



# Land at Bradley Villa Farm, Huddersfield For Bradley Villa Farm

Report no: 4929/1

Date: February 2024



## BRADLEY VILLA FARM, HUDDERSFIELD SUMMARY OF GEOENVIRONMENTAL ISSUES

<b>Job No.</b>	4929	<b>Site area/ha</b>	1.7
<b>Client:</b>	Bradley Villa Farm	<b>NGR:</b>	SE 150 203
<b>Site:</b>	Bradley Villa Farm, Huddersfield	<b>Nearest postcode:</b>	HD2 2JY

The site is located off Bradley Road, approximately 4km north of Huddersfield, and currently comprises an empty warehouse which is surrounded by hardcore surfacing (previously a chicken farm).

To the north there is a small parcel of greenfield land (currently being developed with housing by Redrow Homes). Villa Farm and an associated farm shop occupy adjacent land to the south.

Lithos were commissioned by Bradley Villa Farm to provide a preliminary geoenvironmental appraisal of the site. It is understood that the site is to be redeveloped with an office space inside the current warehouse; a proposed layout is has been prepared.

Lithos' investigation included an inspection of historical and geological maps and information provided by the Landmark Information Group, the Coal Authority, and QGIS. In addition, a site inspection has been carried out.

A summary of salient geoenvironmental issues is provided in the table below.

Issue	Remarks
Anticipated ground conditions	Thin veneer of made ground gravel over firm Clays and/or clayey Sands, with Sandstone bedrock from around 2m bgl.
Anticipated contamination	With respect to potential contaminant pathways site workers will be satisfactorily isolated from any (likely minor) contamination in the ground because the proposed redevelopment simply involves refurbishment of the existing shed. Furthermore, the site was greenfield until the warehouse was constructed about 14 years ago, making it unlikely that significant ground contamination has occurred. (The potential for significant contamination is far greater where operations have been ongoing for longer period of time; especially where operations began more than 50 years ago).
Mining & quarrying	The shallowest coal seams lies at c. 25m bgl. Whilst the site lies within a Coal Authority Low Risk area, no significant risks have been identified, and an intrusive mining investigation will not be required.
Hazardous gas	No special precautions against hazardous gas required.
Flooding & drainage	The site is within flood zone 1

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### Appendix C - Commission

### Appendix D – Historical OS plans\*

### Appendix E – Search responses\*

From	Date	Content
Landmark	6 <sup>th</sup> February 2024	Envirocheck report

\* Some of this data is not included within the paper or PDF copies of this report can be provided on request..

## FOREWORD (GEOENVIRONMENTAL APPRAISAL REPORT)

This report has been prepared for the sole internal use and reliance of the Client named on page 1. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Lithos Consulting Limited (Lithos); such authorisation not to be unreasonably withheld. If any unauthorised third party comes into possession of this report, they rely on it at their peril and the authors owe them no duty of care and skill.

This report has been reviewed by a Competent Person, as defined in the National Planning Policy Framework. We ensure that all projects are managed by individuals with necessary experience, relevant qualifications, and current membership of a relevant professional organisation. Records of engineers, project managers and reviewers involved in this project are maintained by us. Lithos QA/QC procedures for all our work forms an integral part of our ISO9001 accreditation and as such is regularly audited.

The report presents observations and factual data obtained during our site investigation and provides an assessment of geoenvironmental issues with respect to information provided by the Client regarding the proposed development. Further advice should be sought from Lithos prior to significant revision of the development proposals.

The report should be read in its entirety, including all associated drawings and appendices. Lithos cannot be held responsible for any misinterpretations arising from the use of extracts that are taken out of context. However, it should be noted that in order to keep the number of pages to a minimum, some information (e.g. full copy of the Landmark/Groundsure Report) is not included in the PDF; by request it can be provided.

The findings and opinions conveyed in this report (including review of any third-party reports) are based on information obtained from a variety of sources as detailed within this report, and which Lithos believes are reliable. Reasonable care and skill has been applied in examining the information obtained. Nevertheless, Lithos cannot and does not guarantee the authenticity or reliability of the information it has relied upon.

Where the report refers to the potential presence of invasive weeds such as Japanese Knotweed, or the presence of asbestos containing materials, it should be noted that the observations are for information only and should be verified by a suitably qualified expert.

Lithos cannot be responsible for the consequences of changing practices, revisions to waste management legislation etc that may affect the viability of proposed remediation options.

The report represents the findings and opinions of experienced geoenvironmental consultants. Lithos does not provide legal advice and the advice of lawyers may also be required.

Lithos standard terms and conditions apply to the report, a copy of the terms and conditions is available on request or can be found with our proposal in Appendix C.

**PRELIMINARY  
GEOENVIRONMENTAL INVESTIGATION  
OF LAND AT  
BRADLEY VILLA FARM, HUDDERSFIELD**

## **1 INTRODUCTION**

### **1.1 The commission and brief**

- 1.1.1 Lithos Consulting were commissioned by Bradley Villa Farm to carry out a Preliminary Geoenvironmental Investigation of land at Bradley Villa Farm.
- 1.1.2 Correspondence regarding Lithos' appointment, including the brief for this investigation, is included in Appendix C. The agreed scope of works included:
- A site walkover and inspection
  - An assessment of land use history
  - Determination of the site's environmental setting
  - A mining risk assessment in accordance with Coal Authority guidance.
  - Assessment of anticipated ground conditions, including potential contaminants
- 1.1.3 This Preliminary Investigation comprised an inspection of historical and geological maps and information provided by the British Geological Survey, the Landmark Information Group, the Coal Authority. In addition, a site inspection has been carried out by Lithos.
- 1.1.4 Primary aims of this investigation were to identify salient geoenvironmental issues affecting the site to satisfy requirements of the Planning Permission (ref. 2023/92887).

### **1.2 The proposed development**

- 1.2.1 It is understood that consideration is being given to development change of use. A site layout has been provided by Stott Thompson Architects (Drawing reference 1365 01 SK-07, dated June 2023) which is reproduced as Drawing No. 4929/2 in Appendix B to this report.
- 1.2.2 The proposed development has Planning Permission (ref. 2023/92887). With respect to ground, the planning consent includes a number of Conditions which require a desk study.

### **1.3 Report format and limitations**

- 1.3.1 Standard definitions, procedures and guidance are contained within Appendix A, which includes background, generic information on assessment of the site's environmental setting.
- 1.3.2 General notes and limitations relevant to all Lithos preliminary investigations are described in the Foreword and should be read in conjunction with this report. The text of the report draws specific attention to any modification to these procedures and to any other special techniques employed.

## 2 SITE DESCRIPTION

### 2.1 General

2.1.1 The site's location is shown on Drawing 4929/1 presented in Appendix B to this report. Site details are summarised in the table below.

Detail	Remarks
Location	4 km north of Huddersfield city centre
NGR	SE 150 203
Area	1.7 ha (4.2 acres)

### 2.2 Site features

2.2.1 Lithos completed a walkover survey of the site on 16<sup>th</sup> February 2024.

2.2.2 The site comprises of a rectangular piece of land containing a large warehouse in the centre. Some earthworks regrade appears to have been undertaken to create a level development platform to allow construction of the building and there is a small slope (c. 1m – 1.5m) in the west.

2.2.3 The building is surrounded by gravel hardstand currently used to house farm equipment and an assortment of materials such as timber, corrugated iron, stone and plastic piping.

2.2.4 The warehouse itself is empty aside from a few items that are yet to be removed.

2.2.5 Around the back of the warehouse, there was a lorry trailer with a fuel tank that showed some signs of leakage; a small area of stained ground was noted.

2.2.6 Discussion with the client and review of aerial photographs, suggests the site was greenfield until the warehouse was constructed about 14 years ago.

2.2.7 The site is bounded by grassed fields to the north and east, and by Bradley Villa Farm to the south. The fields are currently an active construction site (Redrow housing development).

2.2.8 Existing salient features, at the time of the walkover are presented on Drawing 4929/3 in Appendix B to this report, and summarised in the table below.

Feature	Remarks
Current access	Through Braley Villa Farm or alternatively off A641
Topography	Relatively flat c. 1m – 1.5m slope at west of site
Approximate areas	1,500m <sup>2</sup> buildings 2,000m <sup>2</sup> concrete hardstand 13,500m <sup>2</sup> grass
Nature of boundaries	North, south, west & east – no physical boundary
Surrounding land uses	North & east – open fields (under construction). South – Bradley Villa Farm and farm shop West – residential property

2.2.9 A selection of site photographs are included on Drawing 4929/4.

### 3 SITE HISTORY

- 3.1 In order to investigate the development history and previous land uses at the site and immediate surrounding land, site centred extracts from Ordnance Survey (OS) plans dating back to 1893 have been examined. These plans are presented in Appendix D to this report.
- 3.2 The table below provides a summary of the salient points relating to the history of the site with respect to the proposed end use. It is not the intention of this report to describe in detail all the changes that have occurred on or adjacent to the site. Significant former uses/operations are highlighted in **bold** text for ease of reference.

Dates	Site	Surrounding land
1893	Open fields	Bradley Villa Farm to the south, arable farmland on all sides
1906	No significant changes	No significant changes
1918		
1933		
1959		Bradley Villa Farm to south, arable farmland to north and east, residential housing to west and south
1966		No significant changes
1973		
1992		
2006		
2024	Warehouse on site surrounded by gravel made ground	

## 4 ENVIRONMENTAL SETTING

### 4.1 General

4.1.1 Notes describing how the site's environmental setting has been assessed are included in Appendix A to this report. Reference has been made to publicly available Government held digital data via QGIS (an Open Source Geographic Information System). The responses received from the Coal Authority and extracts from the Landmark Report are presented in Appendix E.

Issue	Data reviewed	Remarks
Geology	1:10,000 BGS map (Sheet SE12SE and SE12SW)	Solid (bedrock) – Pennine Lower Coal Measures (sandstone, siltstone and mudstone) Strata Dip – 3 degrees east Faults – none recorded Cavities / Mineral Veins / Fissures – none recorded
Mining	Coal Authority BGS maps	This site is located within a Coal Mining Development Low Risk Area Past and present workings - no previous underground workings recorded. Opencast – none within 500m of site boundary. Mine entries – none within 100m of site. Shallowest coal seam – c. 40m below site
Quarrying	Historical OS plans	No Quarrying near site
Landfills	Envirocheck	No known landfills within 250m
Radon	Public Health England	The site lies in an area where 1% - 3% of homes are estimated to be above the action level.
Hydrogeology	Environment Agency electronic open data via QGIS	Source Protection Zone - No Aquifer – Secondary A (Solid). Groundwater abstractions – 4 abstractions 380m northeast (golf course irrigation). Soil leaching potential - medium. Pollution incidents – none significant to site
Hydrology	Defra Catchment data explorer Envirocheck Report	Nearest watercourse – Huddersfield Broad Canal (1.8km south). Water quality - good. Pollution incidents – none significant to site. Discharge consents – none significant to site.
Flood risk	Environment Agency electronic open data via QGIS	The site lies in Flood Zone 1, where the risk of flooding from rivers or the sea is classified as low.

## 4.2 Local knowledge (geology)

- 4.2.1 Lithos have undertaken ground investigation on adjacent land (now being developed with housing by Redrow). Review of the geological plans shows similar geology, with residual soil over sandstone bedrock. Generalised findings are discussed below.
- 4.2.2 **Topsoil:** Dark grey slightly sandy slightly gravelly CLAY. Encountered across the site to a typical depth of 300mm.
- 4.2.3 **Cohesive Residual Soil:** Firm (locally stiff) light orange and grey mottled slightly sandy, slightly gravelly CLAY. Encountered immediately below topsoil in most trial pits to depths of between 0.6m and 1.9m.
- 4.2.4 **Granular Residual Soil:** Slightly clayey sands and gravel/cobble. Typically encountered below Cohesive Residual soils to depths between 0.5m and 3.0m
- 4.2.5 **Bedrock** was encountered at the base of each trial pit from depths of between 0.5m and 3.1m (average 1.8m). In TP30, a breaker was used to excavate the bedrock in order to undertake a soakaway test.
- 4.2.6 Cohesive residual soils were locally absent in the far west, where granular residual soils were encountered, and bedrock was found at shallower depths than elsewhere (from between 0.5m and 1.4m).

## 4.3 Coal & mining

- 4.3.1 In July 2011 the Coal Authority (CA) formalised their requirements in relation to planning applications and introduced some new terminology relating to coal mining development areas.
- 4.3.2 The site lies within a **Low Risk** Area - within the defined coalfield, but no known defined risks have been recorded by the CA; there may still be unrecorded issues.
- 4.3.3 A CA mining report obtained for the larger site encompassing this parcel of land states that:
- *There is no past mining recorded*
  - *There are no probable unrecorded shallow workings and no spine roadways recorded at shallow depth*
  - *There are no mine entries recorded within 100m of the site boundary*
  - *There are no outcrops recorded and no faults, fissures or breaklines recorded.*
  - *There are no opencast mines or Coal Authority managed tips within 500m of the site boundary.*
  - *The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50m of the enquiry boundary, since 31<sup>st</sup> October 1994.*
  - *There are no recorded incidences of mine gas within 500m of the boundary*
  - *The property is not in an area where a notice to withdraw support has been given.*
- 4.3.4 The 1:10,000 BGS plans suggest that the **Better Bed** Coal seam outcrops about 200m north of the site.
- 4.3.5 Strata are shown on the BGS plan as dipping at 2° to the east, and it is estimated that the Better Bed lies at a depth of about 25m beneath the site. Consequently, any workings within the Better Bed coal should not pose a significant risk of subsidence at surface beneath the site.
- 4.3.6 There are no other coal seams within influencing depth beneath the Better Bed.

