

# Project Phase I, Phase II, Validation



## Client

McInerney Homes (North Region)

## Cost

Confidential

## Location

Vulcan Street, Oldham

## Program

5 Months



Granville Mill, with the accompanying mill ponds, boiler house, chimney and reservoirs, was unfit for restoration. The mill ponds were backfilled with waste and the site had become derelict due to a fire in 1999. The buildings and chimneys were subsequently demolished. The potential for sub-soil contamination and the presence of landfill gas was therefore identified on the site.



LK Associates investigated the site through the sinking of window sample boreholes, the excavation of trial pits, soil and water sample collection and analysis. Standpipes were installed on the site to enable the monitoring landfill gases. The geotechnical properties of natural ground were derived using in-situ and ex-situ geotechnical testing techniques. Soil sample analysis proved contaminants to be present in levels exceeding Environment Agency soil guideline values and site specific assessment criteria derived by LK Associates.

As a result of the risk assessment recommendations were put forward for remediating the site, with suitable recommendations made for capping layer depths and constituents.



Due to the large areas of infilled land and underground brick structures such as chimney foundations and an ancient culvert, the geotechnical properties of the ground were deemed to be unsuitable.

LK Associates, together with McInerney Homes, devised a remedial strategy which was approved by the Local Authority. This strategy incorporated the removal of hotspot contaminated areas in conjunction with the excavation, sorting and screening of the top 3-4m of made ground in the identified areas on the site. Replacement of the material was carried out in an engineered fashion to enable mini-piles to be used for the foundation option.

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Leyden Kirby Associates has worked with McNerney Homes to supervise the remediation of the site, which has included applying for Landfill Tax Exemptions and Waste Management License Exemption. A Validation and Site Completion Report is in the process of being produced to ensure the site will be suitable for its proposed residential end-use and to assist the local authority and NHBC in the discharge of any relevant planning and NHBC conditions.

