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## Project Quality Assurance Information Sheet

|               |                                                                                                                                                                                 |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site          | 216-218 Holcombe Road, Bury                                                                                                                                                     |
| Report Title  | Phase 1 - Preliminary Risk Assessment                                                                                                                                           |
| Report Status | Final                                                                                                                                                                           |
| Report No     | BEK-23101-1                                                                                                                                                                     |
| Date          | August 2023                                                                                                                                                                     |
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## 216-218 HOLCOMBE ROAD, BURY

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### Phase 1 - Preliminary Risk Assessment

**PROJECT NO:** 23101  
**REPORT REF:** BEK-23101-1  
**DATE:** August 2023

#### REVISION STATUS / HISTORY

| Rev | Date | Issue / Comment | Prepared | Checked |
|-----|------|-----------------|----------|---------|
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#### GENERAL REPORT LIMITATIONS

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Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by BEK for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

No part of this report may be copied or duplicated without the express permission of BEK and the party for whom it was prepared. Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

Unless explicitly agreed otherwise, in writing, this report has been prepared under BEK's limited standard Terms and Conditions as included within our proposal to the Client.

The report needs to be considered in the light of the BEK proposal and associated limitations of scope. The report needs to be read in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the report.

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## **1. INTRODUCTION**

### **1.1 Appointment**

1.1.1 BEK Enviro (BEK) has been commissioned by Nick Mordin to prepare a Phase 1 Preliminary Risk Assessment (PRA) for a parcel of land located at 216-218 Holcombe Road, Bury (hereafter referred to as 'the site'). The PRA will assess the potential risks associated with contamination considering a change of use to residential (with homegrown produce).

1.1.2 The site location and layout are presented on BEK Drawing No 23101-1 and BEK Drawing No 23101-2, respectively. Copies of these drawings are presented in Appendix E.

### **1.2 Proposed Development**

1.2.1 This report has been prepared to support a planning application for the construction of a residential dwelling with access, parking, private garage and private garden.

1.2.2 The proposed site plan is shown on Peel Design Partnership Limited Drawing No: 20-06-27-B, a copy of which is presented in Appendix E.

### **1.3 Objective & Scope of Work**

1.3.1 The objective of this report is to provide a qualitative assessment of the potential risks from contamination and ground with consideration to the proposed residential end use (with homegrown produce).

1.3.2 To achieve the objective BEK will undertake the following:

- Carry out a site inspection and collect photographs
- Review the available relevant background information for the site, including:
  - Recent Ordnance Survey Maps
  - Site Specific GroundSure Reports
  - Site Specific Historical Maps
  - Coal Authority Website
  - Drawings provided by Peel Design Partnership Limited
  - Zetica UXO Information
- Develop a preliminary conceptual site model in accordance with guidance to identify potentially significant pollutant linkages specific to the proposed development
- Establish areas of potential concern based on identified risks and/or potential risks
- Identify any actions required to assess or reduce the risks identified

## **1.4 Limitations**

- 1.4.1 The conclusions and recommendations presented in this report are the result of our professional interpretation of the information currently available. BEK reserves the right to amend the conclusions and recommendations if further information becomes available.
- 1.4.2 However, it should be noted that much of the information has been derived from reports written by others and BEK takes no responsibility for the accuracy of that information. Notwithstanding the above, the reports reviewed have all been written by professional environmental consultants with a duty of care to provide relevant and accurate information.
- 1.4.3 This report does not include an invasive plant species assessment.

## **2. SITE DESCRIPTION**

### **2.1 Site Location**

- 2.1.1 The site occupies a parcel of land located to the south of Holcombe Road. The site is located approximately 715 m north of Tottington, approximately 4.3 km north-west of Bury centre and approximately 7.4 km north-east of Bolton centre.
- 2.1.2 The National Grid Reference for the centre of the site is 377553, 413906. The site location is shown on BEK Drawing No 23101-1, a copy of which is presented in Appendix E.

### **2.2 Site Layout & Description**

- 2.2.1 A walkover/inspection was conducted by an engineer from BEK on 25<sup>th</sup> July 2023. The site occupies a roughly rectangular shaped plot of land of some 0.09 hectares (900 m<sup>2</sup>). The north of the site is accessed off Holcombe Road via a part paved, part gravel driveway.
- 2.2.2 Five brick-built garages with suspected asbestos sheet roofs are present in the north of the site. The garages were inaccessible at the time of the visit, although a photograph could be taken of the inside which showed the nature of the flooring is brick-built.
- 2.2.3 Overgrown vegetation is present along the eastern site boundary.
- 2.2.4 The south of the site (to the rear of the garages) was accessed via a gate. This area was vacant and generally comprised overgrown grasses, shrubs and trees.
- 2.2.5 The general site layout is shown on BEK Drawing No 23101-2, a copy of which is presented in Appendix E and photographs taken during the site walkover are presented in Appendix D.

### **2.3 Surrounding Land Use**

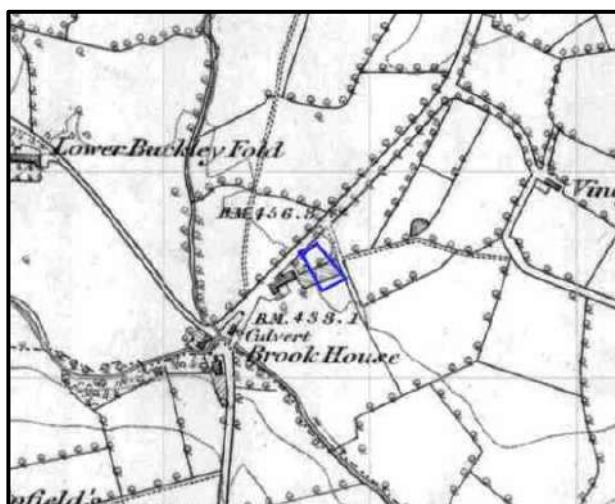
- 2.3.1 Buildings including a barn, cottage and residence are present immediately west of the site. Further residences are present to the north of the site beyond Holcombe Road. The site is bordered by agricultural grassland to the east and west.

### 3. SITE HISTORY

- 3.1 The history of the site has been established using historical OS maps supplied by Groundsure. A selection of historical OS maps reviewed is presented in Appendix A.

#### 1850

- 3.2 The earliest available historical maps dating from 1850 show an orchard/garden in the center of the site. The remainder of the site appears vacant and surrounded by open fields. Roads are located immediately north and east of the site. A building is present some 30 m west of the site. A pond is present approximately 90 m east of the site. Buildings and a culvert for a north-south flowing river are present at 'Brook House', some 100 m south-west of the site.



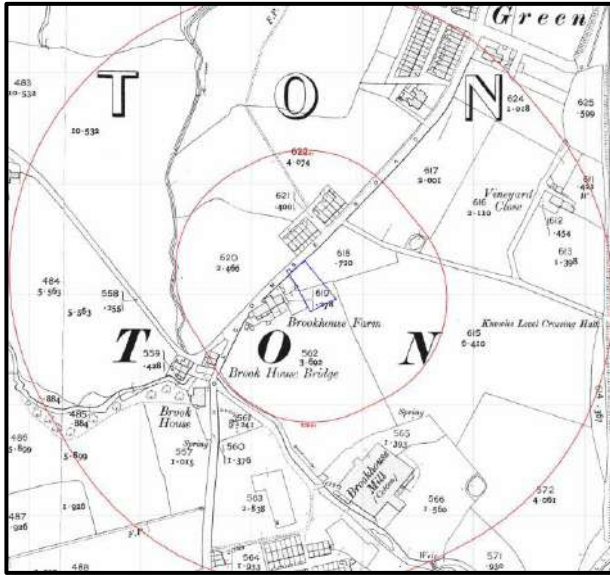
**Figure 1:** Extract from the 1850 map.

#### 1890-1891

- 3.3 The 1890-1891 maps show the garden/orchard on site is no longer present and the site is now vacant. The road present immediately east of the site is no longer present. Two small outbuildings are present approximately 10 m west of the site, as well as residential development some 10 m north of the site. A track/road is present approximately 70 m north-east of the site and additional buildings are present at Brook House circa 100 m south-west of the site. Brookhouse Cotton Mill is present some 150 m south of the site. New ponds are present approximately 180 m north-east and some 190 m south-east of the site. A railway line is located 250 m east of the site.

#### 1910

- 3.4 The 1910 maps show the site remains vacant. The road present immediately north of the site is now labelled 'Holcombe Road'. Additional outbuildings are present some 30 m west of the site. Further residential development approximately 185 m north-east and 190 m south of the site. The pond located approximately 180 m north-east of the site is absent.



*Figure 2: Extract from the 1910 map.*

1930

- 3.5 The 1930 maps shows two small outbuildings present in the north and west of the site and a third present immediately east of the site. Further buildings are present along Holcombe Road circa 90 m north-east of the site, as well as at Brook House some 90 m south-west. The pond approximately 90 m north-east of the site is absent and appears as a marsh.

1959-1960

- 3.6 These maps show a building present in the north of the site is no longer present and a larger rectangular building is present in the same location. A new small outbuilding is present in the centre of the site. An electricity pylon is present immediately east of the site, with the cables crossing the northern corner of the site. Additional outbuildings have been constructed some 30 m west of the site, as well as a building present some 55 m south-west of the site. A works building is present some 90 m west of the site.

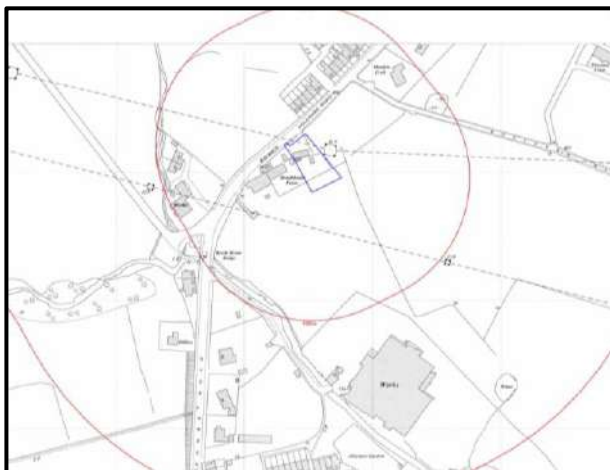
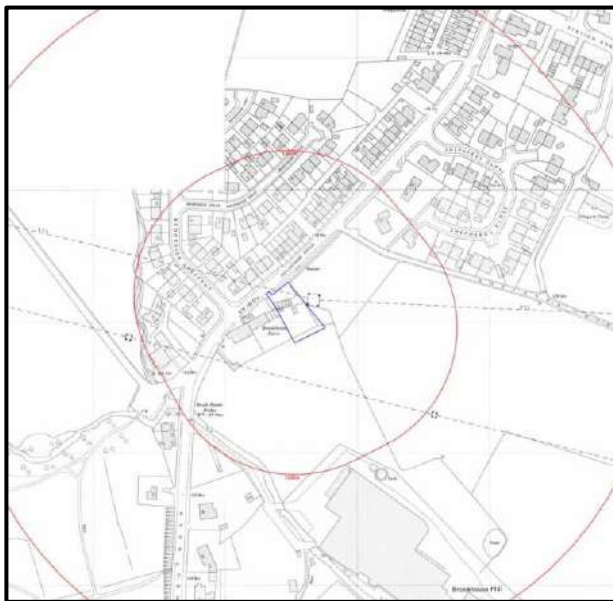


Figure 3: Extract from the 1959-1960 map.

### 1976-2003

- 3.7 These maps show that a building located in the north of the site now appears divided into five separate buildings. No other significant changes have occurred to the site. Residential development has occurred to the north of the site, as well as 90 m north-east of the site. Brookhouse Mill is now much larger, and is present from approximately 100 m south of the site and a 'tank' is now located some 110 m south of the site. The pond approximately 190 m south-east of the site is absent from circa 1983.



