



Phase I Geo-Environmental Desk Study

The Cottage
Gledhow Lane
Leeds
LS8 1NQ

Prepared for:

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THE COTTAGE, GLEDHOW LANE, LEEDS, LS8 1NQ

NON-TECHNICAL CLIENT SUMMARY




This report presents the findings of a Phase I Geo-Environmental Desk Study which was carried out to identify potential contamination from previous or current uses of the site and surrounding area and to provide an initial assessment of geological and geotechnical aspects of the site and how the proposed development or surrounding environment might be affected.

- The site is currently a cottage with associated driveway, greenhouse and extensive garden with mature (>10m high) trees and masonry walls comprising the boundaries. The first structure is anticipated to have been built in approximately 1893, with multiple buildings and extensions being added since. There are also two sheds in the western area of the garden. The proposed development plan includes redevelopment of the existing cottage and construction of another residential dwelling in the gardens in the western area of the property.
- The site is reported to be underlain by the Elland Flags Formation (Sandstone). No superficial material has been mapped beneath the site meaning that bedrock is likely to be encountered at shallow depth. The bedrock has been categorised as a Secondary A Aquifer meaning it would be considered moderately sensitive, although no groundwater is abstracted in the surrounding area.
- Prior to 1893, the property was a rural field with a footpath running through the centre. The surrounding land was largely rural / agricultural land until the early 1900s, before residential houses began to dominate land to the north, south and west. Land to the east has remained a sports ground throughout the 1900s to the modern day. Historic maps also record multiple sandstone quarries within woodlands to the southeast until around the 1930s.
- Considering the site's history and the context of the development, there are not considered to be any unacceptable risks to future site users or environmental receptors. As a result, no further investigation is considered necessary, but a number of recommendations have been included to ensure the development is suitable for its future site use.
- It is recommended that this report is submitted to Leeds City Council to support any future planning application and for inclusion within their land quality records.

By their very nature, the above bullet points represent a simplified summary of our work and must not be relied upon to form the basis for key decisions for the proposed development. A full picture is provided in the following report, or alternatively give us a call and we'll talk you through it.



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The report has been written, reviewed and authorised by the persons listed above. It has also undergone EPS' in house quality management inspection. Should you require any further assistance regarding the information provided within the report, please do not hesitate to contact us.

The National Planning Policy Framework requires a competent person to prepare site investigation information, which is defined as a person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation. EPS considers that it fulfils these criteria and would welcome any request for staff CVs or case studies to demonstrate it.

As stated within DEFRA's Contaminated Land Statutory Guidance, with any complex risk assessment it is possible that different suitably qualified people may reach slightly different conclusions when interpreting the same information. EPS recognises this and considers the conclusions presented within this report to be robust and appropriate but input from the Local Authority and their judgement in line with this guidance would still be welcomed.

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Objectives.....	1
1.2	Project Limitations and Constraints.....	1
2	GEO-ENVIRONMENTAL SETTING	2
2.1	Site Location and Description.....	2
2.2	Environmental Setting.....	3
2.3	Site History.....	5
3	PRELIMINARY RISK ASSESSMENT & CONCEPTUAL SITE MODEL	7
3.1	Background.....	7
3.2	Source Characterisation.....	7
3.3	Potential Receptors.....	8
3.4	Potential Pathways.....	9
3.5	Summary of Contaminant Linkages.....	10
4	GEOTECHNICAL GROUND MODEL	11
5	CONCLUSIONS & RECOMMENDATIONS	12

Figures

Figure 1	Site Location Plan
Figure 2	Current Site Layout
Figure 3	Aerial Photograph

Appendices

Appendix A	Selected Site Photographs & Walkover Notes
Appendix B	Proposed Development Plan
Appendix C	Surrounding Land Use
Appendix D	Geological Context
Appendix E	Groundwater Vulnerability and Flood Maps
Appendix F	A Selection of Historic Maps
Appendix G	Method Statement for Encountering Unexpected Contamination

1 INTRODUCTION

In June 2022, EPS (Leeds) Ltd was commissioned by ID Planning on behalf of John Hope to complete a Phase I Geo-Environmental Desk Study on The Cottage, Gledhow Lane, Leeds, LS8 1NQ ('the site'); see Figure 1.

The work was commissioned in order to fulfil planning requirements inclusive of the alteration of the existing cottage, and construction of a five-bedroom house with associated drive and garden areas.

This report presents the findings, conclusions, and recommendations of the Phase I Desk Study undertaken for the site as instructed.

1.1 Objectives

The purpose of this desk study is to evaluate the potential contaminant linkages which may be active at the site in its current condition, or could become active in future, and to determine if any action is required to investigate them further or to break them.

This is achieved by carrying out the following activities:

- a) Examining the site history - late 1800s to present day, through collection of historical maps of the area, site records, records held by relevant local authorities, the Environment Agency and review of other information databases.
- b) Characterising the site's environmental and geological sensitivity through examination of existing geological, hydrogeological, topographical, and historical maps and aerial photographs of the area.
- c) Identifying Potential Areas of Concern (PAOCs) through a combination of historical map and data review.
- d) Consideration of any future plans for the site and the effects any proposed changes may have on contaminant linkages over time.
- e) Development of a Conceptual Site Model through a Preliminary Risk Assessment to evaluate the potential risks posed by the site and make recommendations for any further work that may be required to ensure suitability for use and safe development. In accordance with the Environment Agency's *Land Contamination: Risk Management* (2020) and the *National Planning Policy Framework*.