## 4.4 Hazardous gas

### Methane & carbon dioxide

4.4.1 The site is not believed to be affected by sources of hazardous gas generation as it is:

- Not located within 250m of a known former or current landfill site or backfilled feature (e.g. quarry, pond, canal etc)
- Neither underlain by shallow mineworkings nor located in an area considered susceptible to mines gas emissions
- Not underlain by a significant thickness of made ground
- Not underlain by peat or shallow chalk deposits

### Radon

4.4.2 Requirements with respect to radon measures are set out in Building Regulations Approved Document C. Probability bandings (based on the proportion of properties in a given area that exceed the Action Level; currently 200 Bq.m<sup>-3</sup>) are used to determine whether a property requires no, basic or full measures.

4.4.3 At present Approved Document C advocates basic measures for the probability banding 3% to 10% (full measures if >10%). However, the UK Health Security Agency (HSA) would like to see all new build include basic measures.

4.4.4 In December 2022, the British Geological Survey (BGS), deployed a revised dataset which increased accuracy and also the number of properties falling within radon affected areas. This revised dataset is now referenced by maps on the HSA website.

4.4.5 The HSA website indicates that the site is in an area where **1% to 3%** of homes are estimated to be above the action level.

4.4.6 Consequently, basic radon protection measures are not required. However, in light of HSA advice, the Developer might consider providing all new dwellings with basic radon protection measures.

## 5 PRELIMINARY CONCEPTUAL SITE MODEL

### 5.1 Potential contaminants

5.1.1 An assessment of potential contaminants associated with the former uses has been undertaken with reference to CLR8. As a consequence of this assessment, anticipated potential contaminants, within soil and/or groundwater include:

- Inorganics (metals associated with made ground and the possible use of pesticides and fertilisers)
- Asbestos &/or ACMs within the made ground associated with from the former buildings etc

5.1.2 However, as noted in Section 2.2, the site was greenfield until the warehouse was constructed about 14 years ago, making it unlikely that significant ground contamination will have occurred. (The potential for significant contamination is far greater where operations have been ongoing for a longer period of time; especially where operations began more than 50 years ago).

5.1.3 The most significant potential contaminant **receptors** include:

- The environment
- End users of the site
- Site workers

5.1.4 With respect to potential contaminant **pathways** site workers (construction & office) will be satisfactorily isolated from any (likely minor) contamination in the ground because the proposed redevelopment simply involves refurbishment of the existing shed. External hardstand will remain in-situ, with minimal (and only temporary breaking of ground) for any new utilities etc.

5.1.5 A preliminary conceptual site model, presented as Drawing 4929/5 in Appendix B, has been prepared after consideration of all the data presented in Sections 2 to 4 inclusive of this report.

### 5.2 Anticipated ground conditions & potential issues

5.2.1 Based on the data reviewed in Section 4 (Environmental Setting), anticipated ground conditions are expected to comprise:

Anticipated condition	Remarks
Made ground	Concrete/ Tarmac hardstand to cover the majority of the site.
Natural soils	Residual soils (firm Clays and/or clayey Sands) across the site to c. 2m depth
Bedrock	Sandstone from c. 2m depth
Mineworkings	None anticipated at shallow depth
Groundwater	Likely at depth in bedrock

5.2.2 Based on the data above and that in Sections 2 (Site Description) and 3 (History), potential ground-related issues associated with this site are likely to include:

Type of issue	Specific issue	Remarks
Potential on-site contamination sources	1. Made ground 2. Vehicle fuel tank	1. Associated with farming 2. Parked trailer with noticeable exterior staining
Other potential constraints	1. None	1. -

## 6 LAND CONTAMINATION – PART IIA & PLANNING

- 6.1 Local Authorities have responsibilities with respect to land contamination in the context both of Part IIA of the Environmental Protection Act 1990, and Planning.
- 6.2 The contaminated land regime in Part IIA was introduced specifically to address the historical legacy of land contamination. It applies where there is unacceptable risk, assessed on the basis of the **current** use and the relevant circumstances of the land. It is not directed to assessing risks in relation to a future use of the land that would require a specific grant of planning permission. This is primarily a task for the planning system, which aims to control development and land use in the **future**.

### Planning

- 6.3 As of March 2012, Planning Policy Statement (PPS23) was replaced by the National Planning Policy Framework (NPPF), supported by web-based planning practice guidance. The NPPF (updated in September 2023) includes the following with respect to contamination and site investigation:

*“Where a site is affected by contamination or land stability issues, responsibility for securing safe development rests with the developer and/or landowner”.*

- 6.4 Planning policies and decisions should ensure that:
- The site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses, and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation
  - After remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the environmental protection act 1990
  - Adequate site investigation information, prepared by a competent person, is presented'
- 6.5 Annex 2 of the NPPF states that 'all investigations of land potentially affected by contamination should be carried out in accordance with established procedures (such as BS10175<sup>1</sup>)'.

### This site

- 6.6 The underlying sandstone is classified as a secondary aquifer. The nearest surface watercourse is the Huddersfield Broad Canal, which flows in a easterly direction, approximately 950m beyond the site's southern boundary. Therefore, the site's environmental setting is considered to be of moderate sensitivity.
- 6.7 With respect to human health, the proposed end use (commercial) is of low sensitivity.
- 6.8 Current use of the site is considered unlikely to have given rise to any significant ground and groundwater contamination, and the site should be suitable for the proposed use.

## 7 GROUND INVESTIGATION DESIGN

- 7.1 Given that the nature of the proposed development (refurbishment of the existing shed), with external hardstand remaining in-situ, ground investigation is not considered essential.

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<sup>1</sup> BS10175 (2011) - Code of practice for the investigation of potentially contaminated sites

## **8 CONCLUSIONS & RECOMMENDATIONS**

### **8.1 General**

- 8.1.1 The site comprises c. 1.7 hectares of land located in Huddersfield about 4km north east of Huddersfield city centre. The site was formerly occupied by green fields and more recently a chicken farm.
- 8.1.2 It is understood that Bradley Villa Farm are considering refurbishment of the existing shed to create new offices.
- 8.1.3 The main issues considered in this report, and in particular in Sections 3 & 4 are based on a review of historical maps and available geological/environmental data. This report provides an assessment of geoenvironmental issues and implications associated with the proposed change of use of the site.

### **8.2 Mining and quarrying**

- 8.2.1 This site is underlain at depth by Pennine Lower Coal Measures bedrock, and the shallowest coal seams lies at least 25m below the surface.
- 8.2.2 Whilst the site lies within a Coal Authority Low Risk area, no significant risks have been identified, and an intrusive mining investigation will not be required.

### **8.3 Hazardous gas**

- 8.3.1 The site is in an area where 1% - 3% of homes are estimated to be above the radon action level. Radon protection is not required.
- 8.3.2 There are no known or suspected areas of landfilling within 250m, and the site is not in area considered susceptible to mines gas, nor is it underlain by shallow mineworkings.
- 8.3.3 As such, no special precautions against hazardous gas are required on this site.

### **8.4 Contamination**

- 8.4.1 The site's environmental setting is considered to be of moderate sensitivity. With respect to human health, the proposed end use (commercial) of low sensitivity.
- 8.4.2 With respect to potential contaminant pathways site workers (construction & office) will be satisfactorily isolated from any (likely minor) contamination in the ground because the proposed redevelopment simply involves refurbishment of the existing shed. External hardstand will remain in-situ, with minimal (and only temporary breaking of ground) for any new utilities etc.
- 8.4.3 Furthermore, the site was greenfield until the warehouse was constructed about 14 years ago, making it unlikely that significant ground contamination has occurred. (The potential for significant contamination is far greater where operations have been ongoing for a longer period of time; especially where operations began more than 50 years ago).
- 8.4.4 However, a small area of stained ground was noted beneath a vehicle fuel tank during the walkover. This contamination is likely very localised and of limited significance. Nonetheless, it would be prudent to consider excavation (under suitable engineering supervision) and export off site to a suitably licensed landfill facility.

Appendix A  
General Notes

## General

Third party information obtained from the British Geological Survey (BGS), the Coal Authority, the Local Authority etc is presented in the "Search Responses" Appendix of this Geoenvironmental Report.

## Geology, mining & quarrying

In order to establish the geological setting of a site, Lithos refer to BGS maps for the area, and the relevant geological memoir. Further information is sourced by reference to current and historical OS plans.

In July 2011, the Coal Authority (CA) formalised their requirements in relation to planning applications and introduced some new terminology. The CA, using its extensive records has prepared plans for all coalfield Local Planning Authorities, which effectively refines the defined coalfield areas into High Risk and Low Risk areas. **High Risk** areas are likely to be affected by a range of legacy issues that pose a risk to surface stability, including: mine entries; shallow coal workings; workable coal seam outcrops; mines gas; and previous surface mining sites. **Low Risk** areas comprise the remainder of the defined coalfield, and are areas where no known defined risks have been recorded; although there may still be unrecorded issues. Where a site lies within either a High or Low Risk area, a mining report is obtained from the CA.

## Landfills

Reference is made to publicly available Government held digital data via **QGIS** (an Open Source Geographic Information System), data from Landmark or Groundsure, and sometimes the Environment Agency and the Local Authority with respect to known areas of landfilling within 250m of the proposed development site.

Historical OS plans are also inspected for evidence of backfilled quarries, railway cuttings, colliery spoil tips etc.

## Radon

Radon is a colourless, odourless gas, which is radioactive. It is formed in strata that contain uranium and radium (most notably granite), and can move through fissures eventually discharging to atmosphere, or the spaces under and within buildings. Where radon occurs in high concentrations, it can pose a risk to health.

In order to assess potential risks associated with radon gas, Lithos refer to BRE Report BR211<sup>1</sup>, and the UK Health Protection Agency (HPA) website. In December 2022, the British Geological Survey (BGS), deployed a revised dataset which increased accuracy and also the number of properties falling within radon affected areas. This revised dataset is now referenced by maps on the HSA website.

Advice on the limitation of exposure of the population to radon in buildings was originally published in 1990 by the National Radiological Protection Board (NRPB), which joined the HPA in 2005; the HPA updated NRPB advice in July 2010<sup>2</sup>.

The HPA recommended that the NRPB radon Action Level for homes be retained, and a new Target Level for radon in homes be introduced. The values of the Action Level and Target Level, expressed as the annual average radon concentration in the home, are 200 Bqm<sup>-3</sup> and 100 Bqm<sup>-3</sup> respectively. The Target Level was to provide an objective for remedial action in existing homes and preventive action in new homes.

The term 'radon Affected Area' is defined as those parts of the country with >1% of homes estimated to be above the Action Levels. The level of protection needed is site-specific and can be determined by reference to this mapping on the Public Health England website, which indicates the highest radon potential within each 1km grid square. Each 1km grid square is classified on the basis of the percentage of existing homes within that grid square estimated to have radon concentrations above the Action Level. There are 6 'bands': <1%; 1 to 3%; 3 to 5%; 5 to 10%; 10 to 30%; and >30%.

The NRPB advised that action should be taken to reduce radon concentrations in existing homes if the radon concentration exceeded the Action Level of 200 Bqm<sup>-3</sup> in room air averaged over a year; ten times the average UK domestic radon concentration. NRPB advice informed changes in the requirements for radon protection in new buildings.

- **Basic** preventive measures are required in new buildings, extensions, conversions and refurbishments if the probability of exceeding the Action Level is **>3%** in England and Wales, and **>1%** in Scotland and Northern Ireland.
- Provision for further preventive (**Full**) measures is required in new buildings if the probability of exceeding the Action Level is **>10%**.

At present Building Regulations Approved Document C advocates basic measures for the probability banding 3% to 10%, and full measures if >10%. However, HPA would like to see all new build include basic measures.

Action & Target Levels should also be applied to non-domestic buildings with public occupancy exceeding 2,000 hrs/yr and to all schools.

## Hydrogeology

Reference is made to publicly available Government held digital data via QGIS, and Landmark or Groundsure with respect to:

- Groundwater quality
- Recorded pollution incidents
- Licensed groundwater abstractions

From April 2010 the EA's Groundwater Protection Policy uses aquifer designations that are consistent with the Water Framework Directive. These designations reflect the importance of aquifers in terms of groundwater as a resource (drinking water supply), but also their role in supporting surface water flows and wetland ecosystems. The aquifer designation data is based on geological mapping provided by the British Geological Survey. The maps are split into two different types of aquifer designation:

- Superficial (Drift) - permeable unconsolidated (loose) deposits. For example, sands and gravels
- Bedrock - solid permeable formations e.g. sandstone, chalk and limestone

The maps display the following aquifer designations:

**Principal aquifers:** These are layers of rock or superficial deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

**Secondary aquifers:** These include a wide range of rock layers or superficial deposits with an equally wide range of water permeability and storage. Secondary aquifers are subdivided into three types:

- **Secondary A** - permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
- **Secondary B** - predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
- Secondary undifferentiated - In most cases, this is because the rock type in question has previously been designated as both a minor and non-aquifer in different locations due to the variable characteristics.

<sup>1</sup> BRE Report BR211, 2023: "Radon: guidance on protective measures for new buildings (including supplementary advice for extensions, conversions and refurbishment projects)".

<sup>2</sup> Limitation of Human Exposure to Radon, Documents of the Health Protection Agency - Radiation, Chemical and Environmental Hazards, RCE-15. July 2010.

**Unproductive strata:** These are rock layers or superficial deposits with low permeability that have negligible significance for water supply or river base flow.

The EA maps only display the principal and secondary aquifers as coloured areas. All uncoloured areas on the map will be unproductive strata. However, for uncoloured areas on the superficial (drift) designation map it is not possible to distinguish between areas of unproductive strata and areas where no superficial deposits are present; to do this, it is necessary to consult the published geological survey maps.