*Figure 4: Extract from the 1976-1977 map.*

### 2012-2023

- 3.8 The 2012 and 2023 maps show that no significant changes have occurred to the site or surrounding area. The electricity pylon located immediately east of the site is now absent.



*Figure 5: Extract from the 2023 map*

## 4. ENVIRONMENTAL SETTING

4.0.1 An Enviro & GeoInsight Report has been obtained from Groundsure and information provided in these reports has been used within this section. A copy of the report is presented in Appendix B.

### 4.1 **Geology**

4.1.1 The site geology is illustrated in the Enviro & GeoInsight Report which has sourced data from several sources including British Geological Society (BGS), BRITPITS database and the Coal Authority. A copy of the report is presented in Appendix B.

4.1.2 In addition, BEK has sought site investigation information from the BGS website. There are no BGS boreholes available to view within 250 m of the site.

#### Made Ground

4.1.3 According to the Enviro & GeoInsight Report there are no records of artificial ground (made ground) present beneath the site.

#### Superficial Geology

4.1.4 The Enviro & GeoInsight Report indicates that the underlying superficial geology comprises of Till, Devensian (Boulder Clay). This strata typically has a low permeability.

#### Bedrock

4.1.5 The Enviro & Geoinsight Report indicates that the underlying solid geology comprises the 'Pennine Lower Coal Measures Formation' which typically comprises mudstone, siltstone and sandstone. This strata typically has a low to moderate permeability.

#### Faults/Linear Features

4.1.6 There are two linear features within 250 m of the site, as shown in Table 1 below:

| Location   | Category | Description         |
|------------|----------|---------------------|
| 31 m north | Fault    | Fault, Inferred     |
| 67 m east  | Rock     | Coal seam, inferred |

**Table 1:** Linear Features within 250 m of the site

### 4.2 **Mining & Ground Stability**

4.2.1 Information in the Enviro & GeoInsight Report indicates that the site is located in an area that may have been affected by coal mining. However, the site is not located within a Coal Authority designated 'Development High Risk Area'. In accordance with

the Coal Authority 'Risk Based Approach to Development Management', risks from coal mining do not need to be considered further.

- 4.2.2 The Enviro & GeoInsight Report indicates that there are seven surface ground workings within 250 m of the site as shown in Table 2:

| Location         | Land Use           | Year of Mapping |
|------------------|--------------------|-----------------|
| 111m East        | Pond               | 1928            |
| 112 m East       | Pond               | 1938            |
| 199 m South-east | Unspecified Quarry | 1890            |
| 228 m North-east | Unspecified Pit    | 1938            |
| 239 m East       | Cuttings           | 1928            |
| 239 East         | Cuttings           | 1938            |
| 240 m East       | Cuttings           | 1891            |

**Table 2:** Summary of Surface Ground Workings

- 4.2.3 The Enviro & GeoInsight Report provides hazard ratings associated with ground subsidence at the site, as summarised below:

|                               |            |
|-------------------------------|------------|
| Shrink-Swell Clay:            | Very Low   |
| Landslides:                   | Very Low   |
| Dissolution of Soluble Rocks: | Negligible |
| Compressible Deposits:        | Negligible |
| Collapsible Deposits:         | Very Low   |
| Running Sands:                | Very Low   |

- 4.2.4 It can be seen from the above that the site is unlikely to be affected by natural ground instability issues.

### 4.3 Hydrogeology

- 4.3.1 Superficial deposits underlying the site are classified by the EA as a 'Secondary Undifferentiated' aquifer which is 'assigned where it is not possible to attribute either category A or B to a rock type.' These aquifers were formerly referred to as 'unproductive'.
- 4.3.2 The bedrock underlying the site is classified by the EA as a 'Secondary A Aquifer' which are described as '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.'
- 4.3.3 The Enviro & Geoinsight Report indicates the site is not located within a groundwater source protection zone.
- 4.3.4 There are no groundwater abstractions located within 250m of the site.

#### **4.4 Hydrology**

- 4.4.1 There are surface water features located 91 m south-west and 95 m west of the site, both described as inland rivers, containing water all year round.
- 4.4.2 There are no registered licensed discharge consents located within 250 m of the site.
- 4.4.3 The site is not considered to be at risk from flooding.
- 4.4.4 There are no surface water abstractions located within 250m of the site.

#### **4.5 Contaminated Land & Landfill Activities**

- 4.5.1 Information provided in the Enviro & Geosight Report indicates that there are no historical or current landfill sites or waste sites located on or within 250 m of the site.
- 4.5.2 There is one registered waste exemptions located within 250 m of the site which refers to the 'use of waste in construction' on a farm located some 234 m west of the site.
- 4.5.3 There are no EA recorded pollution incidents located on or within 250 m of the site.
- 4.5.4 There are no NIHHS or COMAH sites, recorded Part A(1), Part A(2), Part B or IPPC Authorised Activities within 250 m of the site.
- 4.5.5 There are no historical potentially contaminative land uses for the site.
- 4.5.6 There are 16 potentially contaminative land uses located on or within 250 m of the site, the closest of which refers to an 'unspecified works' located some 70 m west of the site.

#### **4.6 Sensitive Land Uses**

- 4.6.1 The site forms part of the Merseyside and Greater Manchester Green Belt. These areas are designated to prevent urban sprawl by maintaining existing open land.
- 4.6.2 The 'Kirklees Valley' is located approximately 243 m east of the site and is classified as a local nature reserve (LNR). However, given the expected contaminant profile of the site and the considerable distance of the reserve from the site, the risk to this receptor is considered to be very low to negligible and will not be considered further.
- 4.6.3 The site is not located within a designated nitrate vulnerable zone.

#### **4.7 Radon**

- 4.7.1 The Enviro & Geosight Report indicates that 'less than 1%' of the homes are affected by Radon and that no radon protective measures are required.

#### **4.8 Unexploded Ordnance**

- 4.8.1 The regional unexploded bomb risk map from Zetica indicates that the site is in an area of Greater Manchester at LOW risk from Unexploded Ordnance (UXO) resulting from the Second World War.
- 4.8.2 BEK do not consider any further assessment to be required with respect to UXO.

## 5. POTENTIAL POLLUTANT LINKAGES

### 5.1 General

5.1.1 This section identifies the potential sources of contamination along with specific contaminants of concern, pathways and receptors that may be associated with the site based on its known history and the current condition and with respect to the re-development of the site for residential use (with homegrown produce).

5.1.2 This information is used to develop a preliminary conceptual model which is a qualitative description of potential sources of environmental pollutants, the pathways by which they are transported and the receptors:

- i) Potential sources of contamination: these include any actual or potentially contaminating materials and activities, located either on or in the vicinity of the site
- ii) Potential pathways for contamination migration: these comprise the routes or mechanisms by which contaminants may migrate from the source to the receptor including environmental migration pathways and human health exposure pathways
- iii) Potential receptors of contamination: these include future land users, ecological systems, water resources and property.

### 5.2 Potential Sources of Contamination

5.2.1 Based on the earliest available maps dating from 1850, the site has been undeveloped until circa 1930 where small buildings are present in the north and centre of the site. Circa 1959-1960 the building in the north has been replaced with a larger rectangular building. The site then remained relatively unchanged until present day. Circa 1976-1977, the building in the north appears to be divided into five connected buildings which likely represent the present-day garages encountered during the site walkover.

5.2.2 Given the history of the site, the potential significant contamination to be present is relatively low.

5.2.3 The site walkover identified a driveway and buildings on site, made ground is likely to be present beneath these areas. The nature, source and extent of any made ground potentially present at the site is currently unknown and if present such made ground could potentially contain contaminants of concern.

5.2.4 The site walkover also identified suspected asbestos roofing panels on the garages located on site.

5.2.5 The potential contaminants of concern that may be present at the site are summarised below:

| Contaminants Associated General Made Ground |                                         |
|---------------------------------------------|-----------------------------------------|
| Arsenic                                     | Zinc                                    |
| Cadmium                                     | Sulphate                                |
| Chromium                                    | Cyanide                                 |
| Copper                                      | Phenols                                 |
| Lead                                        | Polycyclic Aromatic Hydrocarbons (PAHs) |
| Mercury                                     | Total Petroleum Hydrocarbons (TPHCWG)   |
| Nickel                                      | Asbestos                                |
| Selenium                                    | pH                                      |

**Table 3:** Potential Contaminants of Concern

5.2.6 It should be noted that the above list represents a broad range of potential contaminants of concern. Additional contaminants of concern may be present if ground conditions differ from those anticipated.

5.2.7 Based on the available background information, on-site sources of ground gas at the site are considered to be very low. Infilled ponds within the area may represent potential sources of ground gas, however given the size of the ponds and the presence of impermeable boulder clay across the area, the risks to the site are considered to be very low.

5.2.8 Coal measures are present below the site which may represent a significant source of ground gas. However, the presence of Boulder Clay across the site will likely inhibit vertical migration of ground gas from the underlying coal measures.

### 5.3 Potential Pathways

5.3.1 The pathways through which contaminants may reach receptors are in part dependent by the nature and behavior of the contaminant and the intended end use of the site (residential with homegrown produce).

5.3.2 The following potential pathways have been identified with respect to the existing site condition, historical use of the site, the environmental setting and the re-development of the site to residential (with homegrown produce) which are assessed in the conceptual model:

- Ingestion of contaminated soil/home grown vegetables
- Inhalation of contaminative dust including asbestos fibres
- Dermal contact
- Indoor Inhalation of vapours and/or ground gas
- Dissolution or suspension (leaching) of contaminants into pore waters affecting plant growth

- Dissolution or suspension (leaching) of contaminants from site soils leading to lateral migration within perched waters to off-site receptors. Potential significant pathways include more permeable layers within the made ground/natural strata, underground services and piles/foundations
- Dissolution or suspension (leaching) of contaminants from site soils leading to contamination of groundwater
- Contamination affecting the integrity of service pipelines by direct contact
- Buildings affected by direct contact with elevated concentrations of sulphate and/or extreme pH

## **5.4 Receptors**

- 5.4.1 Potential site-specific receptors that may be affected by contamination at the site are listed below:

### Future Site Users

- 5.4.2 Future residents of the site could be at risk from contamination present at the site.
- 5.4.3 Potential risks are associated with ingestion of soil (and homegrown produce), as well as inhalation of contaminated dust (including asbestos fibres) and dermal contact with contaminants of concern. These risks are all associated with the garden areas of the new development
- 5.4.4 Risk are also associated with indoor inhalation of volatile vapours and ground gas.

### Construction Workers

- 5.4.5 The primary risks to construction workers are associated with shallow excavations as asbestos could be present. Asbestos fibers (if present) can be released into the atmosphere during earthworks.
- 5.4.6 Standard personal protective equipment and site specific risk assessments and method statements should reduce risks associated with other contaminants of concern due to short exposure duration.

### Off Site Receptors

- 5.4.7 Off site receptors include residents to the west, north and north-east of the site. Human health could be at risk if asbestos fibres are released during the development.

#### Flora

- 5.4.8 Heavy metals can be phytotoxic and if present can represent a potential risk to flora in the landscaped areas of the new development.

#### Buildings & Services

- 5.4.9 The integrity of service pipes can be affected by concentrations of organic contamination.
- 5.4.10 Risks to buildings (concrete) can occur due to elevated concentrations of sulphate in the shallow ground and extreme pH. Risks to the integrity of service pipes can occur due to elevated concentrations of specific organic contamination.

#### Controlled Waters

- 5.4.11 There are surface water features located 91 m south-west and 95 m west of the site which represent receptors.
- 5.4.12 The superficial strata (Boulder Clay) is classified as a 'Secondary Undifferentiated' aquifer. This strata is relatively impermeable and any water trapped/held within the deposits is not considered to represent a sensitive receptor.
- 5.4.13 The underlying bedrock is classified as a 'Secondary A' Aquifer and represents a receptor. However, hydraulic continuity between any perched water trapped above the Boulder Clay and the deep aquifer is unlikely. The potential risks to deep groundwater quality are considered to be very low.