1.2 Project Limitations and Constraints

The purpose of this report is to present the findings of a Phase I Geo-Environmental Desk Study conducted at the location(s) specified. When examining the data collected from the investigations made during the assessment, EPS makes the following statements:

This report does not include specific investigation for the presence of either Potential Asbestos Containing Material (PACM) or Japanese Knotweed at the subject site however, if obvious evidence of either is observed during EPS site walkover, details will be provided in this report. Specialist contractors should be commissioned to make detailed assessments and recommendations if these materials are suspected.

2 GEO-ENVIRONMENTAL SETTING

The following section provides a summary of the information collected in relation to the site location and history

2.1 Site Location and Description

Detail	Description
Location	The site lies of the approximately 4km NE of Leeds City Centre, situated within the area of Roundhay.
Grid Reference	431700, 437160
Topographic Elevation	The site is generally flat, situated approximately 117mOAD (metres above ordnance datum).
Description of Site	<p>The site is rectangular in shape, with an area of 1600m² and is accessed from a gravel drive that runs from Gledhow Lane in the south. The Cottage has a small gravel parking area that gives access to the property, gardens and garage. Access could not be gained to the garage at the time of the walkover but the site owner suggested that it was empty, it should be noted that they were also suspicious of some potential asbestos containing materials (ACM) within the garage. The Cottage is a stone-built structure from around 1851, although it is understood that several small extensions have been added since this time. A small courtyard area is present in the east where it was generally overgrown with shrubs and several trees were present around the boundary. A gate in this courtyard gave pedestrian access to Gledhow Wood Grove to the northeast. A large brick-built extension on the western side of the cottage was used as a greenhouse with clear plastic corrugated roof and glass windows around the outside. There was evidence of sophisticated but small-scale growing of grape vines and other fruit/vegetable plants. No mass chemical storage including pesticides or herbicides were noted.</p> <p>The garden area extends approximately 50m from The Cottage and is made up of a patio immediately west of the cottage before a lawn extends for much of the remaining distance. It should be noted that a number of fruit trees were present within the garden and the northern half of the western area was predominantly decorative shrubs and plants. A raised area was present near the western boundary which appears to have been a rockery that has become overgrown. A summerhouse and a shed were also noted close to the western boundary, both of which were empty at the time of the walkover.</p> <p>A number of mature trees are present around the boundary, particularly in the south where large Cherry and Handkerchief trees were noted within the boundary towards the building.</p>
Surrounding Land Use	There are several residential properties that share the same access road as the one used for The Cottage. There are also further residential houses to the north, south and west. Gledhow Sports & Social Club is located immediately to the east. Gledhow Park, an area of dense woodland, is located around 200m south of the property.

A plan showing the site location is provided as Figure 1, the current site layout is detailed on Figure 2 and an aerial photograph is included as Figure 3. Selected Site Photographs and Walkover Notes are included as Appendix A. An indicative proposed development plan is included as Appendix B and relevant extracts of a Landmark Envirocheck report showing surrounding land uses are included as Appendix C.

2.2 Environmental Setting

Detail	Description	
Geology	<p>Geological maps of the area show the site to be directly underlain by the Elland Flags – Sandstone. No superficial deposits are mapped within the site.</p> <p>To the north, 826m, and south, 640m, of the site there are faults orientated southwest to northeast.</p> <p>Information on the site’s geological context is included as Appendix D.</p>	
British Geological Survey (BGS)	<p>A number of recorded mineral sites are present within a 1km search radius. The nearest of which is at Gledhow Land, 326m E, an opencast quarry which extracted Sandstone from the Elland Flags and has ceased operation.</p> <p>There are no historic borehole records within the immediate area, two are located at Gledhow Primary School, around 250m to the northwest which note around 300mm of topsoil underlain by shale and sandstone (BGS ref. SE33NW141). These logs are also included within Appendix D for reference.</p>	
Geological Hazards	Hazard	On Site Risk
	Mining (non-coal)	Highly Unlikely
	Coal Mining	No Hazard
	Collapsible Ground	Very Low
	Compressible Ground	No Hazard
	Ground Dissolution	No Hazard
	Running Sand	No Hazard
	Landslide	Very Low
	Shrinking / Swelling Clay	No Hazard
Radon	<p>The Envirocheck indicates the site to lie in a location where the percentage of homes above the radon action level is less than 1%. It further reports that the site will not require radon protection measures in the construction of new buildings.</p>	
Hydrogeology	<p>Groundwater vulnerability maps for the area show that the underlying bedrock geology is classified as a Secondary A Aquifer. The site does not lie</p>	