For the purposes of the EA's Groundwater Protection Policy the following default position applies, unless there is site specific information to the contrary:

- If no superficial (drift) aquifers are shown, the bedrock designation is adopted
- In areas where the bedrock designation shows unproductive strata (the uncoloured areas) the superficial designation is adopted
- In all other areas, the more sensitive of the two designations is used (e.g. If secondary superficial overlies principal bedrock, an overall designation of principal is assumed)

The EA have also designated groundwater Source Protection Zones, which are based on proximity to a groundwater source (springs, wells and abstraction boreholes). The size of a Source Protection Zone is a function of the aquifer, volume of groundwater abstracted and the effective rainfall, and may vary from tens to several thousand hectares.

### Hydrology

Reference is made to publicly available Government held digital data via QGIS, and Landmark or Groundsure with respect to:

- Surface water quality
- Recorded pollution incidents
- Licensed abstractions (groundwater & surface waters)
- Licensed discharge consents
- Site susceptibility to flooding

The EA have set **water quality** targets for all rivers. These targets are known as River Quality Objectives (RQOs). The water quality classification scheme used to set RQO planning targets is known as the River Ecosystem scheme. The scheme comprises five classes (RE1 to RE5) which reflect the chemical quality requirements of communities of plants and animals occurring in our rivers.

General Quality Assessment (GQA) grades reflect actual water quality. They are based on the most recent analytical testing undertaken by the EA. There are 6 GQA grades (denoted A to F) defined by the concentrations of biochemical oxygen demand, total ammonia and dissolved oxygen.

The susceptibility of a site to **flooding** is assessed by reference to a Flood Map on the Environment Agency's website. These maps show natural floodplains - areas potentially at risk of flooding if a river rises above its banks, or high tides and stormy seas cause flooding in coastal areas. There are two different kinds of area shown on the Flood Map:

1. Dark blue areas (Flood Zone 3) could be flooded by the sea by a flood that has a 0.5% (1 in 200) or greater chance of happening each year, or by a river by a flood that has a 1% (1 in 100) or greater chance of happening each year
2. Light blue areas (Flood Zone 2) show the additional extent of an extreme flood from rivers or the sea. These outlying areas are likely to be affected by a major flood, with up to a 0.1% (1 in 1000) chance of occurring each year

These two colours show the extent of the natural floodplain if there were no flood defences or certain other manmade structures and channel improvements. Where there is no blue shading (Flood Zone 1), there is less than a 0.1% (1 in 1000) chance of flooding occurring each year.

The maps also show all flood defences built in the last five years to protect against river floods with a 1% (1 in 100) chance of happening each year, or floods from the sea with a 0.5% (1 in 200) chance of happening each year, together with some, but not all, older defences and defences which protect against smaller floods.

The Agency's assessment of the likelihood of flooding from rivers and the sea at any location is based on the presence and effect of all flood defences, predicted flood levels, and ground levels.

It should also be noted that as the floodplain shown is the 1 in 100 year, areas outside this may be flooded by more extreme floods (e.g. the 1 in 1000 year flood). Also, parts of the areas shown at risk of flooding will be flooded by lesser floods (e.g. the 1 in 5 year flood). In some places due to the shape of the river valley, the smaller floods will flood a very similar extent to larger floods but to a lesser depth.

If a site falls within a floodplain, it is recommended that a flood survey be undertaken by a specialist who can advise on appropriate mitigating measures; i.e. raising slab levels, provision of storage etc. In accordance with Chapter 10 of the National Planning Policy Framework, a site-specific flood risk assessment is required for: proposals of 1 hectare or greater in Flood Zone 1, or in an area within Flood Zone 1 which has critical drainage problems (as notified to the local planning authority by the Environment Agency); and any new development in Flood Zones 2 and 3.

### COMAH & explosive sites

Lithos obtain information from Landmark or Groundsure with respect to Control of Major Accident Hazards (COMAH) or explosive sites within 1km of the proposed development site. Lithos' report refers to any that are present, and recommends that the Client seeks further advice from the HSE.

Areas around COMAH sites (chemical plants etc) are zoned with respect to the implementation of emergency plans. The HSE are a statutory consultee to the local planning authority for all COMAH sites. The COMAH site may have to revise its emergency action plan if development occurs. This might be quite straightforward or could entail significant expenditure. Consequently, the COMAH site may object to a proposed development (although it is the Local Authority who have final say, and they are likely to place more weight on advice from the HSE).

### Preliminary conceptual site model

The site's environmental setting (and proposed end use) is used by Lithos to assess the significance of any contamination encountered during the subsequent ground investigation.

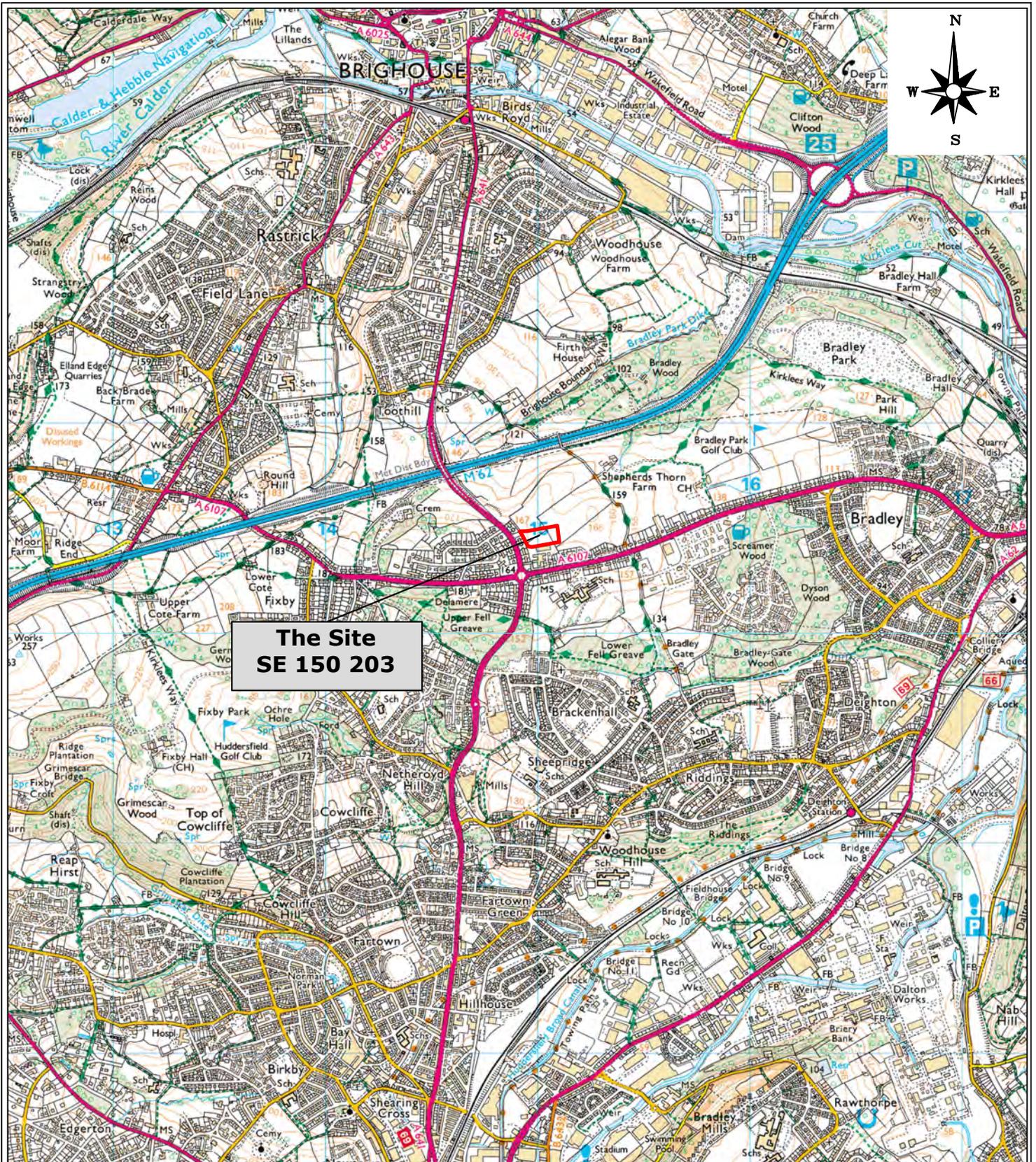
Assessment of contaminated land is based on an evaluation of pollutant linkages (source-pathway-receptor). Contaminants within the near surface strata represent a potential source of pollution. The environment (most notably groundwater), site workers and end users are potential receptors.

Potential pollutant linkages are shown on a preliminary conceptual site model (pCSM). A CSM is essentially a cross-section through a site that reflects both the surface topography and underlying geology, and shows surface features of interest. The most significant sources of contamination are then superimposed onto this cross-section together with potential receptors (human health & controlled waters), and plausible pathways between the two. In addition to environmental issues, the CSM should also highlight geotechnical issues.

A pCSM is prepared after consideration of all available "desk study" data, and before design of the ground investigation. Data reviewed should include historical plans (with superimposition on a current-day plan), previous SI reports, geological maps etc. The pCSM, in conjunction with knowledge of site constraints (buildings, services, slopes etc) is used to design the ground investigation.

The revised CSM takes account of data obtained during the ground investigation, including the distribution of made ground, the nature and distribution of contamination etc.

Appendix B  
Drawings



**The Site  
SE 150 203**

Reproduced from OS Explorer map 1:25,000 scale by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. Crown copyright. All rights reserved. Licence number 100049696.



info@lithos.co.uk  
www.lithos.co.uk  
Tel 01937 545330

CLIENT

**BRADLEY VILLA  
FARM**

JOB TITLE

**VILLA FARM**

DRAWING TITLE

**SITE LOCATION  
PLAN**

DRAWN

DW

DATE

09 02 24

CHECKED

REG

DATE

09 02 24

STATUS

FOR COMMENT

DRAFT

FOR APPROVAL

FINAL

SCALE

1:25,000

SHEET

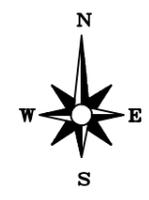
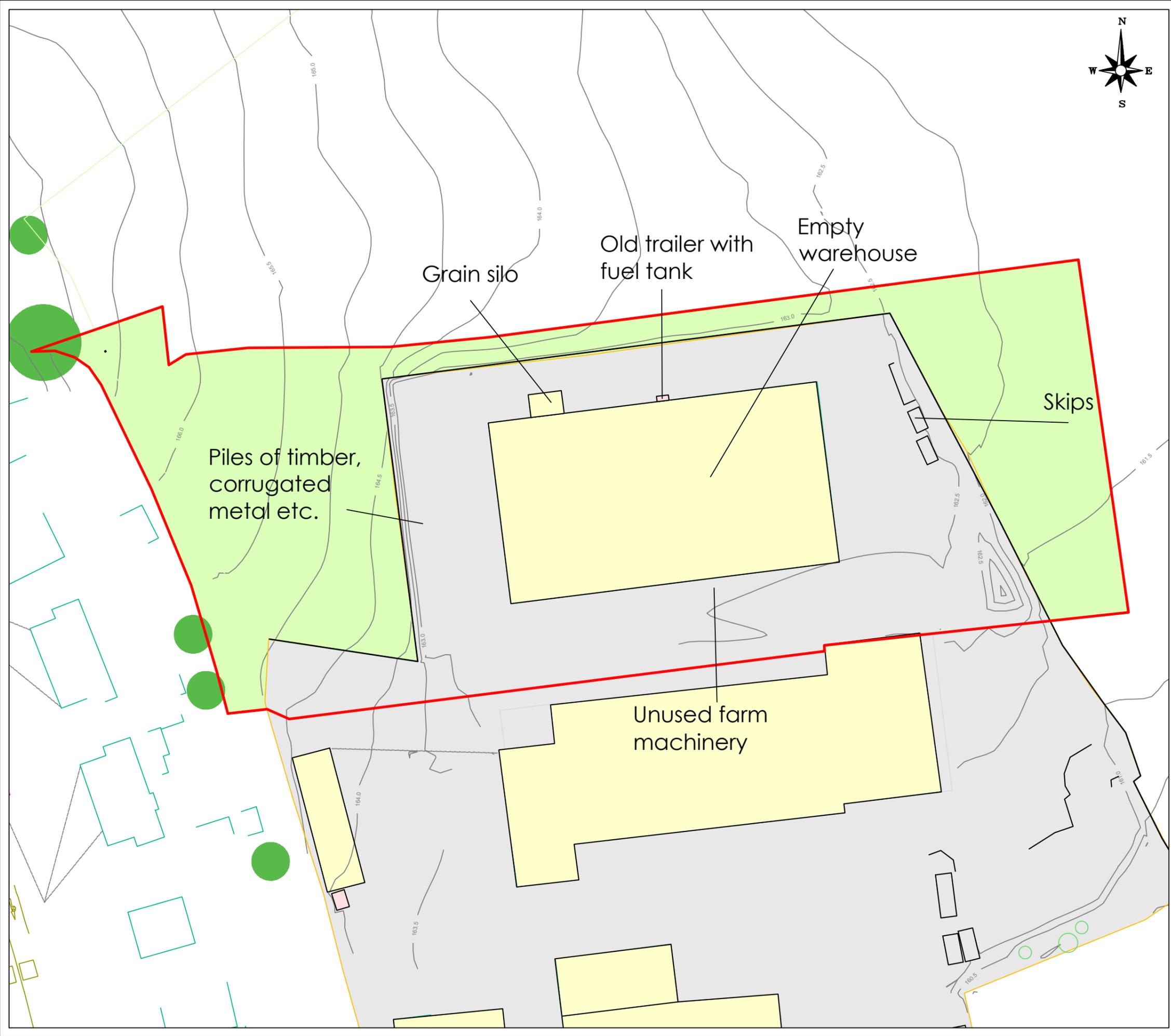
A4

DRAWING NO.