### **5.5 Preliminary Conceptual Model**

- 5.5.1 The identified potential sources of contaminants, pathways and receptors have been assessed to establish plausible pollutant linkages. All potentially significant pollutant linkages are detailed in Table B, in Appendix C.

### **5.6 Potentially Significant Pollutant Linkages**

- 5.6.1 A number of possible 'significant pollutant linkages' have been identified associated with the site.
- 5.6.2 Potential risks relating to the potential harm to the health of humans and/or domestic pets both on and off site due to the potential for direct contact with contaminants in the made ground and the ingestion of contaminated soil/dust (**Link 1**).
- 5.6.3 There is also the possibility of windblown particulates being inhaled by people/animals both on site and off site (**Link 2**).

- 5.6.4 Home grown produce could be affected by ground contamination (**Link 3**) and human health could be at risk by the ingestion of home grown produce affected by contamination (**Link 4**).
- 5.6.5 Human health could be at risk by the inhalation of volatile contamination and/or ground gasses migrating into properties on site (**Link 5**).
- 5.6.6 Property (including services, flora and fauna) could be affected by direct contact to high concentrations of contaminants (**Link 6**).
- 5.6.7 Dissolution or suspension (leaching) of contaminants from site soils leading to lateral migration within perched waters to off-site receptors (surface waters). Potential significant pathways include more permeable layers within the made ground/natural strata, underground services and piles/foundations (**Link 7**).
- 5.6.8 Dissolution or suspension (leaching) of contaminants from site soils leading to impact on the underlying Secondary A aquifer within the bedrock. Potential pathways include areas where Boulder Clay is absent and locations of deep piles/foundations (**Link 8**).
- 5.6.9 Site investigation is required to identify site specific conditions and assess the risks associated with each identified plausible pollutant linkage.

## 6. RECOMMENDATIONS

6.1 Based on the findings of the Preliminary Risk Assessment herein, potential risks associated with potential contamination (human health, controlled waters, property) have been identified with respect to the re-development of the site.

6.2 To quantify the potential risks, BEK recommends that the following works should be undertaken:

### Asbestos Removal

6.3 Suspected corrugated asbestos cement has been identified within the garage which is proposed to be demolished. It is recommended that all asbestos containing materials are removed from the garage/shed in a legislatively compliant manner prior to the commencement of site demolition/clearance works.

### Site Investigation

6.4 The investigation should comprise the drilling of a series of window sample boreholes and/or trial pits to characterize the shallow ground conditions across the site. The borehole locations will target specific locations based on historical activities/features and non-targeted to provide indicative site wide information. The aim of the investigation will be to prove nature and thickness of any made ground present and to characterise the suitability of the soils for re-use and carry out in-situ strength testing (shear vane/SPTs) to inform foundations options.

6.5 The site investigation should be supervised by an experienced engineer who will be responsible for recording ground conditions encountered.

6.6 The engineer will recover representative samples for chemical and geotechnical testing. All samples will be collected in appropriate sampling vessels, stored in a pre-cooled cool box (where necessary) and dispatched to the laboratory within 24 hours.

6.7 If a significant thickness of made ground is encountered then it may be necessary to install gas monitoring probes to facilitate a ground gas risk assessment.

### Laboratory Testing

6.8 Following a review of the ground conditions encountered, a selection of made ground samples will be tested for the contaminants of concern listed in Table 3 of this report. If visual or olfactory evidence of contamination is encountered (including any made ground) during the site investigation then it may be necessary to undertake additional testing.

6.9 Depending on ground conditions encountered, samples will also be submitted for geotechnical testing. If natural clay is encountered, this will include tests for Plasticity Index and natural Moisture Content.

6.10 All testing will be carried out by a UKAS accredited laboratory to MCERTS standard (where applicable).

#### Risk Assessment

6.11 The investigation findings will be assessed as part of a quantitative risk assessment to amend the conceptual site model and identify any potential significant pollutant linkages. The assessment will be undertaken in accordance with current UK guidance and policy.

6.12 The site investigation data and laboratory test results will also be assessed as part of a geotechnical assessment to inform foundation design for the new build.

#### Reporting

6.13 The investigation findings should be assessed in accordance with current UK policy and guidance to identify any potentially significant pollutant linkages and determine the requirements for mitigation and/or remediation.

6.14 The works undertaken will be detailed in a Site Investigation & Ground Assessment report along with full justifications for the assessment and the conclusions/recommendations.

#### Other Considerations

6.15 It is recommended that the site investigation works are extended to cover geotechnical properties of the shallow ground to inform foundation design for the new build.

6.16 We would also recommend that consideration is given to the requirements of the water supply service provider and the completion of the UKWIR risk assessment for water pipe selection.

## APPENDIX A

Historical OS Maps

#### Site Details:

216, HOLCOMBE ROAD,  
TOTTINGTTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** County Series

**Map date:** 1890-1891

**Scale:** 1:2,500

**Printed at:** 1:2,500



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Revised 1890  
Edition N/A  
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Surveyed 1891  
Revised 1891  
Edition N/A  
Copyright N/A  
Levelled N/A

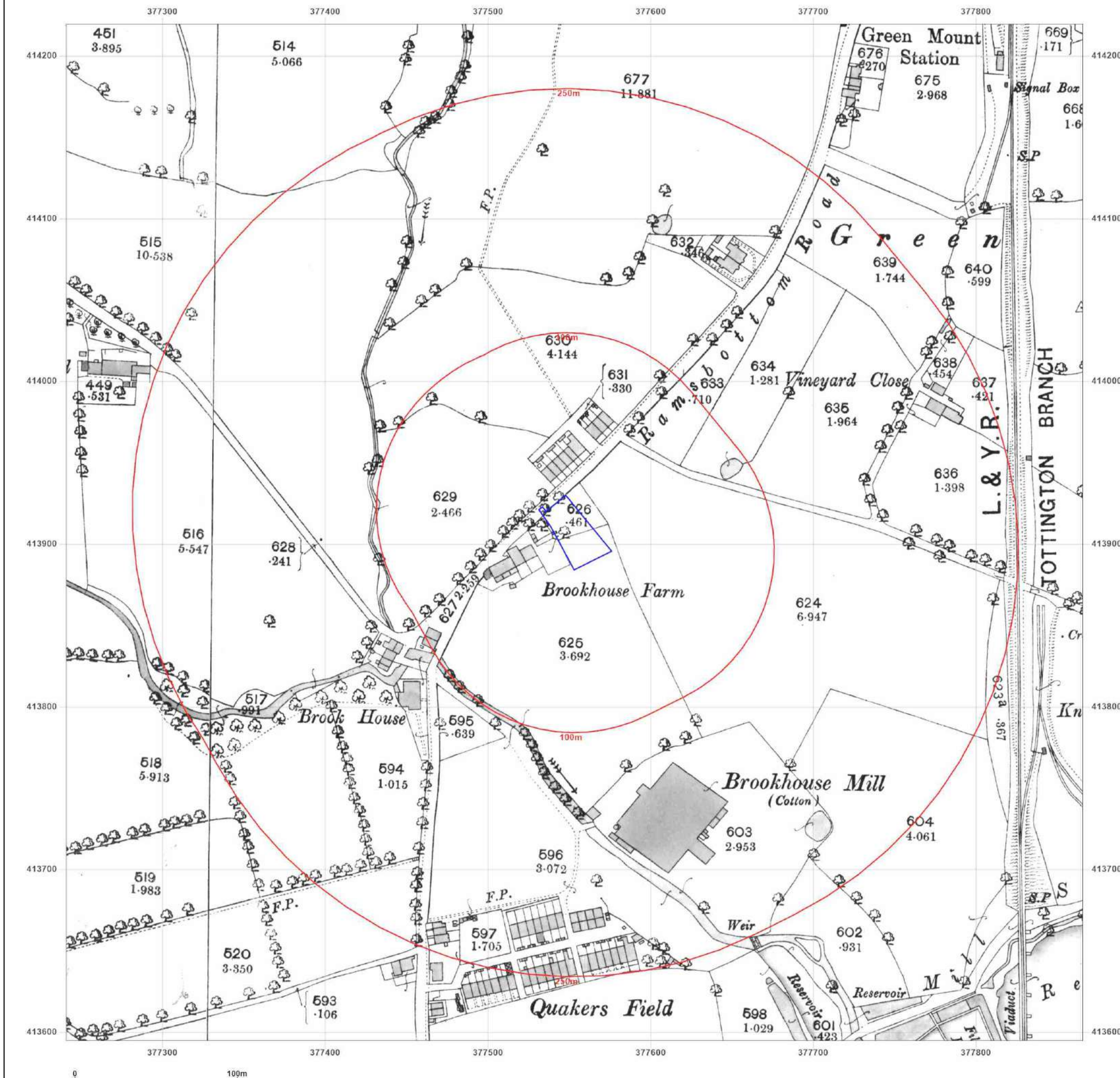


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#### Site Details:

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TOTTINGTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** County Series

**Map date:** 1910

**Scale:** 1:2,500

**Printed at:** 1:2,500



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Edition N/A  
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Revised 1910  
Edition N/A  
Copyright N/A  
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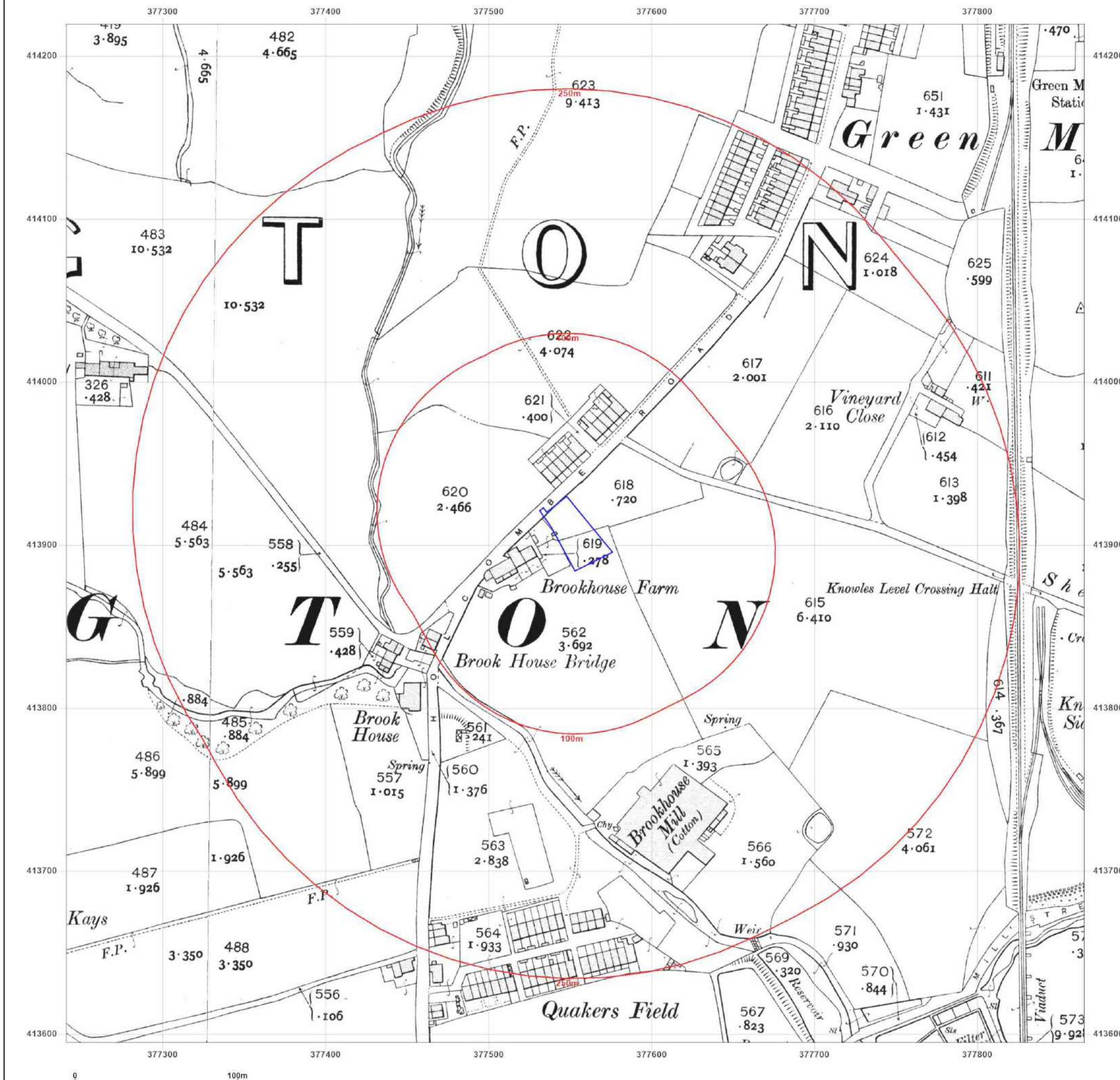