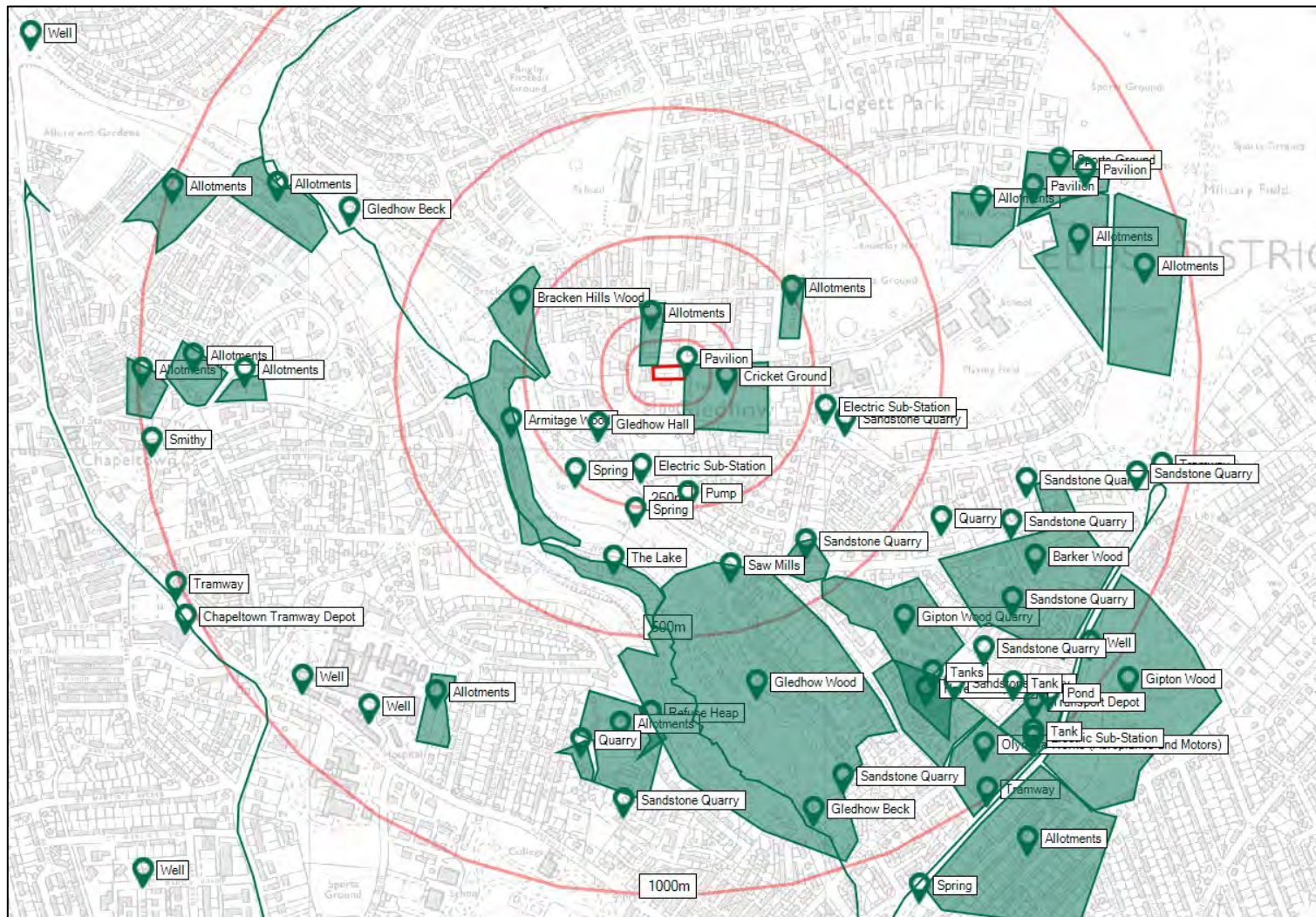
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	<p>within a Source Protection Zone for local groundwater abstraction and there are none recorded within 1 km of the site.</p> <p>Groundwater vulnerability maps are included as Appendix E.</p>																	
Hydrology	<p>The nearest water feature is Gledhow Beck, located 293m northwest at its closest point according to the Envirocheck report.</p> <p>The Envirocheck report lists three discharge consents within 500m of the site. All are located between 319 – 360m W. Two are associated with Sewage Discharge and one is Storm Sewage Overflow. All three outflow into Gledhow Beck.</p> <p>Review of the EA Flood Zone Map for the area indicates that the site lies within Flood Zone 1, which is defined as the area with a low potential risk of flooding from fluvial or tidal sources.</p> <p>It should be noted that the EA maps do not take into account the presence of flood defences or flooding from poor drainage, or groundwater.</p> <p>A copy of the flood map for the site and surrounding area is also included within Appendix E.</p>																	
Infilled Land / Water	<p>Within 500m of the site there are multiple locations of infilled land and water. The closest locations are 42m SE and 79m W (Unknown Filled Ground (Pond, marsh, river, stream, dock etc) recorded as being mapped in 1894 and 1851 respectively, although historic maps do not record clear water features in the locations.</p> <p>A former sandstone quarry is recorded as infilled land around 330m E, associated with the sandstone quarry. There are several other infilled quarry features in the wider area also.</p>																	
Industrial Land Use	<p>The Envirocheck report lists four industrial land uses within 250m, the most pertinent of which are summarised below.</p>																	
	<table border="1"> <thead> <tr> <th data-bbox="504 1556 970 1630">Land Use</th> <th data-bbox="970 1556 1219 1630">Distance (Direction)</th> <th data-bbox="1219 1556 1394 1630">Status</th> </tr> </thead> <tbody> <tr> <td data-bbox="504 1630 970 1704">Jewel Cleaning Services Ltd (Cleaning Services - Domestic)</td> <td data-bbox="970 1630 1219 1704">133m (NW)</td> <td data-bbox="1219 1630 1394 1704">Active</td> </tr> <tr> <td data-bbox="504 1704 970 1778">Ian Curry Architect (Tyre Dealers)</td> <td data-bbox="970 1704 1219 1778">173m (SE)</td> <td data-bbox="1219 1704 1394 1778">Inactive</td> </tr> <tr> <td data-bbox="504 1778 970 1852">In-Ov-8 (Clothing Accessory Manufacturers)</td> <td data-bbox="970 1778 1219 1852">203m (SE)</td> <td data-bbox="1219 1778 1394 1852">Active</td> </tr> <tr> <td data-bbox="504 1852 970 1926">Thorn Garage (Garage Services)</td> <td data-bbox="970 1852 1219 1926">232m (E)</td> <td data-bbox="1219 1852 1394 1926">Active</td> </tr> </tbody> </table>	Land Use	Distance (Direction)	Status	Jewel Cleaning Services Ltd (Cleaning Services - Domestic)	133m (NW)	Active	Ian Curry Architect (Tyre Dealers)	173m (SE)	Inactive	In-Ov-8 (Clothing Accessory Manufacturers)	203m (SE)	Active	Thorn Garage (Garage Services)	232m (E)	Active		
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Pollution Incidents	<p>Two pollution incidents to controlled waters are reported within 250m of the site, both are recorded as minor. These occurred in June 1991, 229m southwest and August 1994, 226m southwest. Both were involved the</p>																	

