FURLONG
Ground Stabilisation

CASE STUDY

Earthworks

Soil Stabilisation

Site Remediation

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Date: Nov 2025

Project: East London Commercial Development

Client: Private Commercial Developer

Process: Demolition and Foundations Removal – By MC

Excavate min 2.0m. Turnover, Rake and Replace for Treatment – **5,000m3**

Cement Stabilisation to achieve >15.0% CBR encapsulation (100Mpa) – **5,000m3**

Subbase Replacement Stabilisation to achieve >30% CBR (150Mpa) – **4,500m2**

Duration: 6 weeks

Remediation Strategy

Human Health Risk Assessment

A Tier 1 human health risk assessment was undertaken, using the results from soil chemical analyses and benchmarking these against appropriate Tier 1 criteria. The findings of this assessment identified elevated levels of heavy metals and non-volatile polycyclic aromatic hydrocarbons (PAHs)

Targeted Remediation Depth

In order to manage the risks posed to human health and to reduce the likelihood of contaminant leaching, remedial efforts should focus on the soil from the current ground surface down to a depth of 2.00 metres. This depth is approximately 1.00 metre below the base of the slag layer. Treating soil below this level would not be cost-effective, as the primary risk is contained within the upper strata.

Distribution of Contaminants

Soil and leachate testing indicates that the majority of heavy metal contamination is confined to the top 2 metres of soil, measured from the current ground level, across the affected area.

Remedial Actions

In summary, remedial measures were necessary for shallow Made Ground soils to a maximum depth of 2.00 metres The remediation concentrated on encapsulating affected soils by cement stabilisation, thereby minimising the risk of contaminants leaching and migrating through the Quaternary superficial deposits strata to the underlying London Clay.