4929/1

REVISION





- NOTES
- GRASS & OVERGROWN AREAS
  - BUILDING
  - GRAVEL OR HARDCORE SURFACING
  - FUEL STORAGE TANKS
  - APPROXIMATE SITE BOUNDARY

REV.	DESCRIPTION	DATE



info@lithos.co.uk  
www.lithos.co.uk  
Tel 01937 545330

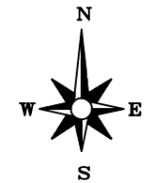
CLIENT  
**BRADLEY VILLA FARM**

JOB TITLE  
**VILLA FARM**

DRAWING TITLE  
**SITE FEATURES**

DRAWN <b>DW</b>	DATE <b>16 02 2024</b>	STATUS FOR COMMENT <input type="checkbox"/>
CHECKED <b>REG</b>	DATE <b>16 02 2024</b>	FOR APPROVAL <input type="checkbox"/>
		DRAFT <input type="checkbox"/>
		FINAL <input checked="" type="checkbox"/>

SCALE <b>1:750</b>	SHEET <b>A3</b>	DRAWING NO. <b>4929/3</b>	REVISION
-----------------------	--------------------	------------------------------	----------



- NOTES
- GRASS & OVERGROWN AREAS
  - BUILDING
  - GRAVEL OR HARDCORE SURFACING
  - FUEL STORAGE TANKS
  - APPROXIMATE SITE BOUNDARY
  - LOCATION & ORIENTATION OF PHOTOGRAPH

REV.	DESCRIPTION	DATE



info@lithos.co.uk  
www.lithos.co.uk  
Tel 01937 545330

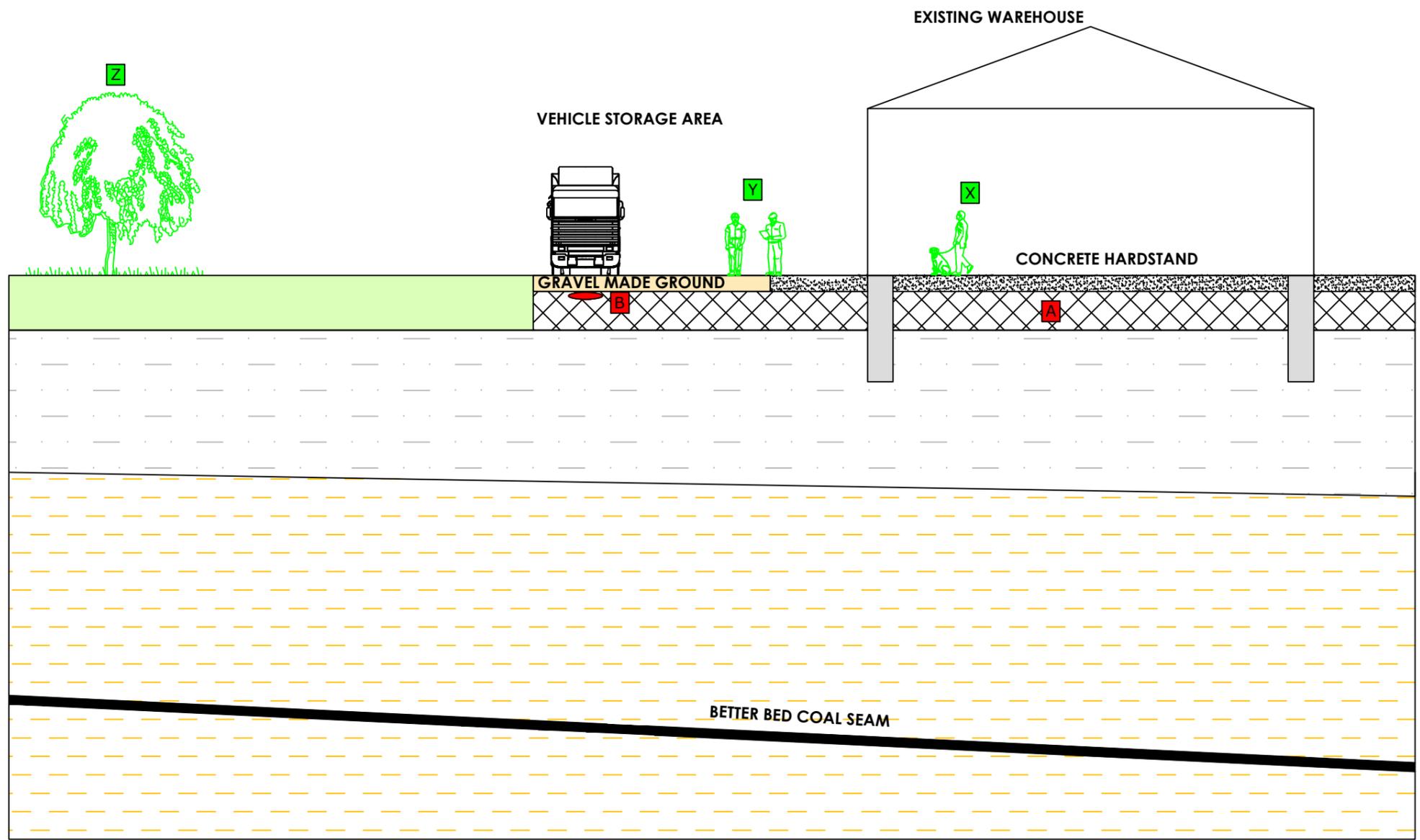
CLIENT  
**BRADLEY VILLA FARM**

JOB TITLE  
**VILLA FARM**

DRAWING TITLE  
**SITE PHOTOGRAPHS**

DRAWN <b>DW</b>	DATE <b>16 02 2024</b>	STATUS FOR COMMENT <input type="checkbox"/> FOR APPROVAL <input type="checkbox"/> DRAFT <input type="checkbox"/> FINAL <input checked="" type="checkbox"/>
CHECKED <b>REG</b>	DATE <b>16 02 2024</b>	

SCALE <b>NOT TO SCALE</b>	SHEET <b>A3</b>	DRAWING NO. <b>4929/4</b>	REVISION
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NOTES

REV.	DESCRIPTION	DATE



info@lithos.co.uk  
www.lithos.co.uk  
Tel 01937 545330

CLIENT  
**BRADLEY VILLA FARM**

JOB TITLE  
**VILLA FARM**

DRAWING TITLE  
**PRELIMINARY CONCEPTUAL SITE MODEL**

DRAWN DW	DATE 08 02 24	STATUS FOR COMMENT <input type="checkbox"/> FOR APPROVAL <input type="checkbox"/> DRAFT <input type="checkbox"/> FINAL <input checked="" type="checkbox"/>
CHECKED REG	DATE 08 02 24	

SCALE Not to scale	SHEET A3	DRAWING NO. 4929/5	REVISION
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KEY	
	TOPSOIL/SUBSOIL
	GLACIAL TILL
	SANDSTONE

SOURCES	
	MADE GROUND (INORGANICS)
	LEAKAGE/SPILLAGE (ORGANICS)

PATHWAYS	

RECEPTORS	
	END USERS
	SITE WORKERS
	VEGETATION

Appendix C  
Commission

002/4929/REG

13<sup>th</sup> December 2023



Registered in England 07068066

Parkhill  
Wetherby  
West Yorkshire  
LS22 5DZ

T 01937 545 330

[www.lithos.co.uk](http://www.lithos.co.uk)

Mr J Dunbavin  
ID Planning Limited  
9 York Place  
Leeds  
LS1 2DS

Dear Jon

### Bradley Villa Farm, Huddersfield, HD2 2JY

Further to your recent invitation, please find below our proposal for preparing a geotechnical and environmental desk study appraisal for the above land. It is understood that the site consists of a single parcel of land of approximately 1.7 hectares and is currently occupied by a miscellany of farm buildings.

We understand that the proposed development change of use (egg production unit to research and development or industrial uses) has planning permission (Application No. 2023/92887). With respect to ground, the EHO has recommended a number of Conditions requiring a Desk Study, and (if necessary) Ground Investigation, Remediation Strategy and Verification Report.

Brief examination of the relevant geological map suggests the site is underlain by Lower Coal Measures sandstone.

This site is located within a Coal Mining Development Low Risk Area (within the defined coalfield, but no known defined risks have been recorded by the Coal Authority; there may still be unrecorded issues), and therefore a Consultant's mining report will be obtained.

Our report will include a mining risk assessment (desk-based) that should satisfy the Coal Authority.

Environmental search data and historical maps, obtained from Landmark or Groundsure, will be reviewed in order to determine whether any past land uses have had any effect on the proposed development. In addition, we will visit site to review current operations and undertake a walkover survey.

The report will include preliminary recommendations with respect to mining, foundations, contamination and hazardous gas.

Our report will be in a format that should satisfy the planning condition imposed by Leeds CC (Desk Study \Phase 1 investigation), and we will do what we reasonably can to avoid recommending intrusive investigation.

It is anticipated that a final bound report will be available within 3 weeks of receiving your written instruction to proceed. Our lump sum fee for provision of this report is £\*\*\* plus VAT.

This work will be undertaken in accordance with our Standard Terms and Conditions, a copy of which are enclosed.

It is hoped the above is sufficient for your present needs. However, should you require any further information, please contact the undersigned.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Mark Perrin', is written over a light blue horizontal line.

Mark Perrin  
Director  
for and on behalf of  
**LITHOS CONSULTING LIMITED**



**1 DEFINITIONS AND INTERPRETATION**

1.1 In this Agreement, unless the context otherwise requires, the following words and expressions have the following meanings:

"Agreement" means these Terms (entitled "Terms and Conditions for the Appointment of Lithos Consulting"), the Proposal, any document recording your unequivocal acceptance of the Proposal and any other documents or parts of other documents expressly referred to in any of the foregoing;

"Documents" means all documents of any kind and includes plans, drawings, reports, programmes, specifications, Bills of Materials, calculations, letters, e-mails, faxes, memoranda, films and photographs (including negatives), or any other form of record prepared or provided or received by, or on behalf of us, and whether in paper form or stored electronically or on disk, or otherwise;

"Intellectual Property" includes all rights to, and any interests in, any patents, designs, trade marks, copyright, know-how, trade secrets and any other proprietary rights or forms of intellectual property (protectable by registration or not) in respect of any technology, concept, idea, data, programme or other software (including source and object codes), specification, plan, drawing, schedule, minutes, correspondence, scheme, programme, design, system, process logo, mark, style, or other matter or thing, existing or conceived, used, developed or produced by any person;

"Project" means the project described in the Proposal and any enquiry from you on which we have based our Proposal;

"Proposal" means the offer document prepared by us in response to an enquiry or otherwise, in connection with the proposed provision of the Services;

"Services" means the work and services relating to the Project to be provided by us pursuant to the Agreement and as set out in the Proposal and includes any additions or amendments thereto made in accordance with these Terms;

"Terms" means these terms entitled "Lithos Consulting Terms of Appointment" as amended from time to time.

1.2 Words importing the singular only shall also include the plural and vice versa, where the context requires.

1.3 Words importing persons or parties shall include firms, corporations and any organisation having legal capacity and vice versa, where the context requires; and words importing a particular gender include all genders.

1.4 The sub-headings to the clauses of these Terms are for convenience only and shall not affect the construction of the Agreement.

1.5 A reference to legislation includes that legislation as from time to time amended, re-enacted or substituted and any Orders in Council, orders, rules, regulations, schemes, warrants, by-laws, directives or codes of practice issued under any such legislation.

1.6 In the event of conflict between the documents forming part of the Agreement, the Proposal shall prevail, followed by the Terms.

**2 APPOINTMENT**

2.1 You agree to engage us and we agree to provide the Services in accordance with the provisions of this Agreement.

**3 OUR OBLIGATIONS**

3.1 We shall perform the Services using the reasonable standard of skill and care normally exercised by qualified members of our profession, performing similar services under similar conditions.

3.2 We shall use all reasonable endeavours to perform the Services in accordance with relevant environmental and safety legislation.

**4 YOUR OBLIGATIONS**

4.1 Throughout the period of this Agreement you shall afford to us, or procure for our benefit, access to any site where access is required for the performance of the Services.

4.2 You accept responsibility for ensuring that we are notified in writing of all special site and/or plant conditions, including without prejudice to the generality of the foregoing, the existence and precise location of all underground services, cables, pipes, drains or underground buildings, constructions or any hazards, which you shall clearly mark on the ground or identify on accurate location plans supplied to us prior to the commencement of the Services. You shall also inform us in writing of any relevant operating procedures including any site safe operating procedures and any other regulations relevant to the carrying out of the Services. You shall indemnify us against all costs, losses, claims, demands and expenses arising as a result of any non-disclosure in this respect, including but not limited to indemnification against any action brought by the owner of the land or otherwise.

4.3 If you discover any conflict, defect or other fault in the information or designs provided by us pursuant to the Agreement, you will advise us in writing of such defect, conflict or other fault and we shall have the right to rectify the same or where necessary, to design the solution for rectification of any works carried out by others pursuant to the conflicting, defective or in any other way faulty information or designs.

**5 COPYRIGHT**

5.1 The copyright in all Intellectual Property prepared by or on behalf of us in connection with the Project for delivery to you shall remain vested in us.