Detail	Description
	release of unknown sewage into freshwater stream, most likely Gledhow Beck.
Previous Investigation	EPS are not aware of any previous site investigations or remedial works undertaken at the site.
Sensitive Land Use	The site does not lie within any sensitive land uses, however 427m south is Gledhow Valley Wood and 925m southeast is Gipton Wood, both mapped as Ancient Woodland. 700m east is the beginning of an extensive area mapped as Adopted Greenbelt.

2.3 Site History

A summary of historical map data from 1851 to 2022 is summarised below. Key points are listed below, and copies of relevant historic maps and any others examined during the investigation are included in this report as Appendix F.

- In 1851, the site is rural land with a footpath running through it, from northeast to southwest. The surrounding land is dominated by multiple woods, and Gledhow Hall. There is a stream, Gledhow Beck, orientated northwest to southeast that comes within approximately 300m west of the site. This stream flows north to south, through Armitage Wood, ‘The Lake’ and into Gledhow Wood. Between 500m – 1000m, east through to the south, are multiple sandstone quarries, the closest is approximately 300m southeast of the site.
- By 1893, Gipton Wood Quarry has been established, located approximately 480m SE from site at its closest point. Approximately 900m to the southeast and west-southwest tramways have been constructed, with the southeast tramway expected to be associated with the transportation of sandstone from the multiple surrounding quarries. The site itself looks to have had the first building constructed, in addition to structured pathways and garden like features.
- During the early 1900s, extensive residential housing has been established immediately north of the site, while within the site additional buildings have been constructed to extend the property. The surrounding woods remain, extensive allotments have developed, and the majority of quarries are now mapped as ‘disused’ or ‘old’. Immediately to the east a Cricket Ground with associated pavilion has been developed. While adjacent to the northwest is a plot of allotments. Approximately 350m to the south is a Saw Mills, approximately 700m southeast is Harehills Quarry, that appears to be active, and adjacent to this quarry is Olympia Works – Aeroplanes and Motors.
- The late 1900s see little change to the area. A few more tanks and electric sub-stations are mapped, associated with Works. The tramway remains. Many of the allotments are now residential housing or sports grounds.
- During the 2000s residential housing dominates the surround land, with a few hospitals and schools, the tramway no longer exists, most of the woods remain, with exception to Barker Wood, which is now housing. The site remains the same as the early 1900s, with buildings on site and an extensive garden.



3 PRELIMINARY RISK ASSESSMENT & CONCEPTUAL SITE MODEL

In accordance with the Environment Agency’s Land Contamination: Risk Management, there are three stages to managing contaminated land (Risk Assessment/Remedial Options Appraisal/Remediation and Verification). This section outlines the first tier of Stage 1, the Preliminary Risk Assessment.

The following section provides a review of the contaminant linkages that may be active at the site, whereby EPS have examined the potential sources that may be present as a result of historic and / or current site activities and where potential interaction between these sources and the identified human / environmental receptors may occur.

3.1 Background

A Desk Study comprises the first stage of any geo-environmental assessment, the purpose of which is to determine what potentially contaminative activities may have occurred at the property or the surrounding area which may pose an environmental or geological risk to site users, the surrounding environment or proposed development, either at present or in the future.

The method used in this investigation to assess the environmental risk posed is based on the concept of ‘contaminant linkage’, which considers the following three factors:

Source	The location from which an environmentally hazardous / contaminative substance is, (or was,) derived.
Pathway	A route or mechanism via which a source could come into contact with a receptor to cause significant harm.
Receptor	An environmentally sensitive object or condition e.g. person, property, controlled water, or ecological system, which may be present now or in future.

If all three factors are identified, there is the potential for a ‘contaminant linkage’ to be active, which could result in significant harm being caused to the environment or human health.

3.2 Source Characterisation

The following potential contaminant sources have been identified at the site and in the surrounding area:

Potential Source	Source Description	Principal Contaminants of Concern
Current Site Use	Made Ground used for construction of original and extensions to the property	PAH, Metals, ACM
	Small scale cultivation of food produce (fruit trees, viniculture etc)	Pesticides, herbicides, metals
Current and Historical Surrounding Land Use	Neighbouring allotments	Pesticides, herbicides, metals

Notes: PAH Polycyclic Aromatic Hydrocarbons ACM Asbestos Containing Materials

3.3 Potential Receptors

A framework for the assessment of risks arising from the presence of contamination in soils has been produced by the Environment Agency and the Department for the Environment, Food and Rural Affairs (DEFRA) and is presented with the report: *'Using Science to Create A Better Place: Updated Technical Background to the CLEA Model – Science Report SC050021/SR3'*. This guidance document defines a series of standard land-uses which have been further developed into six generic landuses in the Category 4 Screening Levels project for Land Affected by Contamination (DEFRA/Contaminated Land: Applications in Real Environments (CL:AIRE) Project Report SP1010, 2014) which form a basis for the development of the Conceptual Site Model.

