

ABSTRACTS OF PRELIMINARY RISK ASSESSMENT

PARK GROVE, MANCHESTER, M19 3AQ

INTRODUCTION

A commercial development is proposed on above mentioned premises after demolishing the existing one. The objective is to carry out a *Preliminary Risk Assessment* to consider contamination, landfill gas and geotechnical issues. This report is referred to as a Preliminary Risk Assessment (PRA) and prepared by Worms Eye Ltd, P O Box 115 Colne, BB9 4HS

The conclusions derived in "Geo Environmental Study" already submitted at the time of planning application, should be considered which state that gas and flood risks involved are moderate to low

SITE DESCRIPTION

The site is irregular shaped, about 40 by 26 metres, located to the north of Park Grove in Manchester and at OS Grid Reference 387287, 394673. The site comprises a dilapidated single storey building at the west/middle (used as a mosque), with a surrounding tarmac surfaced car park. At the northeast corner is a single storey brick, garage with modern sheet metal roof.

To the north, south and west are houses and to the east is offices/classrooms. The area is generally level with a gentle slope down to the northwest from the site. (Page 1)

ENVIRONMENTAL DATA

A Landmark Envirocheck report and geological maps have been reviewed by WORMS, the following is a summary of the combined data. The Envirocheck report indicated none of the following within 250 metres:

- Contaminated land register entries
- Discharge consents
- Substantiated pollution incidents
- Water abstraction points or Source protection zones
- Landfill sites

- Hazardous substances sites
- Sensitive land uses

(Page 2)

Geology of Site

The geological map indicates that the underlying solid rocks are sandstone of the Chester Formation.

Surface drift is shown as glacial till (boulder clay) of unknown thickness and natural subsidence hazards are shown as very low to no hazard. (P-3)

Radon

The site is in a lower probability radon area as less than 1% of homes in the area are above the radon action level. Radon protection measures are not required. (Page 3)

Flooding

It has been discussed on page 3 having low risk only from burst pipes, blocked drains, sewers, inadequate drainage etc (P-3)

Contamination has been discussed at page 5.

Filled ground has been discussed at P-4. The suspected filled features, minimum is 19 m in south.

Contamination has been discussed at page 5.

It is likely that made ground will be present in that area. Similarly, if the original houses had basements, made ground up to 2-3m deep may be present. The works/commercial use are potential sources of contaminants, as is made ground, and demolition rubble if this was left on site. (Page 6)

Landfill Gas/Ground Gas

Although there are no landfill sites within 250m, there are several filled features within 250m. These are small, potential sources, of ground gases, however, the underlying clay is expected to impede the passage of gas from off-site sources, and not pose a risk.

There is probable made ground on-site, possibly up to 2-3m at most if basements were present and

most likely demolition rubble. This would be expected to have a very low to low gas generation potential at worst and a very low to low risk. (Page 7)

Foundations

It is expected that there will be made ground overlying clay, and a range of foundation options may need to be considered.

If foundations are to be on clay the shrinkage potential of the clay needs to be determined, to ensure foundations are below the potential effects of tree root shrinkage. (Page 6)

Conclusion

The structural engineer reports to have pile foundations on site and submit the log file to this office.