5.2 You shall have a non-exclusive licence to copy and use such Intellectual Property for purposes directly related to the Project. Such licence shall enable you to copy and use the Intellectual Property but solely for your own purposes in connection with the Project and such use shall not include any licence to reproduce any conceptual designs or professional opinions contained therein nor shall it include any licence to amend any drawing, design or other Intellectual Property produced by us.

5.3 Should you wish to use such Intellectual Property in connection with any other works or for any other purpose not directly related to the Project or wish to pass any Intellectual Property to any third party, you must obtain our prior written consent. The giving of such consent shall be at our absolute discretion and shall be upon such terms as we may require. We shall not be liable to you for the use by any person of such Intellectual Property for any purpose other than that for which the same were prepared by or on our behalf.

5.4 Ownership of any proposals submitted to you that are not subsequently confirmed as part of the Services to be provided for you remain with us and such proposals must not be used as the basis for any future work undertaken by you or a third party and no liability can be accepted howsoever arising from such proposals.

5.5 In the event of you being in default of payment of any fees or other amounts due, we may suspend further use of the licence on giving no less than 2 calendar days' notice of the intention to do so. Use of the licence may be resumed on receipt of the outstanding amounts.

**6 CONFIDENTIALITY**

6.1 Neither you nor we shall at any time disclose to any person any confidential information concerning the business, affairs, customers, clients or suppliers of the other party or of any member of the group of companies to which the other party belongs, except as permitted by clauses 6.2 and 6.4.

6.2 Each party may disclose the other party's confidential information:

(a) to its employees, officers, representatives, contractors, sub-contractors or advisers who need to know such information for the purposes of exercising the party's rights or carrying out its obligations under or in connection with this Agreement. Each party shall ensure that its employees, officers, representatives, contractors, sub-contractors or advisers to whom it discloses the other party's confidential information comply with this paragraph 6; and

(b) as may be required by law, to a court of competent jurisdiction or any governmental or regulatory authority.

6.3 Neither you nor we shall use any other party's confidential information for any purpose other than to exercise our rights or perform our respective obligations under or in connection with this Agreement.

6.4 Subject to the above and our privacy policy which can be found on [www.lithos.co.uk](http://www.lithos.co.uk), we shall be permitted to use information related to the Services we provide in connection with the Project for the purposes of marketing its services and in proposals for work of a similar type.

**7 ASSIGNMENT**

7.1 You may assign the benefit of this Agreement on two occasions with our prior written consent (not to be unreasonably withheld) and any additional assignments shall be with our prior consent.

7.2 We may at any time assign, mortgage, charge, subcontract, delegate, declare a trust over or deal in any other manner with any or all of our rights and obligations under this Agreement.

**8 INSURANCE**

8.1 We shall maintain a professional indemnity insurance policy covering our liabilities for negligence under this Agreement, with a limit of indemnity of £5,000,000 (FIVE MILLION POUNDS) any one claim, save for pollution and contamination claims and asbestos claims both of which carry £2,000,000 (TWO MILLION POUNDS) in the aggregate cover. This policy is annually renewable and whilst renewal is not automatic, We shall maintain such insurance at all times until six years from the date of the completion (or termination) of the Services under this Agreement, provided such insurance is available at commercially reasonable rates and terms.

8.2 If for any period such insurance is not available at commercially reasonable rates and terms, we shall inform you and shall obtain in respect of such period such reduced level of professional indemnity insurance as is available and as would be fair and reasonable in the circumstances for us to obtain.

**9 PAYMENT**

9.1 Invoices for services rendered will be submitted for payment in accordance with the Proposal.

9.2 You shall pay you any VAT properly chargeable on the Services and any amount expressed as payable to us under this Agreement is exclusive of VAT unless stated otherwise.

9.3 The due date for payment is the date of the invoice and the final date for payment is 28 days from the date of the invoice.

9.4 If you dispute the amount included for payment in an invoice then you must serve a written notice on us no later than 14 calendar days before the final date for payment. If no notice is given within the required timeframe the amount due shall be the amount stated in the invoice.

9.5 If you fail to pay any monies in accordance with the foregoing payment provisions, we shall be entitled to charge interest on any monies owed to us, such interest to be at a rate of 4% above the base rate of a clearing bank from time to time calculated from the final date for payment to the date of actual payment on a compound basis. The parties acknowledge that our liability under this clause 10.5 is a substantial remedy for the purposes of section 9(1) of the Late Payment of Commercial Debts (Interest) Act 1998.

**10 LIMITATIONS ON LIABILITY**

10.1 Unless otherwise agreed in writing, our total liability under or in connection with this Agreement whether in contract, tort, negligence, breach of statutory duty or otherwise (other than in respect of personal injury or death) shall be limited to and shall not exceed the lesser of either the level of insurance cover referred to within clause 8.1 above, or 20 times the total value of invoices issued to you for the Services.

10.2 No action or proceedings under or in respect of the Agreement whether in contract, tort, negligence, under statute or otherwise shall be commenced against us after the expiry of a period of six years from the date of the completion (or termination) of the Services under this Agreement.

10.3 Whilst we usually scan for potential exploratory locations with a Cable Avoidance Tool, we shall not be liable for any damage to underground services, cables, pipes, drains or underground buildings, constructions and the like which were either not marked on site or for which accurate plans were not provided.

10.4 We shall not be liable for the cost of rectifying any defect, conflict or other fault in the information or designs provided by us or for the cost of designing a solution for and rectifying any subsequent works carried out by others pursuant to the conflicting, defective or in any other way faulty information or designs, unless we have been advised in writing of the same by you and have been given the opportunity to rectify the same or where necessary, to design the solution for rectification of any subsequent works carried out by others pursuant to the same.

**11 DELAY**

We shall comply with any timescale agreed for completion of the Services unless delayed or prevented by circumstances beyond our reasonable control and in the event of any such circumstances arising we undertake to complete the Services within a reasonable period, but will not be liable to you for any delay as a result.

**12 TERMINATION**

12.1 The Agreement may be terminated by either of us in the event of the other making a composition or arrangement with its creditors, becoming bankrupt, or being a company, making a proposal for a voluntary arrangement for a composition of debts, or has a provisional liquidator appointed, or has a winding-up order made, or passes a resolution for voluntary winding-up (except for the purposes of a bona fide scheme of amalgamation or reconstruction), or has an administrator or an administrative receiver appointed to the whole or any part of its assets. Notice of termination must be given to the party which is insolvent by the other party.

12.2 If for any reason our Services are suspended for a period in excess of three calendar months then we shall be entitled to terminate our appointment under this Agreement in respect of the Services by no less than seven days written notice to you.

12.3 If you fail to pay in full any sum due under the terms of this Agreement by the final date for payment for that sum and no effective pay less notice is issued, we may serve written notice to you demanding payment within 14 days of such notice. If you fail to comply with such notice, we shall be entitled to terminate our employment under this Agreement forthwith.

12.4 Any termination of our appointment howsoever caused shall be without prejudice to our rights to require payment for all Services performed up to the date of such termination including but not limited to payment of a fair and reasonable proportion of any figure identified in the Proposal or otherwise for fees in respect of a particular service which Lithos has started, but not completed.

**13 THIRD PARTY RIGHTS**

The Agreement shall not confer and shall not purport to confer on any third party any benefit or any right to enforce any term of this Agreement for the purposes of the Contracts (Rights of Third Parties) Act 1999 or otherwise.

**14 COLLATERAL WARRANTIES & LETTERS OF RELIANCE**

We shall consider and may consent to a request from you for us to enter into a collateral warranty or letter of reliance with a third party with regard to the Services provided under this Agreement. The giving of such consent shall be at our absolute discretion and providing we agree to our standard form of collateral warranty or letter of reliance (subject to any reasonable changes to be approved by us at our absolute discretion) and in return for payment of a fee (to be notified at the time of the request).

**15 NOTICES**

15.1 Any notice provided for in the Agreement shall be in writing and shall be deemed to be properly given if delivered by hand or sent by pre-paid first class post to the address of the relevant party as may have been notified by each party to the other or, in the absence of notification, to our respective registered office addresses.

15.2 Such notice shall be deemed to have been received on the day of delivery if delivered by hand or on the second working day after the day of posting if sent by pre-paid first class post.

**16 ENTIRE AGREEMENT**

16.1 The Agreement constitutes the complete and entire agreement between us with respect to the Services and supersedes any prior oral and/or written warranties, terms, conditions, communications and representations, whether express or implied and any claim against us in respect of the Services can only be made in contract under the provisions of this Agreement and not otherwise under the law or tort or otherwise.

16.2 No amendments, modifications or variation of this Agreement shall be valid unless made in writing and agreed to by us: such agreement must be recorded in writing by at least one of us.

16.3 We shall not be bound by any standard or printed terms or conditions furnished by you in any of your documents unless we specifically state in writing separately from such documents that we intend such terms and conditions to apply.

**17 DISPUTES, JURISDICTION AND GOVERNING LAW**

17.1 This Agreement shall be governed by and construed in accordance with English law and we irrevocably and unconditionally submit to the jurisdiction of the English Courts.

17.2 Where the Housing Grants, Construction and Regeneration Act 1996 applies, any dispute between us may be referred to adjudication in accordance with the Scheme for Construction Contracts Regulations 1998 or any amendment or modification thereof being in force at the time of the dispute, as applicable to England, Wales, Scotland and Northern Ireland.

**From:** Reg  
**Sent:** Tuesday, January 30, 2024 4:30 PM  
**To:** Jon Dunbavin <[jonathan@idplanning.co.uk](mailto:jonathan@idplanning.co.uk)>  
**Subject:** RE: BVF- COU to employment uses

Afternoon Jon

I've re-run quote for pits rather than mini-BHs – the cost is only £\*\*\* different. So, take your pick, but I'd have thought the mini-BHs best as they won't destroy large areas of existing hardstand. hole location plan attached.

You could reduce the no. of locations, but not much point as it's simply a day on site so no real saving.

We could test fewer samples – say 6 (reduces cost by c. £\*\*\*), but that runs the risk of the Report being “thin” and meeting objection from EHO.

If a simple letter report was suffice, we could probably save £\*\*\*.

Hope this helps.

Mark Perrin  
Director  
Lithos Consulting Ltd  
M 07703 396 635  
DD 01937 545 331



[www.lithos.co.uk](http://www.lithos.co.uk)

---

**From:** Jon Dunbavin <[jonathan@idplanning.co.uk](mailto:jonathan@idplanning.co.uk)>  
**Sent:** Monday, January 29, 2024 5:30 PM  
**To:** Reg <[reg@lithos.co.uk](mailto:reg@lithos.co.uk)>  
**Subject:** RE: BVF- COU to employment uses

Reg afternoon and thanks for coming back to me.

Apologies, couple of quick questions if I may.

Would pitting be cheaper? Is 10 locations the minimum we could get a way with and where would the locations be? If you could let me have the locations on a plan it would help.

Thanks

JD

Jonathan Dunbavin  
Managing Director  
ID Planning  
9 York Place  
Leeds  
LS1 2DS  
07841 474980

---

**From:** Reg <[reg@lithos.co.uk](mailto:reg@lithos.co.uk)>  
**Sent:** 26 January 2024 13:19  
**To:** Jon Dunbavin <[jonathan@idplanning.co.uk](mailto:jonathan@idplanning.co.uk)>  
**Subject:** BVF- COU to employment uses

Hi Jon

Probably the best option would be a day's mini-boreholes (window sampling) – broadly same cost as pitting, but far less surface disturbance.

Budget cost c £\*\*\*. This allows for the mini-BHs, supervision, soils analysis (10 no.) & reporting (and the desk study previously quoted).

Regards

Mark Perrin  
Director  
Lithos Consulting Ltd  
M 07703 396 635  
DD 01937 545 331



[www.lithos.co.uk](http://www.lithos.co.uk)

---

**From:** Jon Dunbavin <[jonathan@idplanning.co.uk](mailto:jonathan@idplanning.co.uk)>  
**Sent:** Friday, January 26, 2024 12:59 PM  
**To:** Reg <[reg@lithos.co.uk](mailto:reg@lithos.co.uk)>  
**Subject:** RE: BVF- COU to employment uses

Reg afternoon I trust you are well.

Thanks for this, we are still wrangling with the EHO and it looks like they may want an intrusive which seems a bit excessive for essentially a change of use application. If we had to do one what's the minimum scope you think would be able to satisfy this without significant costs, for instance can we just do trial pits, bore holes seem onerous and unnecessary given the nature of the scheme.

If you could please come back to me with a limited scope and cost it would be very much appreciated.

Regards

JD

Jonathan Dunbavin  
Managing Director  
ID Planning  
9 York Place  
Leeds  
LS1 2DS

07841 474980

---

**From:** Reg <[reg@lithos.co.uk](mailto:reg@lithos.co.uk)>  
**Sent:** Wednesday, December 13, 2023 3:16 PM  
**To:** Jon Dunbavin <[jonathan@idplanning.co.uk](mailto:jonathan@idplanning.co.uk)>  
**Subject:** BVF- COU to employment uses

Afternoon JD

Quote for desk study as requested. Given proposed end use, hopefully this will suffice to resolve EHO concerns.

Regards

Mark Perrin  
Director  
Lithos Consulting Ltd  
M 07703 396 635  
DD 01937 545 331



---

**From:** Jon Dunbavin <[jonathan@idplanning.co.uk](mailto:jonathan@idplanning.co.uk)>  
**Sent:** Tuesday, December 12, 2023 11:25 AM  
**To:** Reg <[reg@lithos.co.uk](mailto:reg@lithos.co.uk)>  
**Subject:** BVF- COU to employment uses

Reg good morning I trust you are well.

I am currently running an application for the change of use of an egg production unit to employment uses E(g) (11) and E(g) (111) at Bradley Villa Farm at Bradley, Huddersfield. The use classes are for research and development or any industrial process (which can be carried out in any residential area without causing detriment to the amenity of the area).