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#### Site Details:

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TOTTINGTON, BL8 4BQ

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**Grid Ref:** 377553, 413907

**Map Name:** County Series

**Map date:** 1930

**Scale:** 1:2,500

**Printed at:** 1:2,500



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Edition N/A  
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Revised 1930  
Edition N/A  
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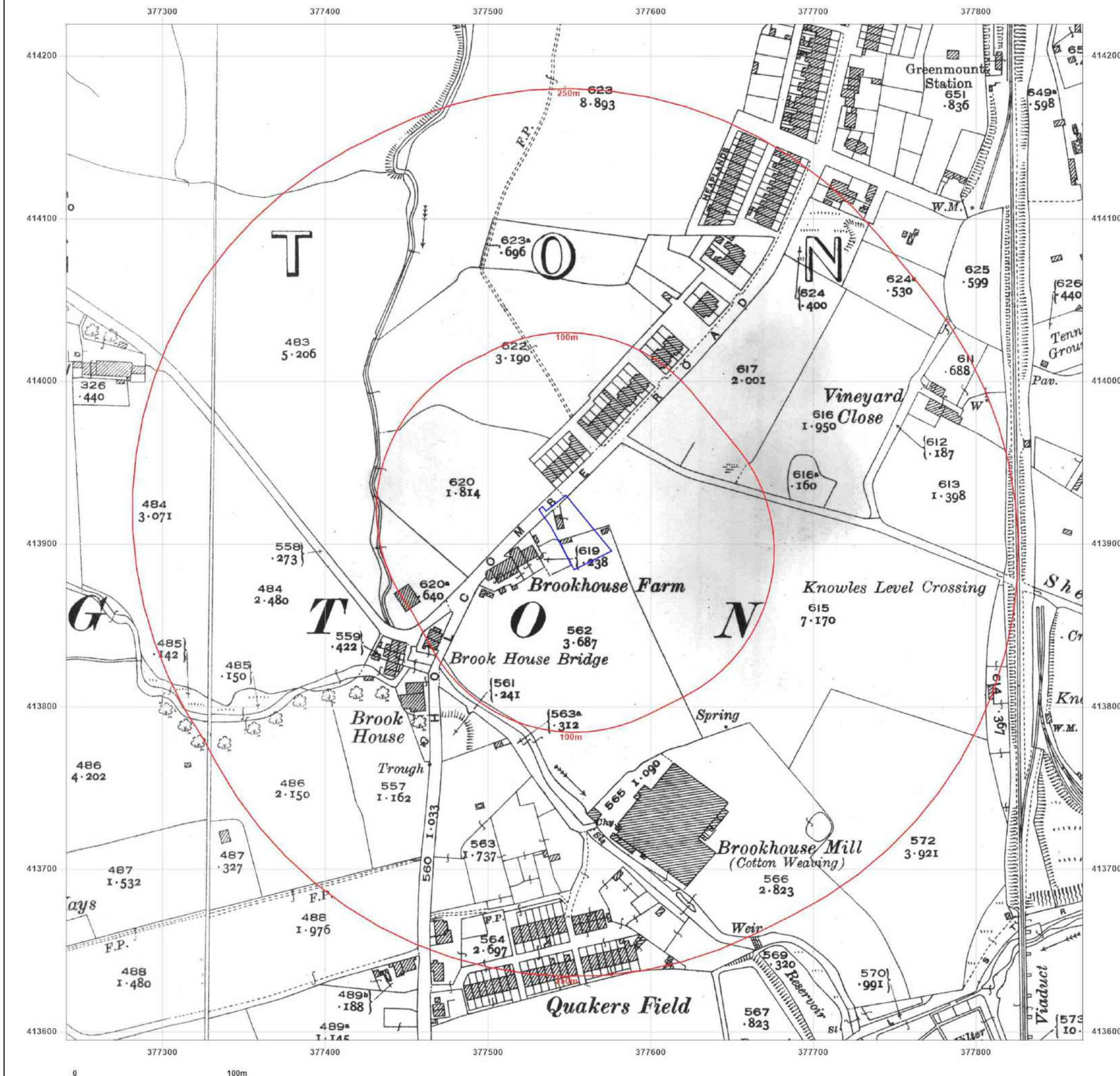


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TOTTINGTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
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**Map Name:** National Grid

**Map date:** 1959-1960

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**Printed at:** 1:2,000



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Edition N/A  
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Revised 1959  
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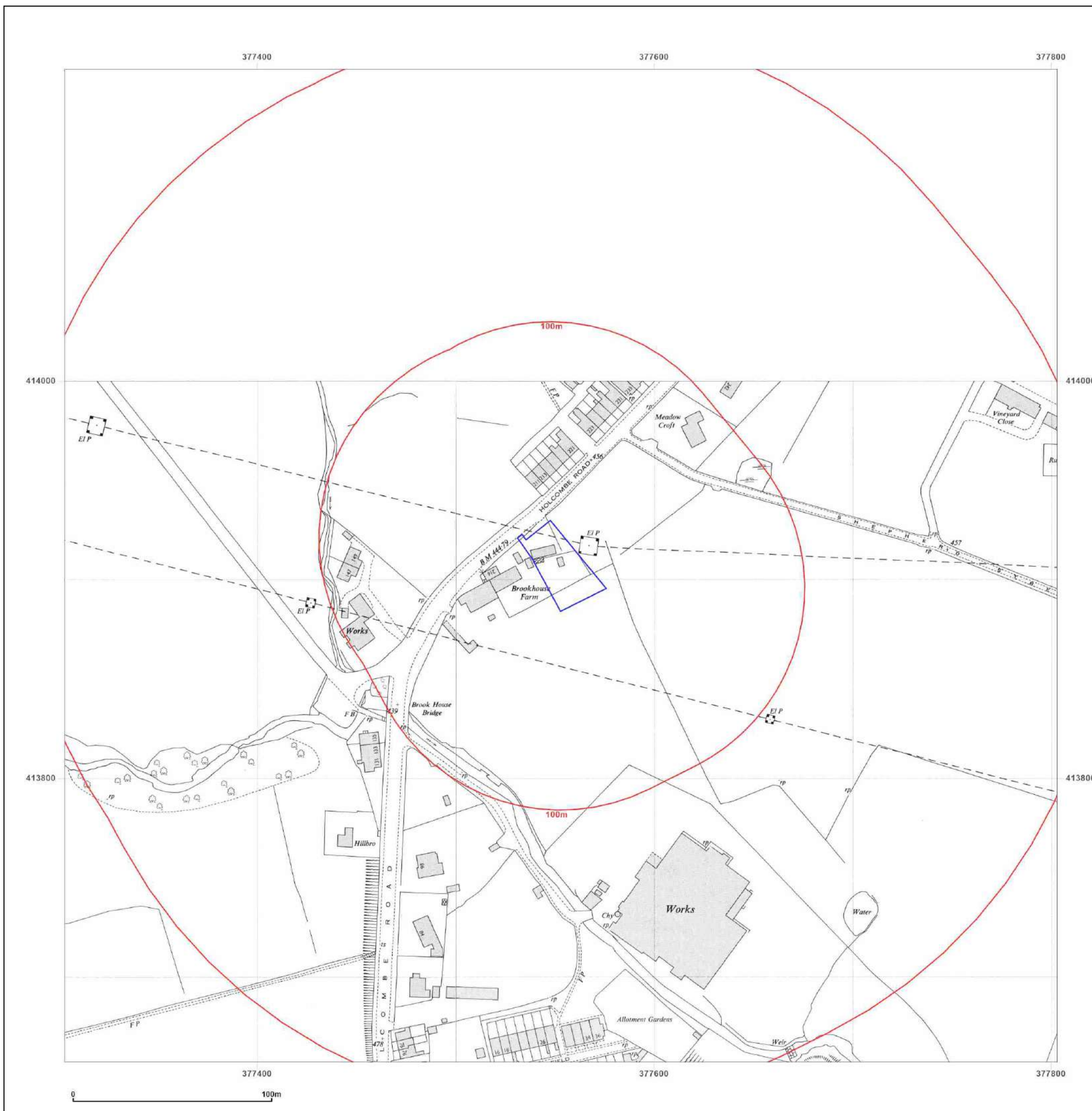


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**Map Name:** National Grid

**Map date:** 1960

**Scale:** 1:1,250

**Printed at:** 1:2,000



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Revised N/A  
Edition N/A  
Copyright N/A  
Levelled N/A

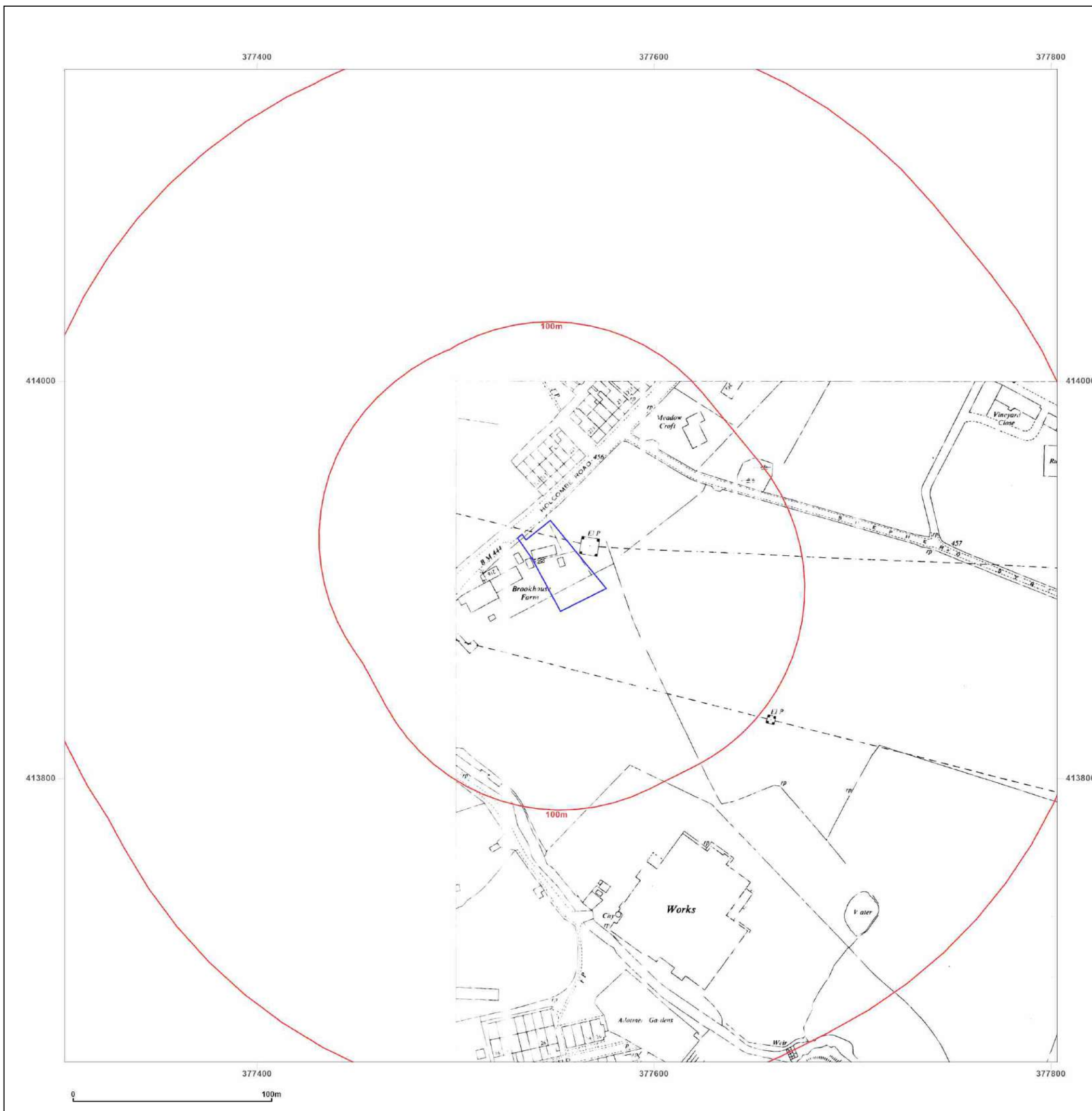


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Edition N/A  
Copyright 1964  
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Surveyed 1963  
Revised 1963  
Edition 1964  
Copyright 1964  
Levelled 1957