Risks posed to controlled waters have been considered in line with the Environment Agency's *approach to groundwater protection* (v1.2, 2018) and associated position statements.

The work was commissioned in order to fulfil planning requirements inclusive of the alteration of the existing cottage, and construction of a five-bedroom house with associated drive and garden areas. This proposed land use has been considered as:

- Residential (with home-grown produce)

In view of the environmental setting, current and potential future land use of the site and surrounding sites, the potential receptors for any contaminant impact are discussed below:

Receptor	Site Specific Description
Human	Future site users, site workers involved in the site redevelopment, and those working and living in the surrounding area have the potential to be at risk from exposure to potential contaminants of concern (CoCs).
Groundwater	The site is reported to be underlain by Elland Flags (Sandstone) which is categorised as a Secondary A Aquifer. Whilst the site does not lie within a SPZ for nearby groundwater abstraction, the underlying geology does have some resource potential and therefore groundwater should be considered as a potential receptor to site derived contaminants.
Surface Water	The closest water source, Gledhow Beck, is located 293m west-northwest. Therefore, surface waters are not considered sensitive receptors within the conceptual site model.
Flora and Fauna	The proposed development includes soft landscaping. Some of the identified contaminants of concern are known to be phytotoxic and as such, the potential for this impact should be considered.
Buildings & Infrastructure	Subsurface structures are going to be present at the site which may be adversely affected by the potential presence of the identified contaminants of concern. These include concrete used in building foundations, buried potable water supply pipes and other service lines and pipes.
Adjacent Land	The surrounding land use is predominantly residential. As such, no added risk from contamination to land more sensitive than that proposed on site has been identified.

3.4 Potential Pathways

Where contaminants may be present in soil, there are a number of potential pathways that enable human receptors to come into contact with or be exposed to them. The most direct pathways, considered under current UK legislation, can be summarised as follows:

- Direct ingestion of contaminated soil
- Ingestion of household dust
- Ingestion of contaminated vegetables
- Ingestion of soil attached to vegetables
- Dermal contact with contaminated soil
- Dermal contact with household dust
- Inhalation of fugitive soil dust
- Inhalation of fugitive household dust
- Inhalation of vapours outdoors
- Inhalation of vapours indoors

Clearly, not all of these potential pathways apply for every standard land-use. For example, ingestion of contaminated vegetables will not apply to land uses other than residential with plant uptake and allotments.

However, in addition to direct exposure pathways, a number of physical transport mechanisms / pathways may also exist at a site that allow remote or less accessible contaminants in soil or groundwater to reach human or environmental receptors both at a site and beyond the site boundary. These include the following:

- Downward and lateral movement of contaminants in soil either by gravity or through being 'leached' by percolating rainwater.
- Lateral migration of contaminants dissolved in groundwater.
- Direct seepage or leaching of contaminants from soil into subsurface drains or supply pipework.
- Volatilisation of contaminants from groundwater or unsaturated soils into buildings or outdoor air.

Through examination of the standard land use and environmental setting at each site, the presence of pathways and transport mechanisms described above must be considered when assessing whether a contaminant linkage may plausibly be active, and therefore be included in the conceptual site model.

3.5 Summary of Contaminant Linkages

Considering the site use and environmental setting, and the proposed land use remaining residential; no plausible contaminant linkages have been identified.

The following comments are made with respect to contaminant linkages which have been considered through development of the conceptual model, but have not been concluded as 'plausible' – i.e. through which a significant possibility of significant harm could occur to an identified receptor:

- Whilst the property has been developed in the past and there is a potential for made ground to exist, it is not anticipated that there will be extensive deposits and as the land has remained residential for over a century, it is unlikely that industrial wastes will be present. As a result, no unacceptable risks to future occupants have been identified. It should also be acknowledged that it is likely that the existing garden areas will remain as gardens and therefore no change in risk. Although it is likely that construction workers will come into direct/ indirect contact with shallow soils at some stage; either during any limited groundworks or throughout the development process, any risks can be appropriately controlled through the adoption of standard health and safety precautions and best working practices.
- Anecdotal evidence suggests that there are potential ACM materials in the structure of the garage that could not be accessed by the EPS engineer. If present, these materials should be appropriately characterised and then removed and discarded by experienced professionals and evidence of the removal works should be provided to Leeds City Council. If this documentation is insufficient, a round of surface soil sampling may be required to confirm that the removal of ACM has not impacted future garden areas.
- Whilst the use of pesticides and herbicides have been considered likely due to the presence of fruit trees etc on-site and neighbouring allotments. It is considered unlikely that they have been used in quantities that would represent an unacceptable risk to future site users.
- PAHs and metals have been identified as contaminants of concern associated with the made ground potentially to be present, however these contaminants are considered to be relatively immobile in the environment by virtue of their very low solubility and volatility. On this basis, plausible pathways by which these potential contaminants could pose a significant risk to the underlying groundwater or nearby surface watercourses are not considered to be active.
- Given the likely shallow nature of impacts to surface soils, no site derived contaminants of concern have been identified at the site which could pose a significant risk to below ground potable water supply pipes. Although the installation of barrier pipework may remain at the discretion of Yorkshire Water.
- Whilst possible areas of infilled land have been recorded within 100m, given the age, (and therefore likely nature of fill material) and the likely size of these features, there is not considered to be a plausible risk from ground gases. It has also been acknowledged that there are a number of infilled quarries in the area, but given the distance (>300m) of these features from the site, a plausible contaminant linkage is not recognised from the on-site migration of landfill gas.