The egg production unit had to cease operations due to an approval (on the same clients' land) for residential to the north for Redrow and the odour issues associated with the keeping of poultry.

My client needs to find an alternative use for the building, and we thought light industrial uses would be an acceptable option but we are now running up against difficulties with the council. One such difficulty is the request for contamination conditions which seems onerous given the building exists and the nature of the proposed use. We need to address this so could you please let me have a strategy and fee quote letter to address the EHO comments which are attached including a desk top SI?

Let me know if you need anything more, the application can be viewed on the Kirklees council portal.

I look forward to hearing from you

Regards

JD

Jonathan Dunbavin  
Managing Director  
ID Planning  
9 York Place  
Leeds  
LS1 2DS

07841 474980

This message has been scanned by Mailsafe

**Appendix D**  
**Historical OS Plans**



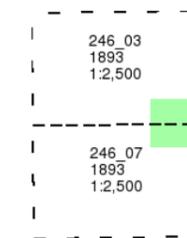
Yorkshire

Published 1893

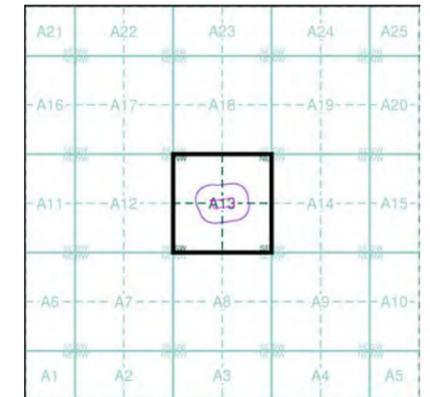
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

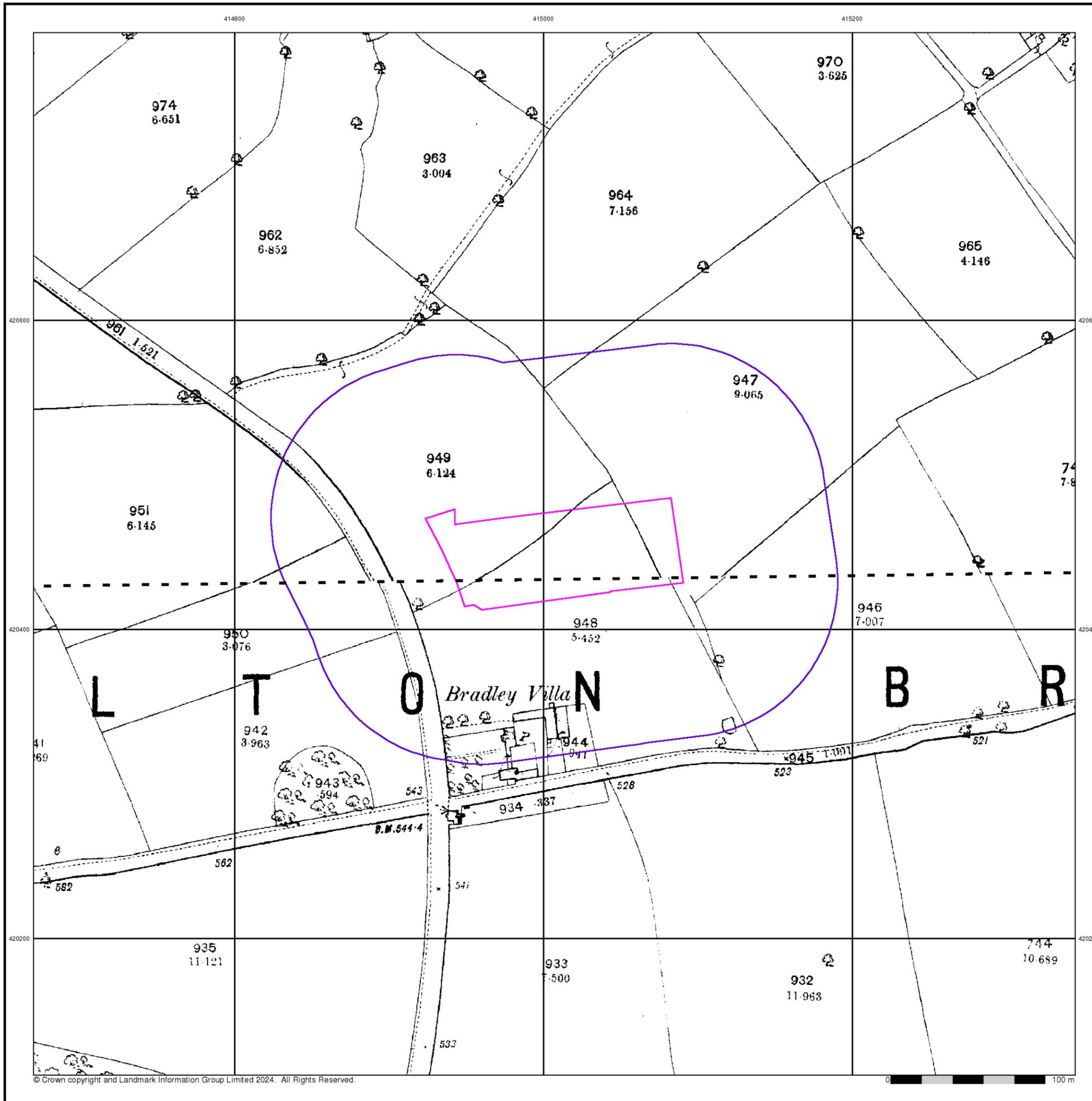
Order Number: 334523858\_1\_1  
Customer Ref: PO21919/DW/4929  
National Grid Reference: 415010, 420450  
Slice: A  
Site Area (Ha): 0.85  
Search Buffer (m): 100

Site Details

Bradley Villa Farm, Huddersfield, West Yorkshire, HD2 2JY



Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: www.envirocheck.co.uk





### Ordnance Survey Plan

Published 1958 - 1959

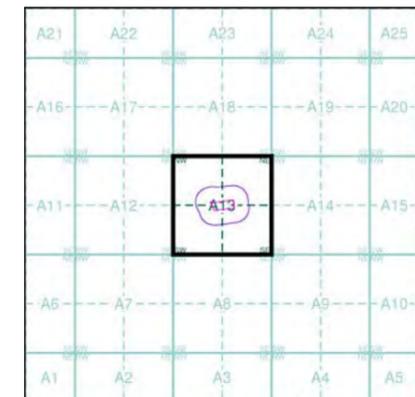
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

### Map Name(s) and Date(s)

SE 1420NE 1959 1:1,250	SE 1520NW 1958 1:1,250
SE 1420SE 1959 1:1,250	SE 1520SW 1958 1:1,250

### Historical Map - Segment A13



### Order Details

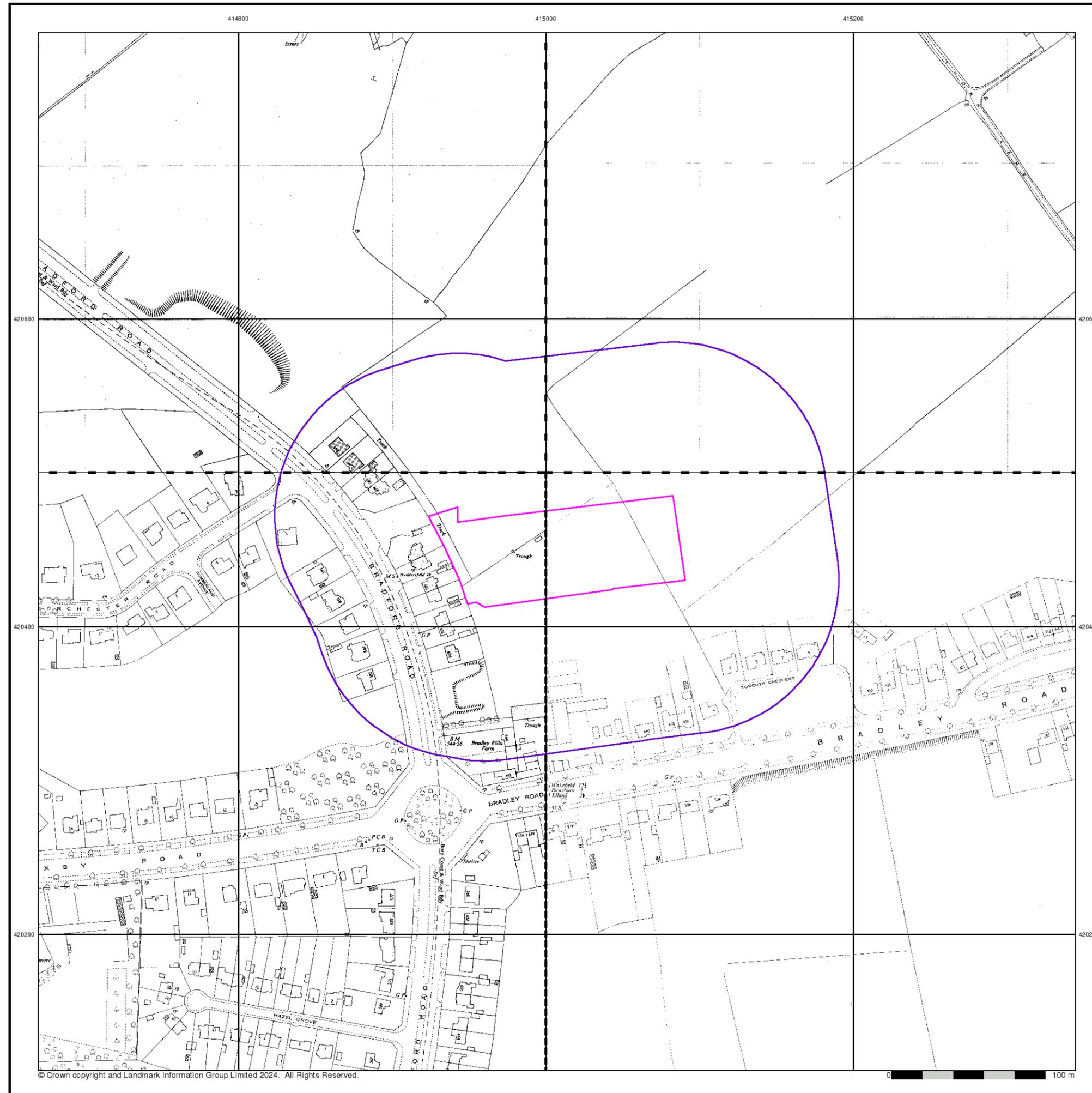
Order Number: 334523858\_1\_1  
 Customer Ref: PO21919/DW/4929  
 National Grid Reference: 415010, 420450  
 Slice: A  
 Site Area (Ha): 0.85  
 Search Buffer (m): 100

### Site Details

Bradley Villa Farm, Huddersfield, West Yorkshire, HD2 2JY



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk





### Large-Scale National Grid Data

Published 1992 - 1993

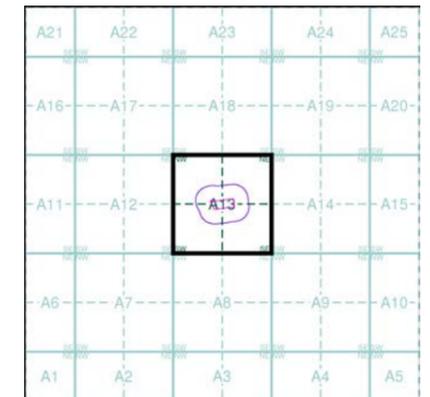
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)