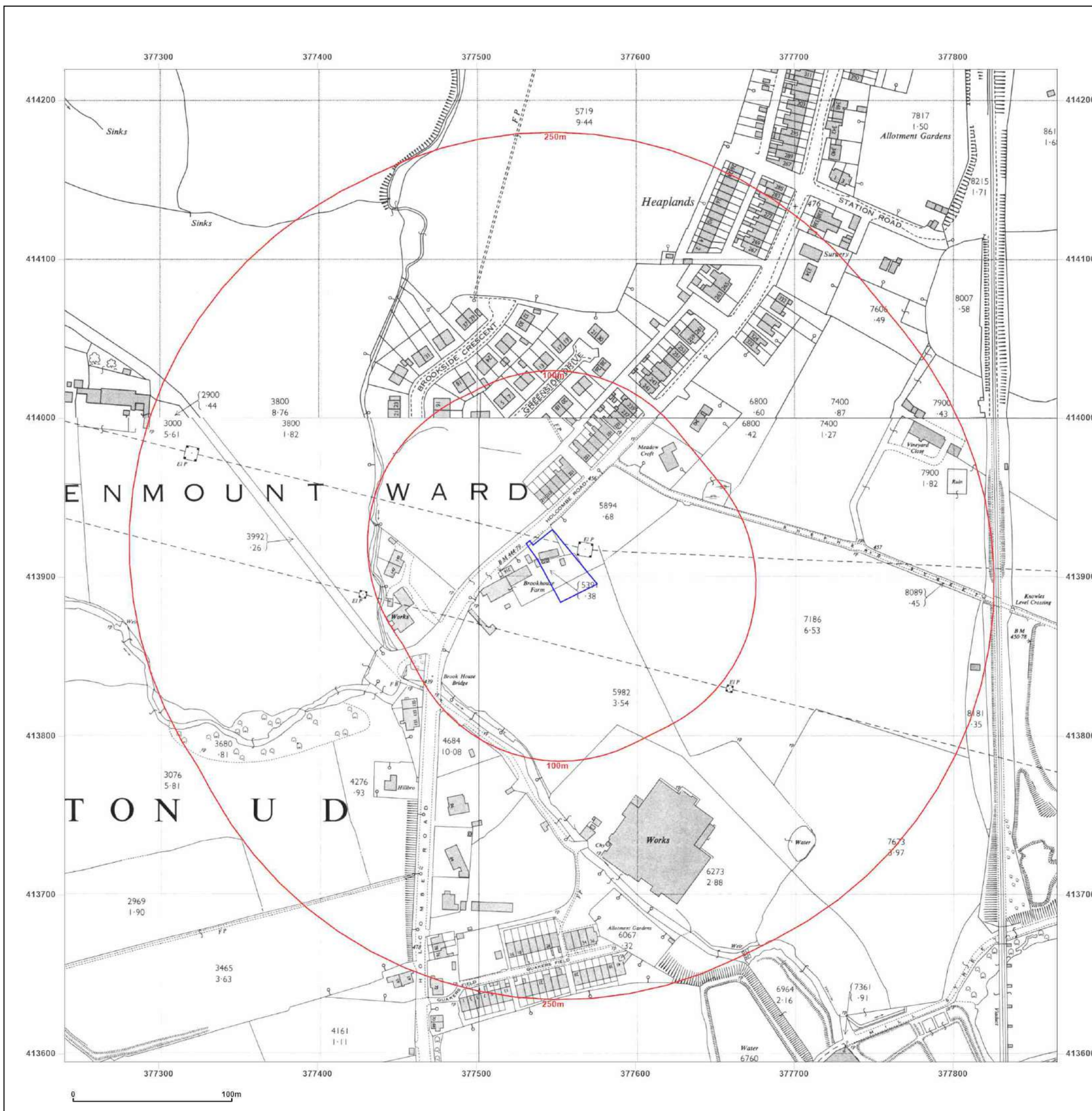


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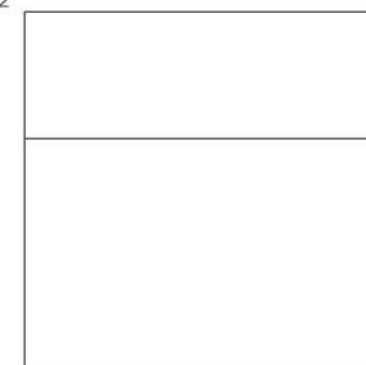
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Edition N/A  
Copyright 1971  
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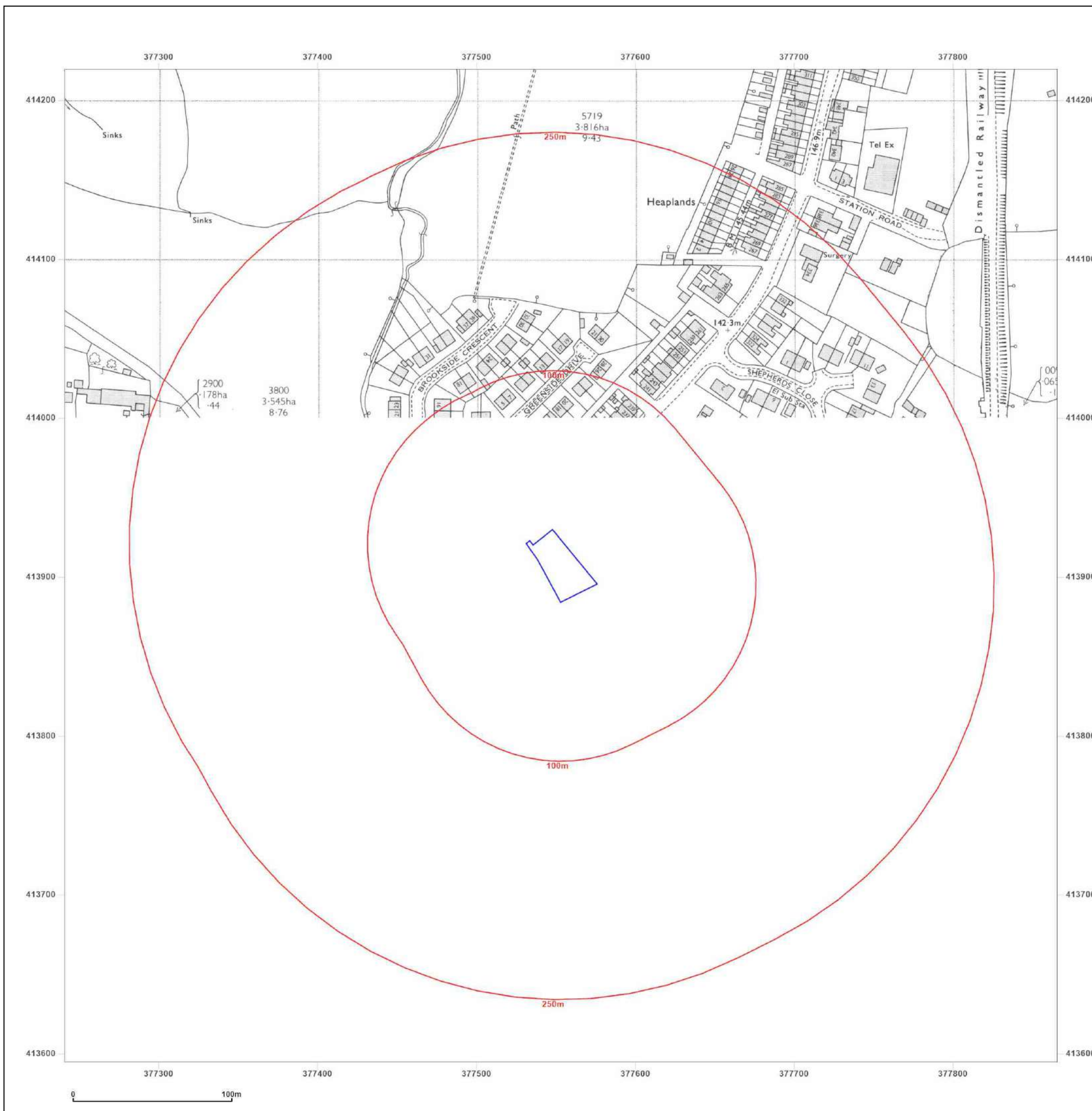


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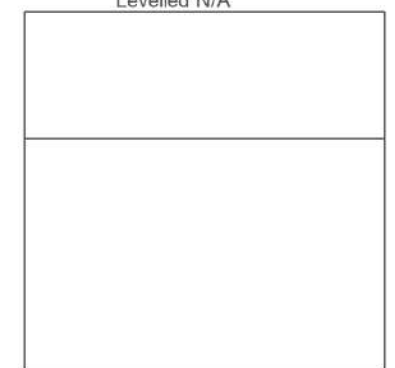
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Edition N/A  
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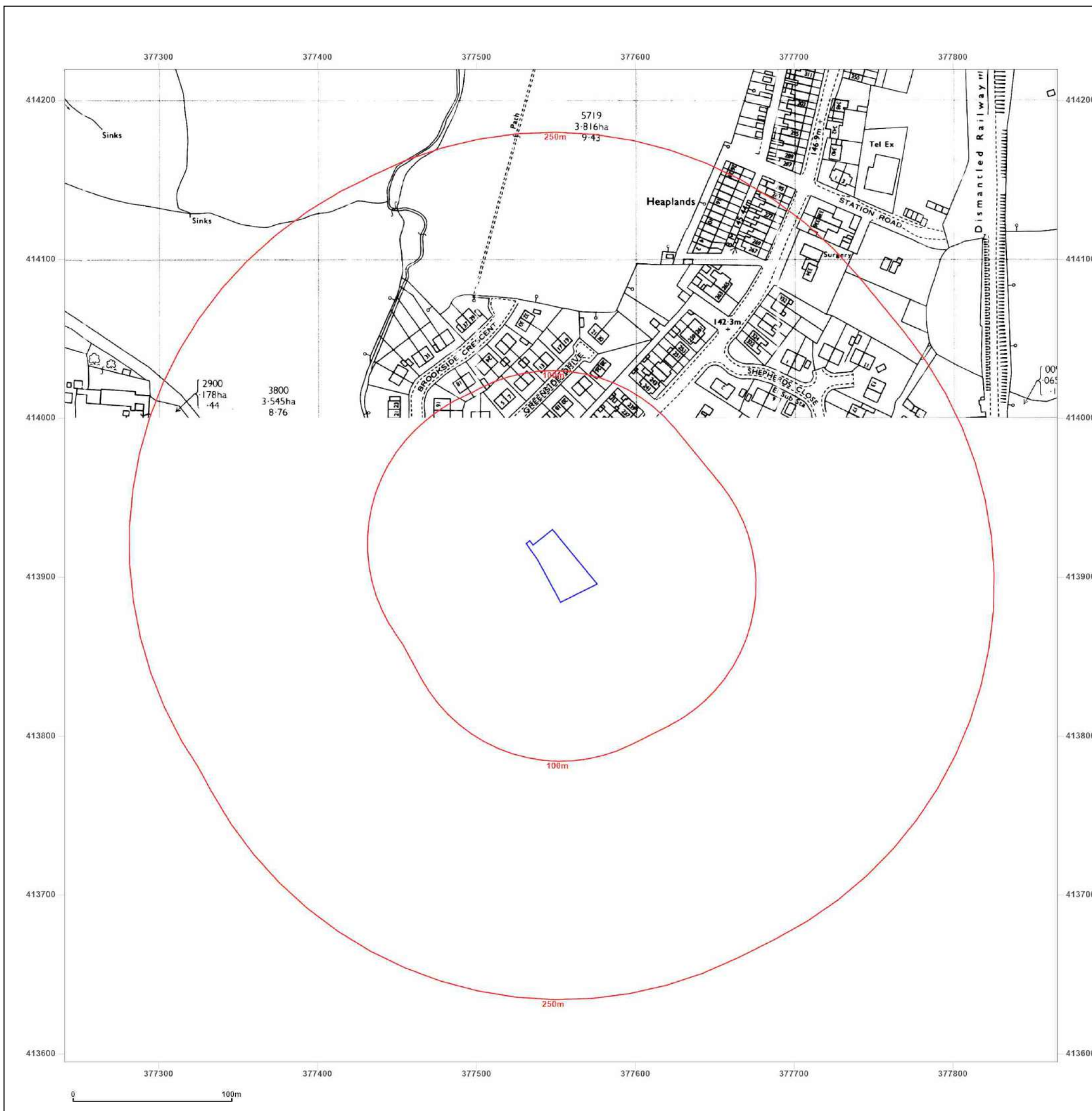