4 GEOTECHNICAL GROUND MODEL

Geological records indicate the ground conditions to comprise Elland Flags (Sandstone), with Made Ground anticipated to be present at the surface. A conceptual geotechnical ground model is provided in the table below which assesses design elements, anticipated strata and ground conditions:

Element	Anticipated Strata	Parameter(s)	Anticipated Conditions
Foundations	Made Ground	Allowable Bearing Pressure	Not appropriate as a bearing strata
		Settlement	High sensitivity
		Volume Change	Depends upon the soil composition
	Elland Flags (Sandstone)	Allowable Bearing Pressure	In excess of 150kN/m ²
		Settlement	Low risk
		Volume Change	Low risk
Drainage	Made Ground	Permeability	Not suitable for infiltration drainage
	Elland Flags (Sandstone)		Potential to be suitable for infiltration drainage
Concrete Grade	Made Ground	Grade	Low to moderate risk of high sulphate levels
	Elland Flags (Sandstone)		Low risk of high sulphate levels

Potential Hazard	Comment
Trees & Vegetation	A number of large trees (>10m) have been noted around the site and therefore have the potential to lead to deepening of foundations if cohesive soils are present.
Below Ground Structures	Below ground utilities are anticipated on site, but no significant below ground structures are anticipated.
Excavation Stability	Made Ground materials are expected and are likely to be unstable in unsupported excavations. Strong sandstone may be able to remain stable for longer periods of time, however this will depend on its sand, clay and water content. It is recommended that any excavation is supported.
Slopes	The development area is predominantly flat.

5 CONCLUSIONS & RECOMMENDATIONS

In the context of potentially unacceptable or acceptable risks as outlined within the Environment Agency's *Land Contamination: Risk Management* guidance and based upon the information obtained and reviewed in this report, it is concluded that there are currently no plausible contaminant linkages active at the site.

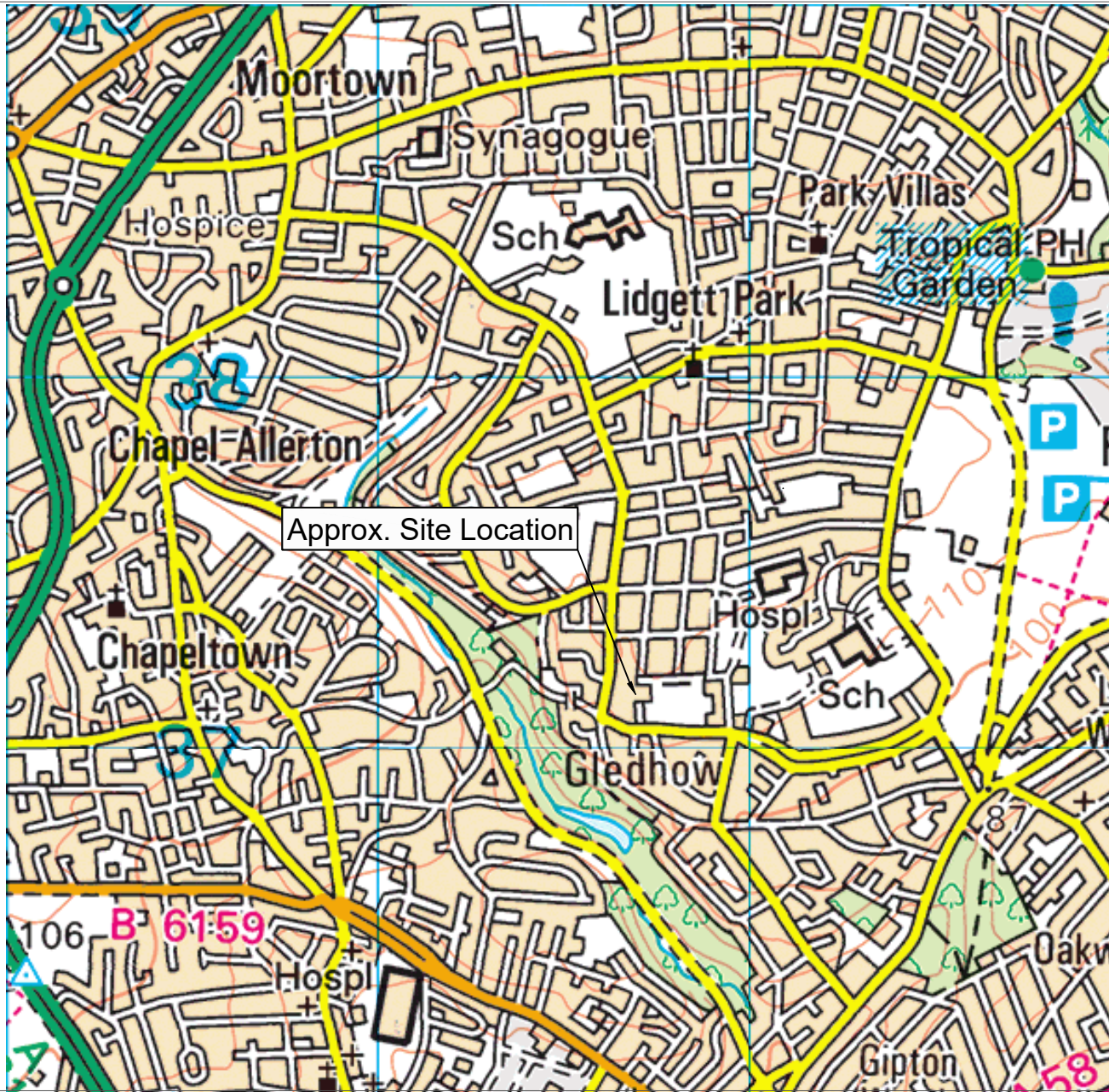
On this basis EPS therefore concludes that no further environmental investigation work is warranted, however the following precautionary measures have been recommended in order to ensure safe development.