SE1420NE 1992 1:1,250	SE1520NW 1993 1:1,250
SE1420SE 1992 1:1,250	SE1520SW 1993 1:1,250

### Historical Map - Segment A13



### Order Details

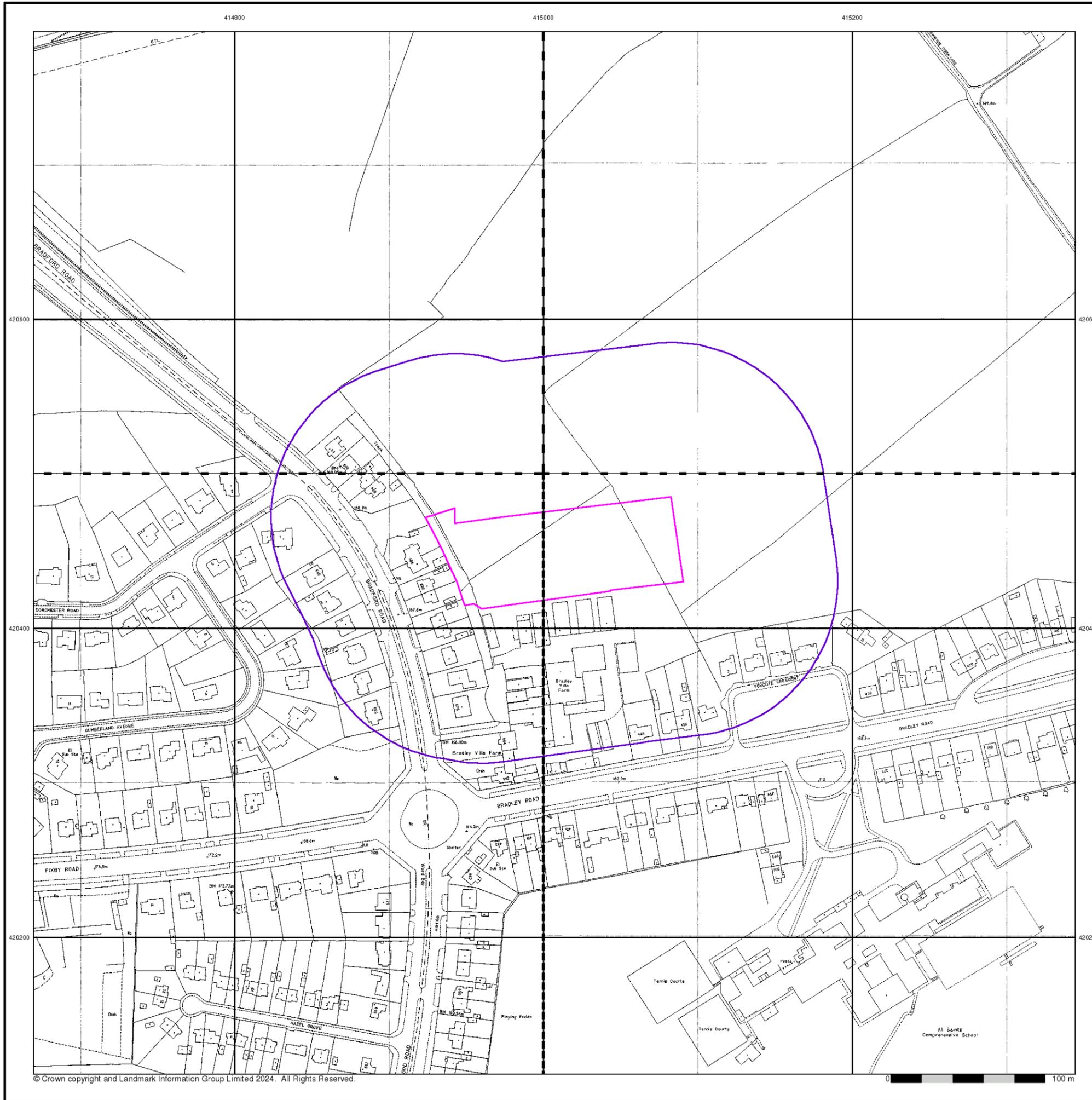
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 Customer Ref: PO21919/DW/4929  
 National Grid Reference: 415010, 420450  
 Slice: A  
 Site Area (Ha): 0.85  
 Search Buffer (m): 100

### Site Details

Bradley Villa Farm, Huddersfield, West Yorkshire, HD2 2JY



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414800

415000

415200



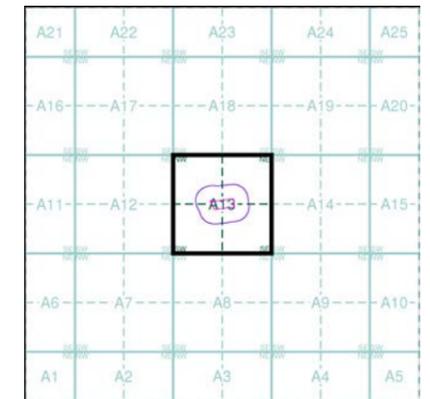
### Historical Aerial Photography

Published 2000

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain



### Historical Aerial Photography - Segment A13



### Order Details

Order Number: 334523858\_1\_1  
 Customer Ref: PO21919/DW/4929  
 National Grid Reference: 415010, 420450  
 Slice: A  
 Site Area (Ha): 0.85  
 Search Buffer (m): 100

### Site Details

Bradley Villa Farm, Huddersfield, West Yorkshire, HD2 2JY



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



### VectorMap Local

Published 2023

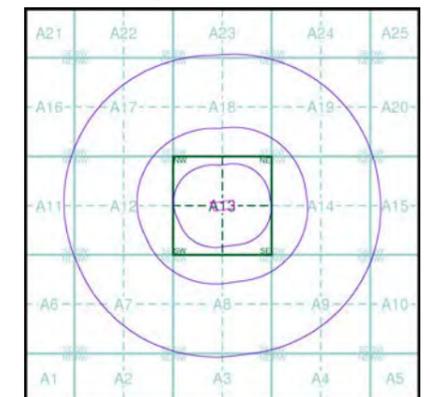
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

### Map Name(s) and Date(s)

SE12SW	SE12SE
2023	2023
Variable	Variable
SE11NW	SE11NE
2023	2023
Variable	Variable

### Historical Map - Slice A



### Order Details

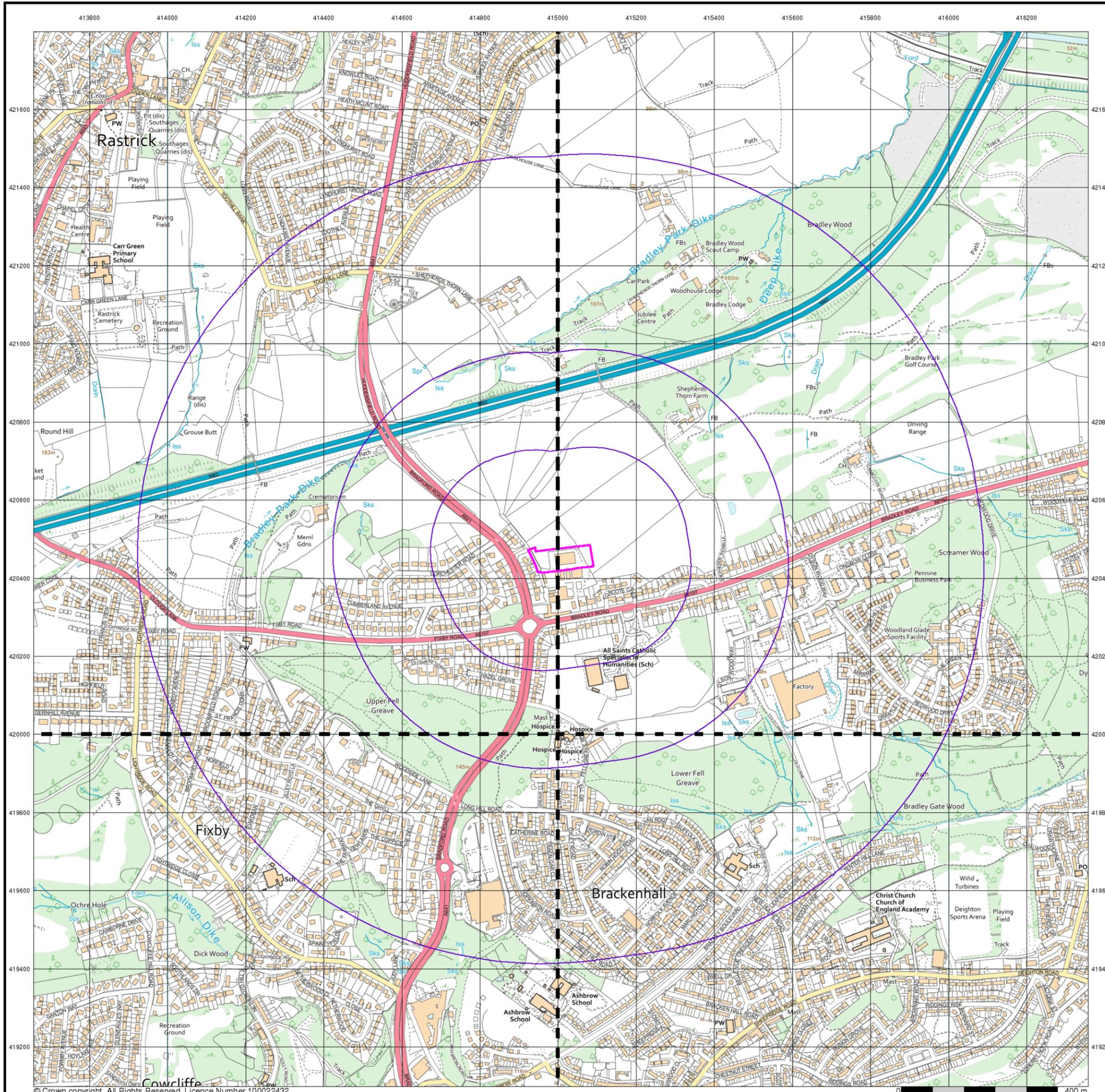
Order Number: 334523858\_1\_1  
 Customer Ref: PO21919/DW/4929  
 National Grid Reference: 415010, 420450  
 Slice: A  
 Site Area (Ha): 0.85  
 Search Buffer (m): 1000

### Site Details

Bradley Villa Farm, Huddersfield, West Yorkshire, HD2 2JY



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



## Appendix E

### Search Responses & other Correspondence



# Envirocheck<sup>®</sup> Report:

## Datasheet

### Order Details:

**Order Number:**

334523858\_1\_1

**Customer Reference:**

PO21919/DW/4929

**National Grid Reference:**

415010, 420450

**Slice:**

A

**Site Area (Ha):**

0.85

**Search Buffer (m):**

1000

### Site Details:

Bradley Villa Farm

Huddersfield

West Yorkshire

HD2 2JY

### Client Details:

Mr M Perrin

Lithos Consulting Ltd

Parkhill

Walton Road

Wetherby

LS22 5DZ

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	18
Hazardous Substances	-
Geological	20
Industrial Land Use	29
Sensitive Land Use	35
Data Currency	36
Data Suppliers	42
Useful Contacts	43

#### Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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#### Report Version v53.0

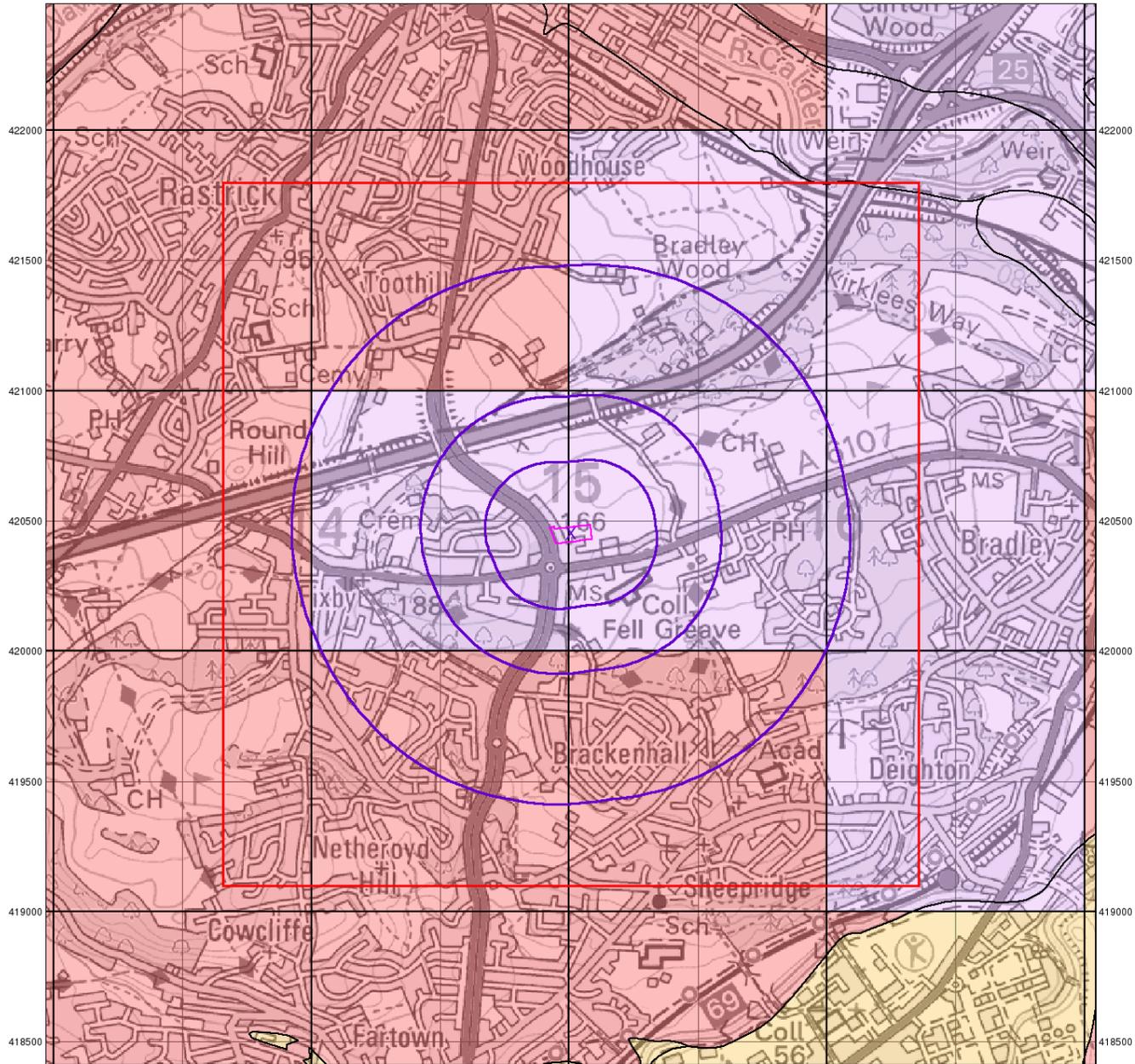
Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Agency &amp; Hydrological</b>					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2				4
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 3				2
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3			Yes	
Pollution Incidents to Controlled Waters	pg 3				3
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
Substantiated Pollution Incident Register	pg 3			1	
River Quality Chemistry Sampling Points					
Water Abstractions	pg 4			4	(*14)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 8	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 8	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 9			17	61

