plants. We also removed Japanese Knotweed and pockets of asbestos.

As part of remediation works on this former landfill site, we managed the design and installation of a gas collection system. This will capture and manage any potential gas produced from deeper made ground within the site.

RESULTS

- Finished on programme and on budget
- Processed and reused 95% of material onsite
- Phased release of the site brought new homes to market faster
- Managed the installation of a bespoke gas collection system
- Strict health and safety protocol, with zero incidents