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**Map date:** 1976-1977

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Copyright 1976  
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Copyright 1976  
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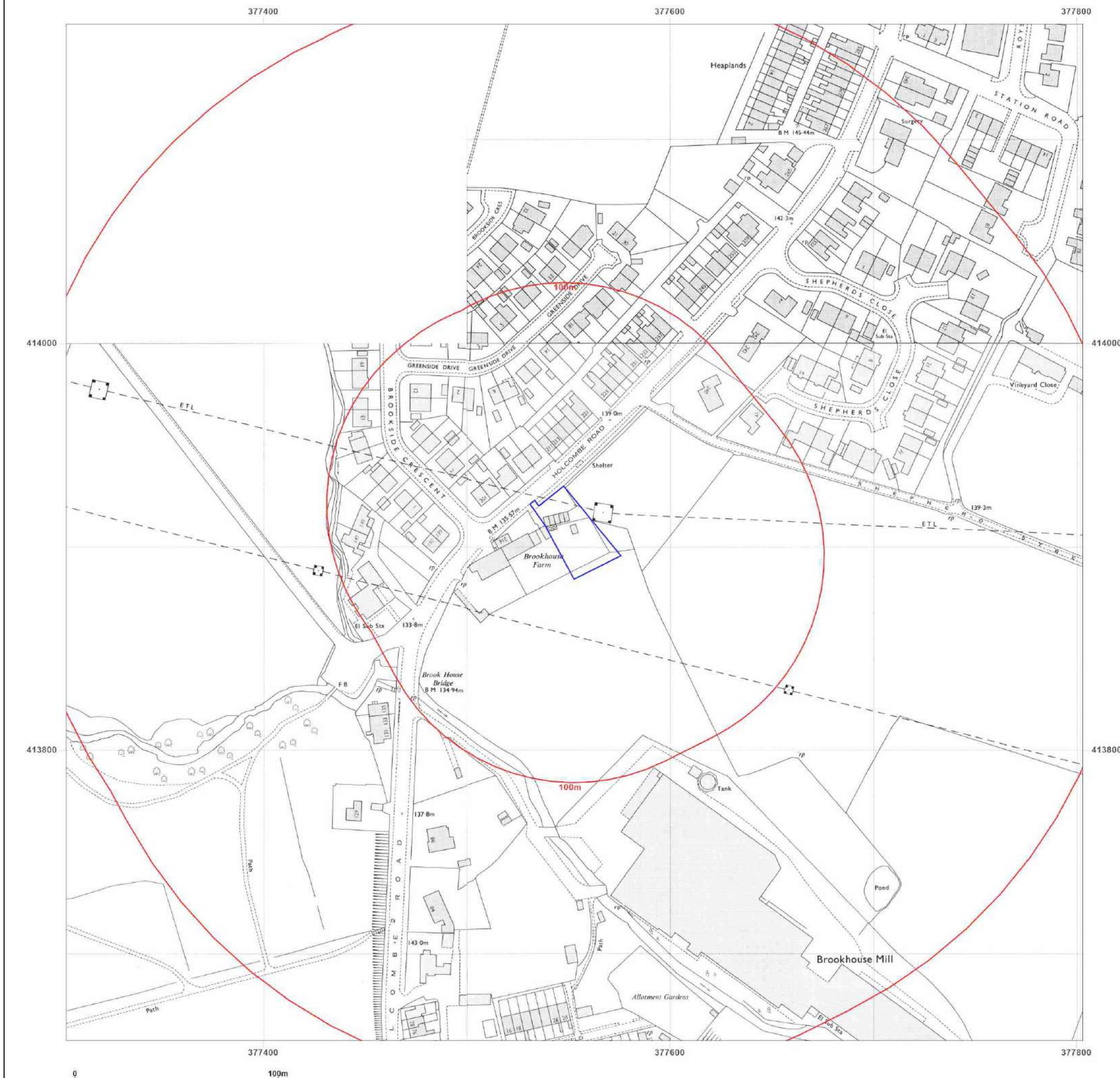


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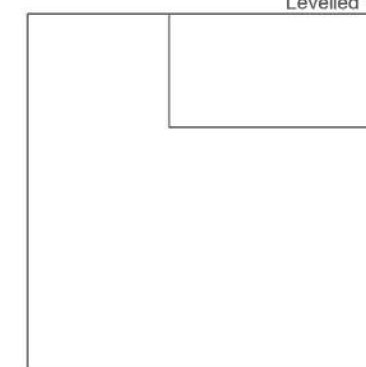
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Edition N/A  
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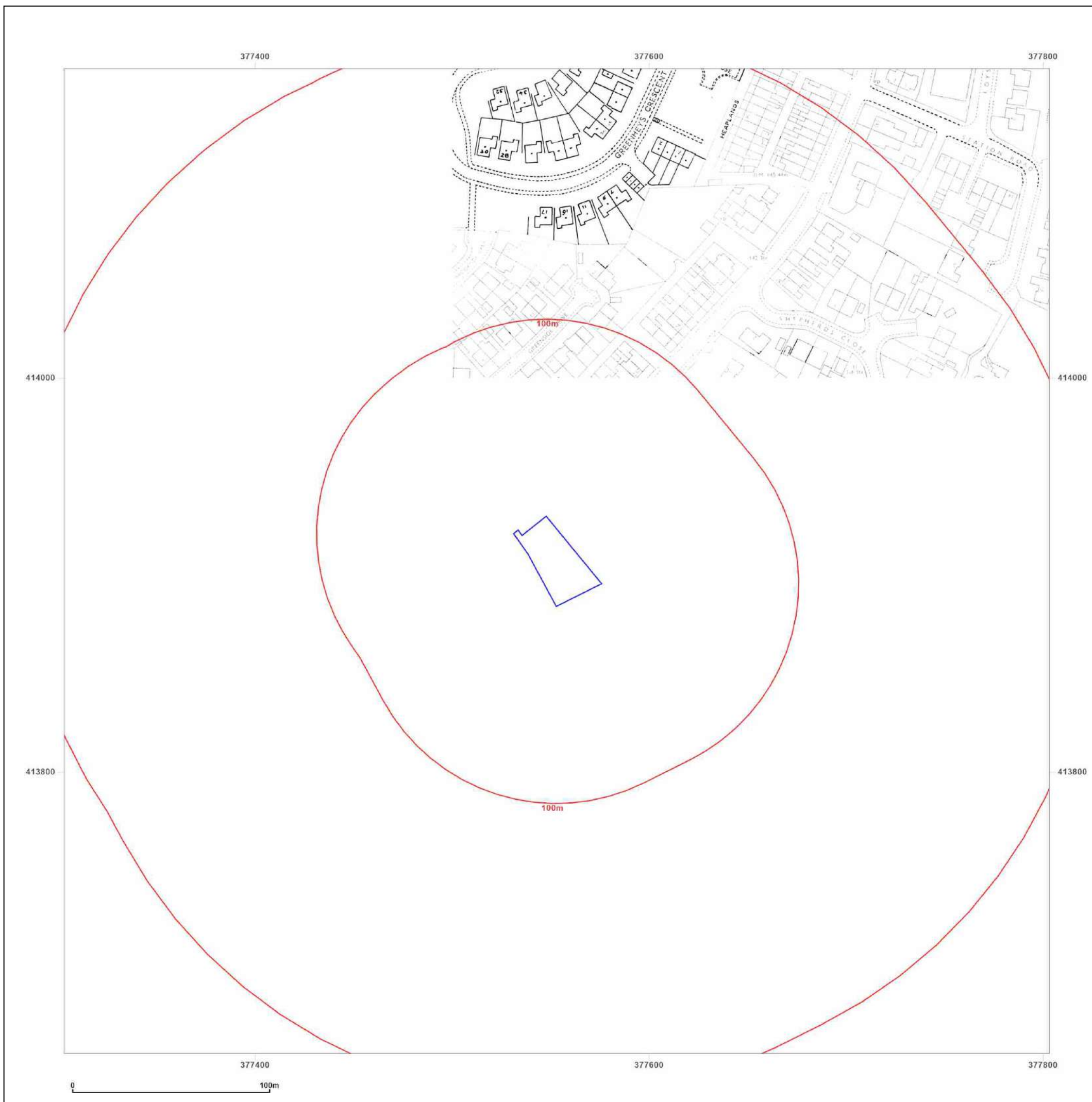


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**Report Ref:** GS-379-LFP-V7C-Z7Q  
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**Printed at:** 1:2,000



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Edition N/A  
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Revised 1988  
Edition N/A  
Copyright 1988  
Levelled 1963