- a) All construction workers operating at the site should be advised of the potential for exposure to and contact with made ground in the subsurface, including beneath and around the existing building. Appropriate health and safety precautions should also be adopted during any excavation works to avoid exposure to soils. Reference should be made to relevant health & safety guidance including the following CIRIA document: R132 *Guide to Safe Working on Contaminated Sites*.
- b) Any palpable evidence of contamination encountered during exposure of shallow soils beneath the site during redevelopment work should be reported to EPS so that an inspection can be made and appropriate sampling and assessment work carried out. Construction workers should have a procedure in place for dealing with any previously unidentified contamination if it is encountered during their redevelopment activities and to this end an example method statement has been provided as Appendix G.
- c) Although no clear signs of potential Asbestos Containing Material (ACM) were noted during the site walkover inspection, its presence is common within buildings/ settings such as those identified within the study area boundary. Therefore, if suspected ACM material is identified at the property during future development works, a detailed assessment would be required by a suitability qualified professional. As discussed in the previous section, removal of ACM will require detailed records to clearly demonstrate that it has not resulted in potential contamination.

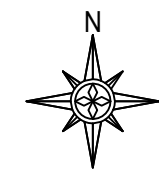
A copy of this report should be provided to the Environmental Health department of Leeds City Council so that the information may be used to support planning proposals for the site. It is recommended that the above recommendation investigation could be carried out in response to a conditional planning consent.



FIGURES



KEY:



Notes:

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Rev	Date	Drawn	Description	Drawn



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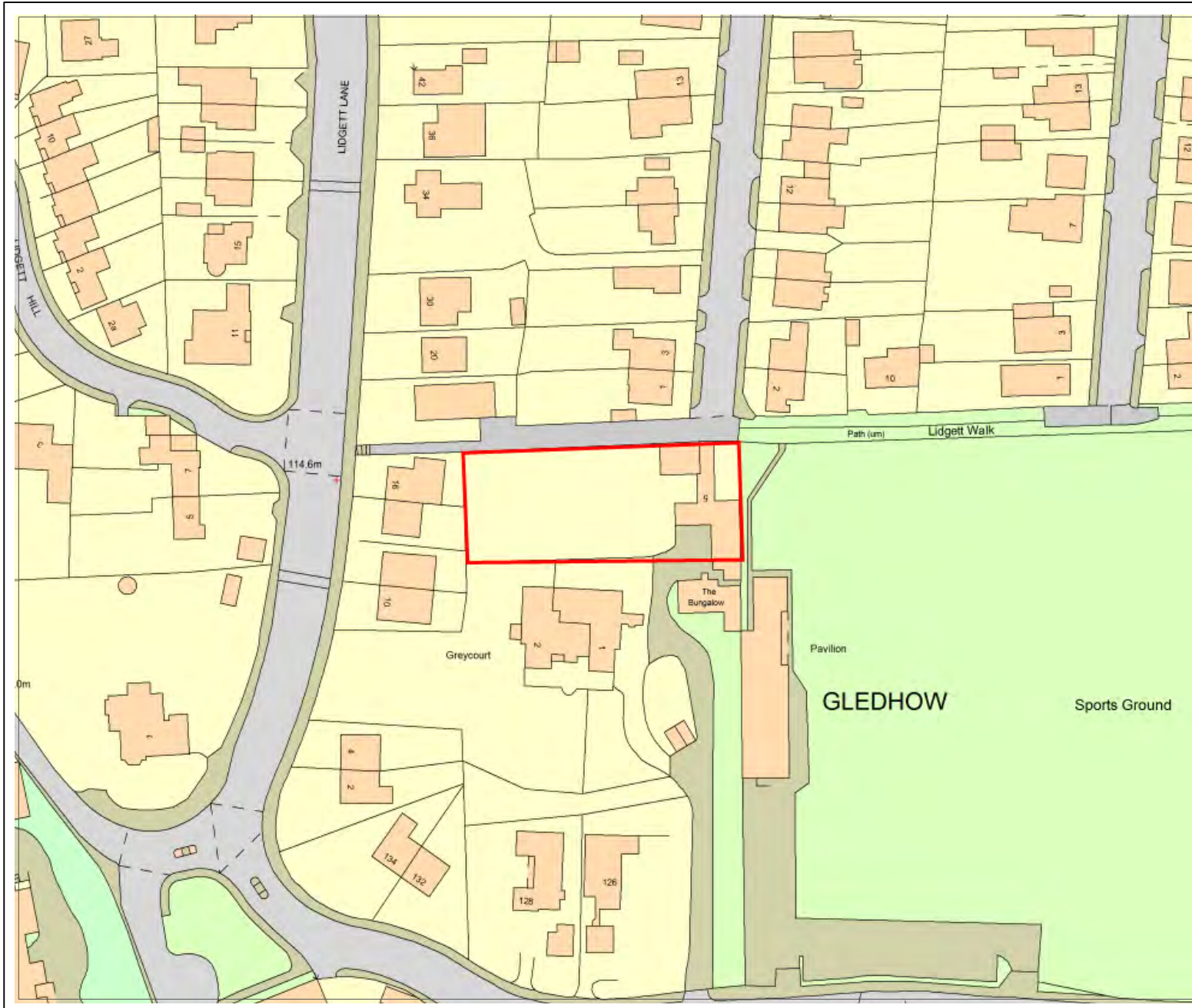
Site
The Cottage, Gledhow Lane
Leeds, LS8 1NQ

