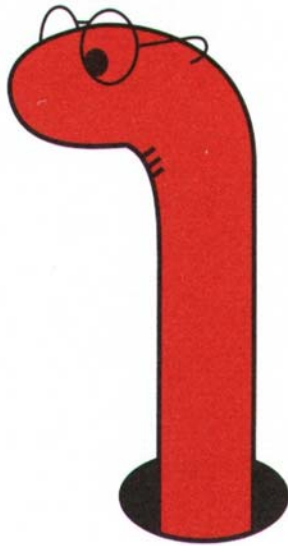


# **Electronic Report**



## **WORMS EYE**

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Our Ref: Lord Street/BL9 0RE/2021  
Date: 19 April 2021

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**69A LORD STREET, BURY, BL9 0RE**  
**PROPOSED INVESTIGATION**

**INTRODUCTION**

A mixed residential/commercial development is proposed. Following a PRA (19/4/21) the objective is to design an investigation to consider potential contamination, landfill gas and geotechnical issues.

**SITE DESCRIPTION**

The overall plot is about 42 by 18 metres, located to the southeast of Lord Street in Bury and at OS Grid Reference 380880, 410490. The area of the proposed development, referred to as 'The Site' is about 16 by 16 metres, at the northwest/middle of the plot. The site is hardcore surfaced and used for car sales at the northwest/middle. The southeast comprises a flagged yard, used to store building materials and waste,

To the northeast and southwest are small retail units, to the northwest is the car park to a supermarket and to the southeast are houses. The area is generally level.

**PROPOSED DEVELOPMENT**

The proposal is to build a block of four retail units at ground level. The middle two units will have seated dining at first floor level, and the outer two units will have flats at first floor level. Flats will also be created at first floor level in No.69 to the northeast and in the building immediately southwest.

At the rear (southeast) of the new building will be a communal court yard with an existing building being converted into a bin store.

## **INDUSTRY PROFILE**

The site has had no industrial use. Contaminants may be present in made ground/demolition rubble or small leaks from parked vehicles.

| Industry               | Possible Contaminants                                                                                                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Potential Contaminants | Metals: copper, zinc, chromium, nickel, lead, cadmium, arsenic,<br>Inorganic compounds: cyanide, thiocyanate, sulphates<br>Mineral oils, fuel oils (TPHs)<br>Asbestos<br>General hydrocarbons (PAHs) |

## **CONCEPTUAL MODEL**

| Source                 | Receptors                | Pathway                                         | Potential/Likely Pollutant Linkage |
|------------------------|--------------------------|-------------------------------------------------|------------------------------------|
| Asbestos               | Householders             | No pathway                                      | No                                 |
|                        | Off-site                 | Migration off-site                              | Possible                           |
| Inorganic contaminants | Householders             | No pathway                                      | No                                 |
|                        | Groundwater              | No pathway                                      | No                                 |
|                        | River/stream             | No pathway                                      | No                                 |
| Sulphate               | Building fabric          | Concrete directly in contact with soil          | Yes                                |
| Hydrocarbons           | Householders             | No pathway                                      | No                                 |
|                        | Service pipes            | Seeping into drinking water pipes               | Yes                                |
|                        | Groundwater              | No pathway                                      | No                                 |
|                        | River/stream             | No pathway                                      | No                                 |
| Hydrocarbon vapours    | Householders             | Inhalation of vapours indoors and outdoors      | No                                 |
| Landfill gas           | End-users - in buildings | Seeping into buildings, explosion, asphyxiation | Yes                                |
| Radon                  | End-users - in buildings | Seeping into buildings                          | No                                 |

## **PROPOSED INVESTIGATION**

### **Contamination**

Taking into account the past use of the site it is thought unlikely that contamination will be present on the site at high levels. Although low levels, exceeding stringent residential thresholds, may be present they are not expected to be high enough to pose a risk to end-users/householders on this hard-surfaced development.

A limited intrusive investigation is suggested, consisting of boreholes/trial holes and tests to confirm the presence/absence and extent of contamination on the site. This will also help to classify material for disposal off-site, design buried concrete and select appropriate drinking water pipes.

There are no specific point sources for contamination.

Proposed Action

- Drill 3 boreholes to about 6 metres deep and 1 borehole to about 1m.
- Test 4 shallow samples (about 0.25m) for heavy metals, cyanide, sulphate, asbestos, TPHs and PAHs
- Test 2 deeper sample for a suite of contaminants suitable for selecting water pipes.

**Controlled Waters**

No risk to controlled water is expected and no further action is considered necessary. This may need to be reviewed following the soil tests.

**Landfill Gas/Ground Gas**

There are several nearby filled features, and possible made ground on site. A low gas risk to the development is anticipated and a gas testing programme is required.

Proposed Action

- Install 3 gas monitoring points.
- Test for methane, carbon dioxide, oxygen and gas outflow on 6 occasions over 3 months,

**Foundations**

A series of boreholes are required in the area of the proposed building to allow the most suitable foundations to be designed.

Proposed Action

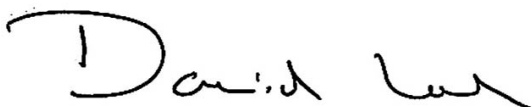
- Supplement boreholes with 1 dynamic probe and a series of SPT tests.

**General**

The PRA, and these proposals, should be issued to the Local Authority for their comments before proceeding with the investigation.

Yours faithfully

on behalf of Worms Eye Ltd



David Lord  
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