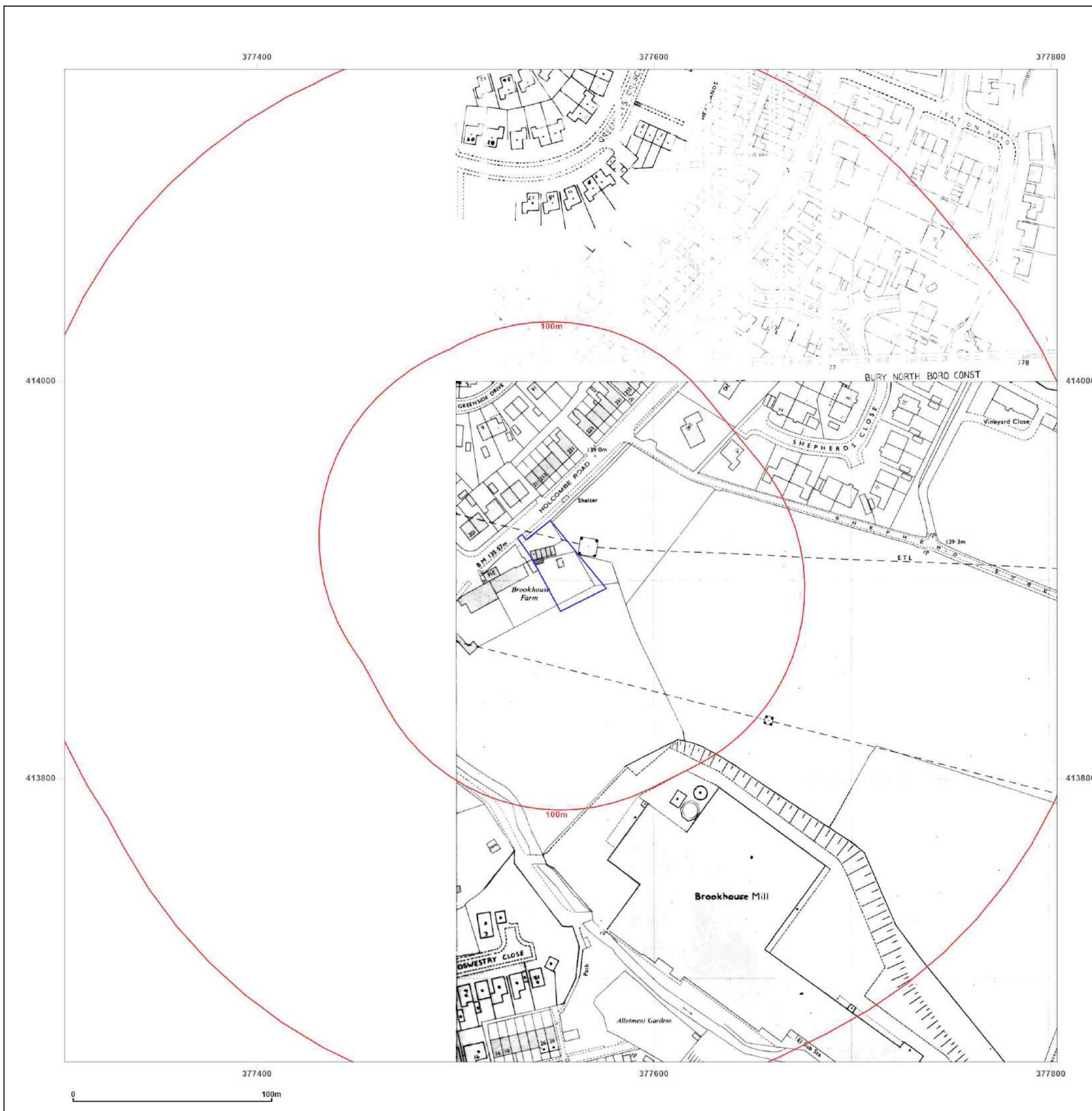


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**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** National Grid

**Map date:** 1992

**Scale:** 1:1,250

**Printed at:** 1:2,000



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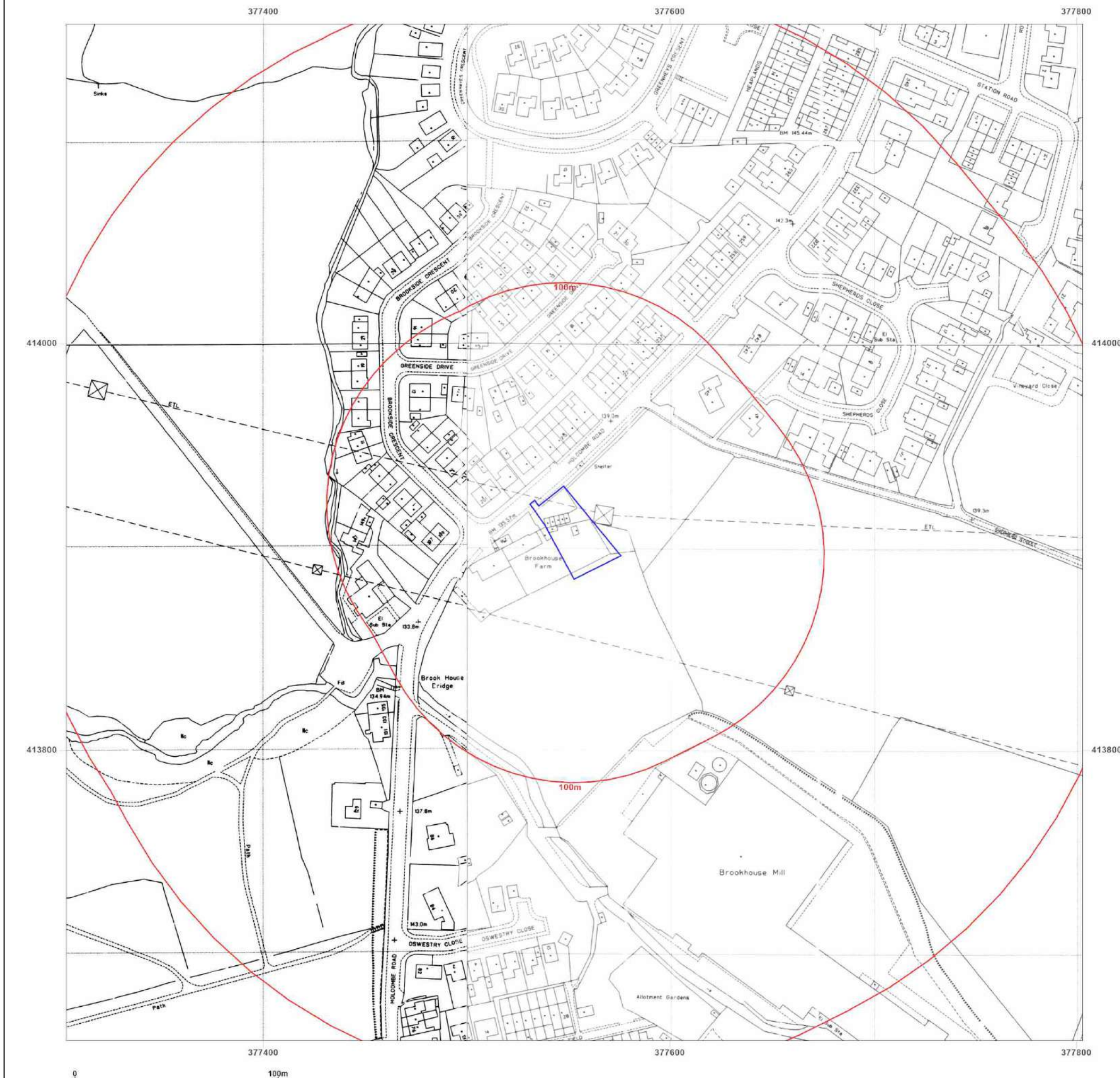


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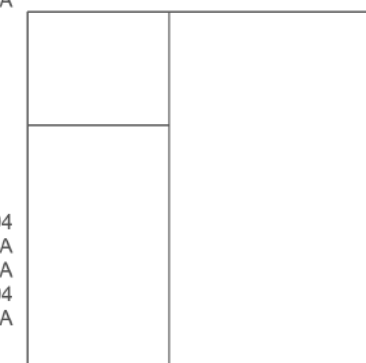
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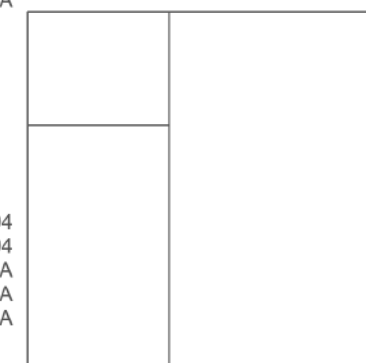
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Edition N/A  
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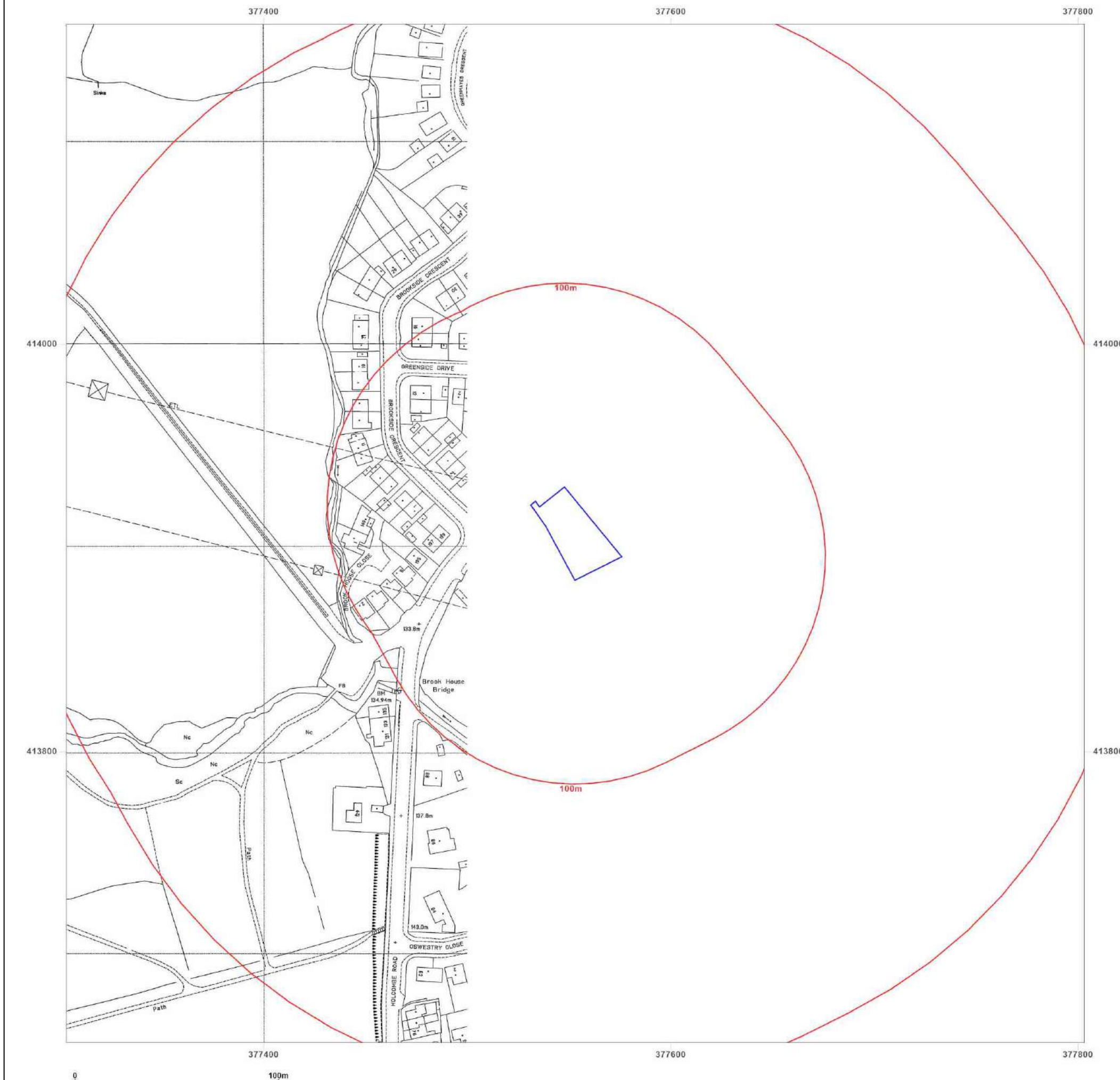