Client
ID Planning

Figure 01 - Site Location Plan

Drawn by	LA	Drawn by	AW
Checked by	XX	Date	12.07.2022

Scale	(M Scale)	Drawing Reference	
NTS		Fig_01_UK22.6004	
Job No	UK22.6004	Rev	00



KEY:
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Site
**The Cottage, Gledhow Lane
 Leeds, LS8 1NQ**

Client
ID Planning

Title
Figure 02 - Site Layout Plan

Approved by	LA	Drawn by	AW
Checked by	XX	Date	12.07.2022

Scale	(M Scale)	Drawing Reference
NTS		Fig_02_UK22.6004
Job No	UK22.6004	Rev
		00



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Site:
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 Leeds, LS8 1NQ**

Client:
ID Planning

Title:
Figure 03 - Aerial Photograph

Surveyed by:	LA	Drawn by:	AW
Checked by:	XX	Date:	12.07.2022

Scale:	(M Scale)	Drawing Reference:
NTS		Fig_03_UK22.6004

Job No:	UK22.6004	Rev:	00
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
APPENDICES



APPENDIX A

Selected Site Photographs & Walkover Notes



KEY:
 SITE BOUNDARY
 PHOTO LOCATION AND ORIENTATION



Notes:
 1. Base map reproduced under Crown Copyright Licence Number: 100054115

Rev	Date	Drawn	Description	Drawn



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Site:
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 Leeds, LS8 1NQ

Client:
 ID Planning

Title:
 Figure App. A - Photo Location Plan

Drawn by:	LA	Drawn by:	AW
Checked by:	XX	Date:	12.07.2022

Scale:	NTS	Drawing Reference:	Fig_App_A_UK22.6004
Job No:	UK22.6004	Rev:	00

Site Ref:	old Cottage, Gledhow
Date:	12/07/22
Made by:	LA



Are there any abrupt changes in slope profiles?

There a 2 steps from front drive into the house and garden



Is there evidence of overburden on the slopes?

NA



Is there evidence of excavation at the base of a slope?

NA



Are there signs of landslip, such as tilting trees/posts?

None observed



Are there signs of subsidence?

None observed



Is there evidence of cracked ground?

None observed



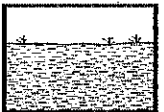
Is there evidence of compressible ground (i.e. Peat)?

None observed



Is there evidence of an abrupt change in ground conditions?

Only between MG + grass + h/standing



Is there evidence of high groundwater, such as areas of waterlogged ground?

None observed



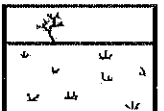
Do signs of water loving plants such as reeds exist?

None observed



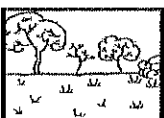
Are there any ponds, streams, ditches (even if dry), springs or wells?

None observed.



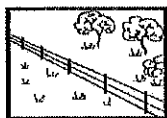
What is the nature of the vegetation?

Grass lawn with fruit trees (cherry, pear + apple). Lots of decorative shrubs. Some non deciduous hedges.



Species & Height of trees

Mature (20) hawthorn tree + cherry tree near building.



What is the nature and condition of vegetation on adjoining land?

Neighbouring gardens have some 7-10m deciduous + non deciduous trees.



Is there evidence of former vegetation?

None observed - verges heavily overgrown

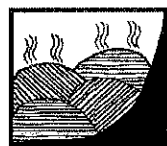


Is there evidence of movement of any existing structures?



Evidence of below ground structures & services?

Usual utilities feed site



Evidence of ground contamination?

None observed



Evidence of groundwater / surface water contamination?

None observed.



Evidence of historic site use (including tanks)

Resi. Evidence of fruit/veg growing (trees, vines) large greenhouse.



Anecdotal evidence



Evidence of /suspected Asbestos

None observed. Although

Any Other Comments:

currently a residential property
Gas feed.

Large stone wall runs along garden (E) boundary (~8-10m)

Photo 1: Looking SW at mature trees at the site boundary.



Photo 2: Inside the greenhouse, grape vines present.



Photo 3: Looking NNW within the 'Cottage Garden', red houses are situated on Gledhow Wood Grove to the north.



Photo 4: Gas feed entering cottage, no heating oil present on site.



Photo 5: Looking NE at the main entrance to the property.



Photo 6: Looking S at driveway to property, leading Gledhow Lane.





APPENDIX B

Proposed Development Plan