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Waste</b>					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 18				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 18			1	4
Potentially Infilled Land (Water)	pg 18			2	7
Registered Landfill Sites	pg 19				1
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
<b>Hazardous Substances</b>					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Geological</b>					
BGS 1:625,000 Solid Geology	pg 20	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 20	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 26				5
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 26	Yes	n/a	n/a	n/a
Mining Instability	pg 27	Yes	n/a	n/a	n/a
Man-Made Mining Cavities	pg 27				1
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 27	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 27		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 27	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 27		Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 28	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 28	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
<b>Industrial Land Use</b>					
Contemporary Trade Directory Entries	pg 29		1	3	24
Fuel Station Entries	pg 31				1
Points of Interest - Commercial Services	pg 31				8
Points of Interest - Education and Health	pg 32				1
Points of Interest - Manufacturing and Production	pg 32		1		3
Points of Interest - Public Infrastructure	pg 32				9
Points of Interest - Recreational and Environmental	pg 33				10
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Sensitive Land Use</b>					
Ancient Woodland	pg 35			3	1
Areas of Adopted Green Belt	pg 35	1		1	
Areas of Unadopted Green Belt	pg 35		1	1	
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

413000 413500 414000 414500 415000 415500 416000 416500 417000



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## Groundwater Vulnerability

### General

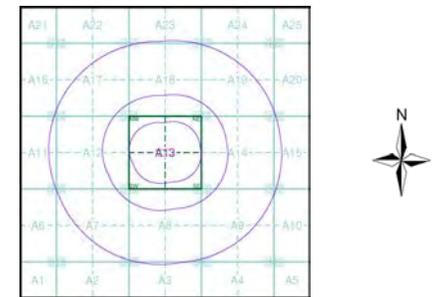
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

- | Bedrock Aquifers                        | Superficial Aquifers                    |
|---|---|
| High Vulnerability, Principal Aquifer   | High Vulnerability, Principal Aquifer   |
| High Vulnerability, Secondary Aquifer   | High Vulnerability, Secondary Aquifer   |
| Medium Vulnerability, Principal Aquifer | Medium Vulnerability, Principal Aquifer |
| Medium Vulnerability, Secondary Aquifer | Medium Vulnerability, Secondary Aquifer |
| Low Vulnerability, Principal Aquifer    | Low Vulnerability, Principal Aquifer    |
| Low Vulnerability, Secondary Aquifer    | Low Vulnerability, Secondary Aquifer    |

- Unproductive Aquifer
- Soluble Rock

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 334523858\_1\_1  
 Customer Ref: PO21919/DW/4929  
 National Grid Reference: 415010, 420450  
 Slice: A  
 Site Area (Ha): 0.85  
 Search Buffer (m): 1000

### Site Details

Bradley Villa Farm, Huddersfield, West Yorkshire, HD2 2JY



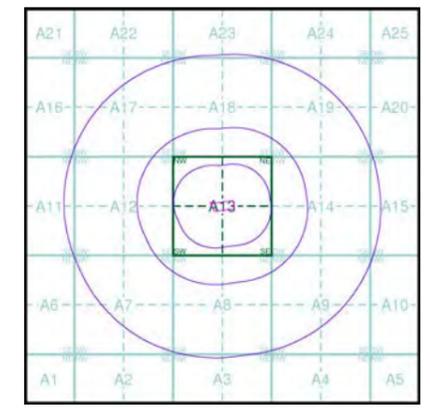
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
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- General**
- Specified Site
  - Specified Buffer(s)
  - Bearing Reference Point
  - Map ID
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
  - Contaminated Land Register Entry or Notice
  - Discharge Consent
  - Enforcement or Prohibition Notice
  - Integrated Pollution Control
  - Integrated Pollution Prevention Control
  - Local Authority Integrated Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control Enforcement
  - Pollution Incident to Controlled Waters
  - Prosecution Relating to Authorised Processes
  - Prosecution Relating to Controlled Waters
  - Registered Radioactive Substance
  - River Network or Water Feature
  - River Quality Sampling Point
  - Substantiated Pollution Incident Register
  - Water Abstraction
  - Water Industry Act Referral
- Waste**
- BGS Recorded Landfill Site (Location)
  - BGS Recorded Landfill Site
  - EA Historic Landfill (Buffered Point)
  - EA Historic Landfill (Polygon)
  - Integrated Pollution Control Registered Waste Site
  - Licensed Waste Management Facility (Landfill Boundary)
  - Licensed Waste Management Facility (Location)
  - Local Authority Recorded Landfill Site (Location)
  - Local Authority Recorded Landfill Site
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Registered Landfill Site
  - Registered Landfill Site (Location)
  - Registered Landfill Site (Point Buffered to 100m)
  - Registered Landfill Site (Point Buffered to 250m)
  - Registered Waste Transfer Site (Location)
  - Registered Waste Transfer Site
  - Registered Waste Treatment or Disposal Site (Location)
  - Registered Waste Treatment or Disposal Site
- Hazardous Substances**
- COMAH Site
  - Explosive Site
  - NIHHS Site
  - Planning Hazardous Substance Consent
  - Planning Hazardous Substance Enforcement
- Geological**
- BGS Recorded Mineral Site

**Site Sensitivity Map - Slice A**



**Order Details**

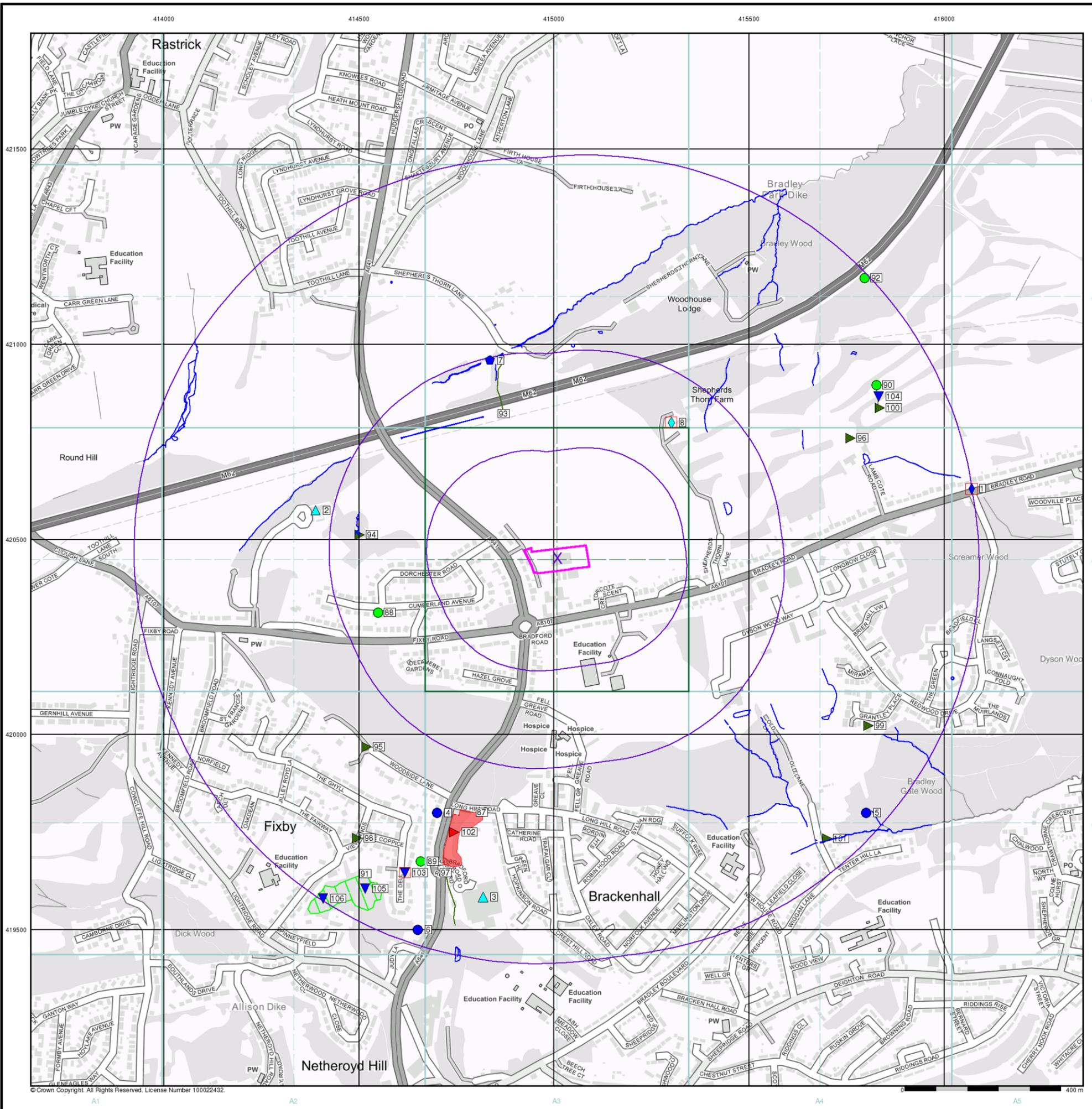
Order Number: 334523858\_1\_1  
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 Search Buffer (m): 1000

**Site Details**

Bradley Villa Farm, Huddersfield, West Yorkshire, HD2 2JY



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 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



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### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

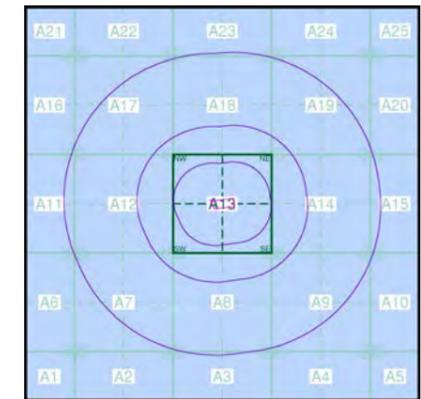
### Risk of Flooding from Surface Water

- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

### Suitability

- See the suitability map below
- National to county
  - County to town
  - Town to street
  - Street to parcels of land
  - Property

### EANRW Suitability Map - Slice A



### Order Details

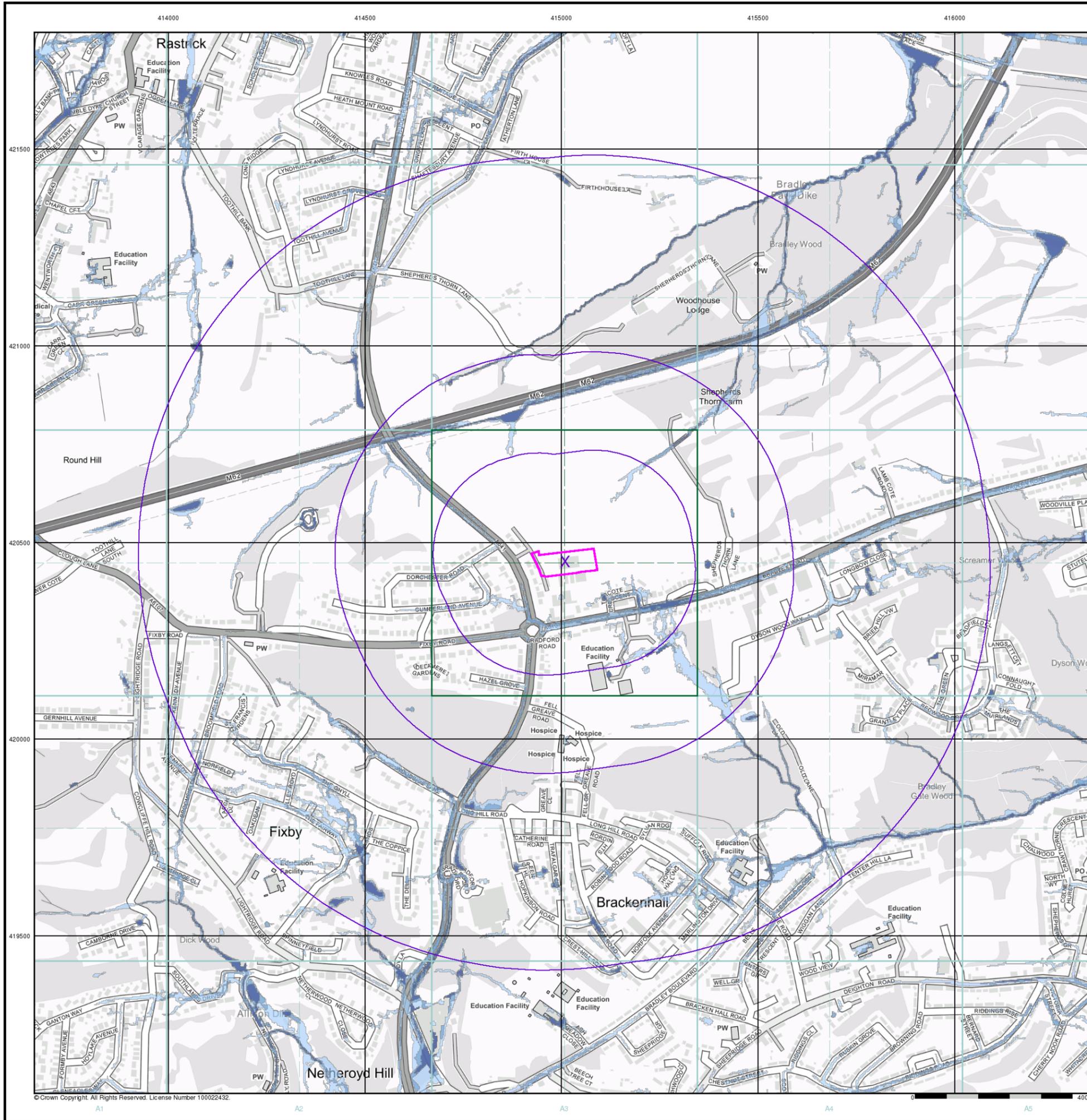
Order Number: 334523858\_1\_1  
 Customer Ref: PO21919/DW/4929  
 National Grid Reference: 415010, 420450  
 Slice: A  
 Site Area (Ha): 0.85  
 Search Buffer (m): 1000

### Site Details

Bradley Villa Farm, Huddersfield, West Yorkshire, HD2 2JY



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



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