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**Map date:** 2003

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2003

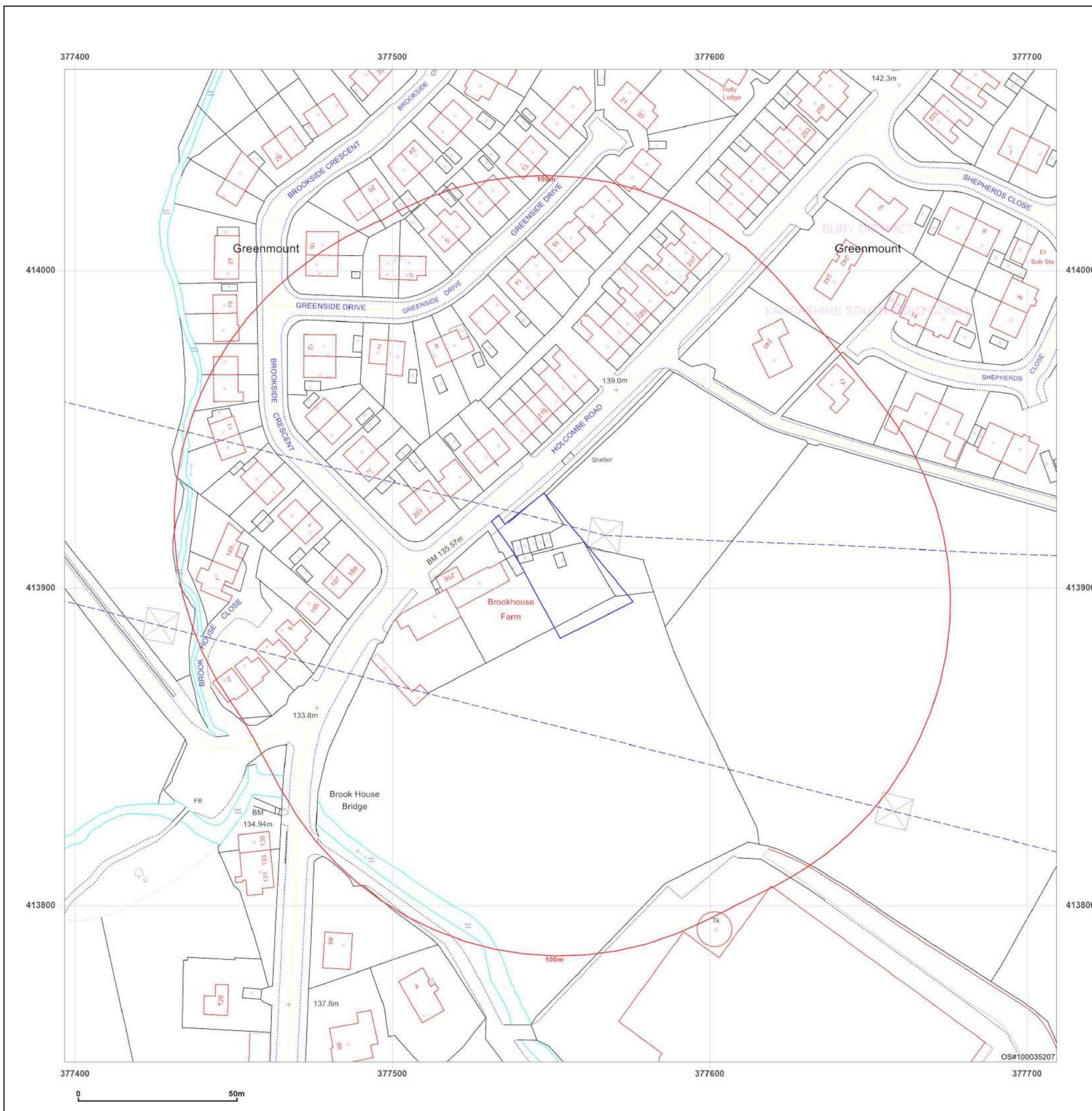


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**Grid Ref:** 377553, 413907

**Map Name:** County Series

**Map date:** 1850

**Scale:** 1:10,560

**Printed at:** 1:10,560



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Edition 1850  
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Edition 1850  
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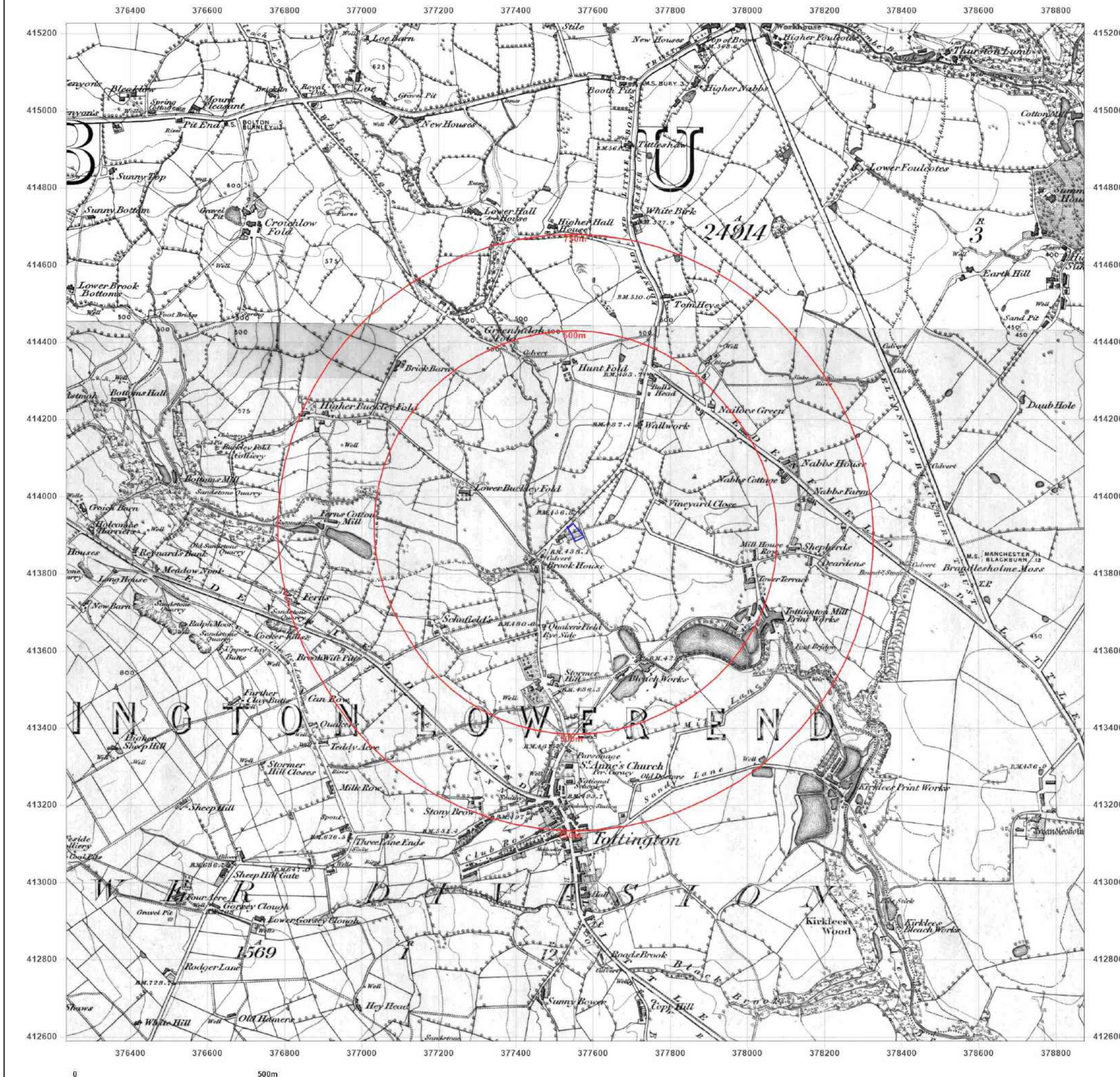


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**Map Name:** County Series

**Map date:** 1891

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**Printed at:** 1:10,560



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Edition N/A  
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Revised 1891  
Edition N/A  
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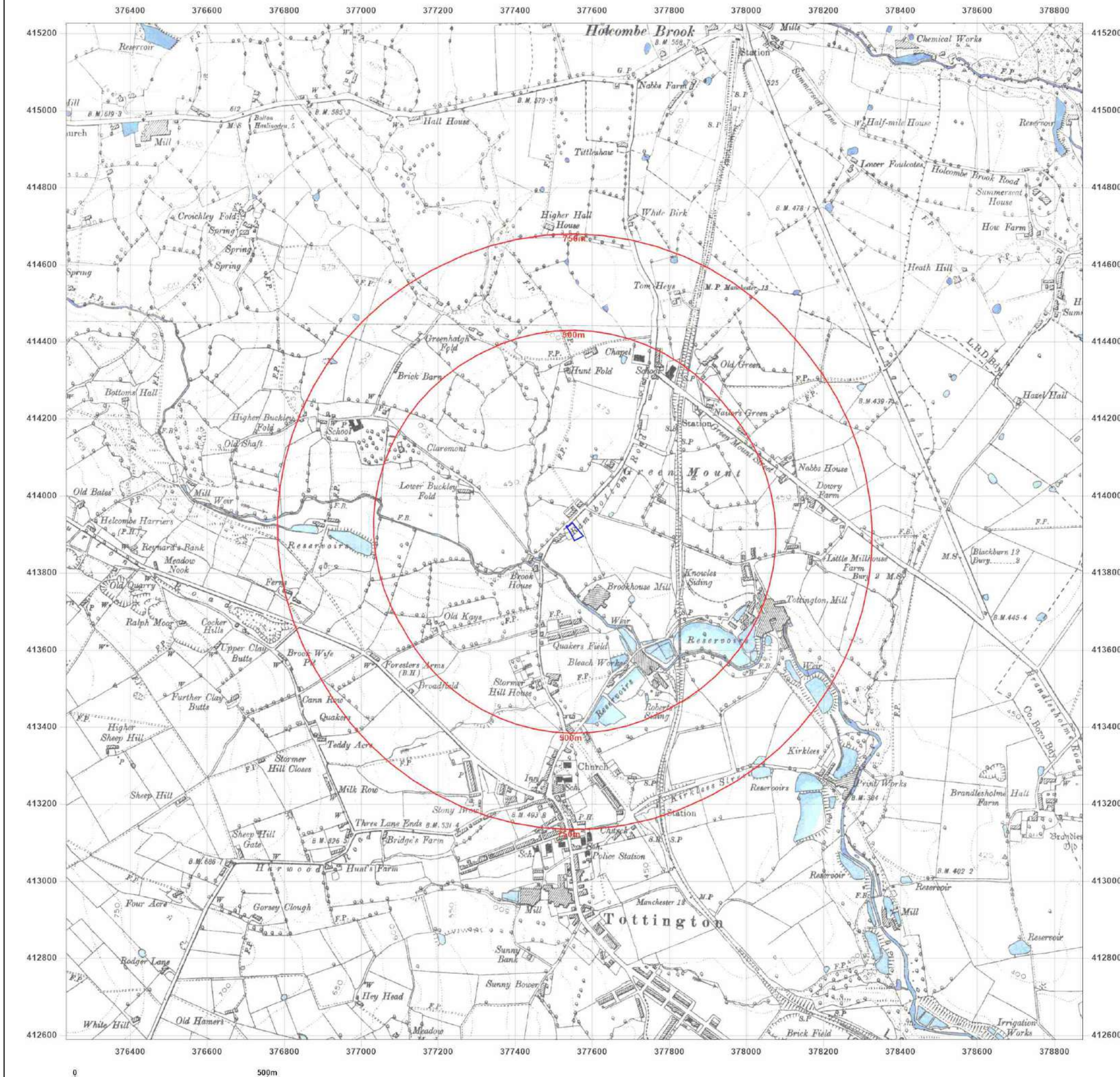


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**Client Ref:** 7881-23101-AH  
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**Grid Ref:** 377553, 413907

**Map Name:** County Series

**Map date:** 1908-1909

**Scale:** 1:10,560

**Printed at:** 1:10,560



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Surveyed 1844  
Revised 1909  
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#### Site Details:

216, HOLCOMBE ROAD,  
TOTTINGTON, BL8 4BQ

Client Ref: 7881-23101-AH  
Report Ref: GS-379-LFP-V7C-Z7Q  
Grid Ref: 377553, 413907

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844  
Revised 1938  
Edition N/A  
Copyright N/A  
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#### Site Details:

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TOTTINGTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** County Series

**Map date:** 1948

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1948  
Revised 1948  
Edition N/A  
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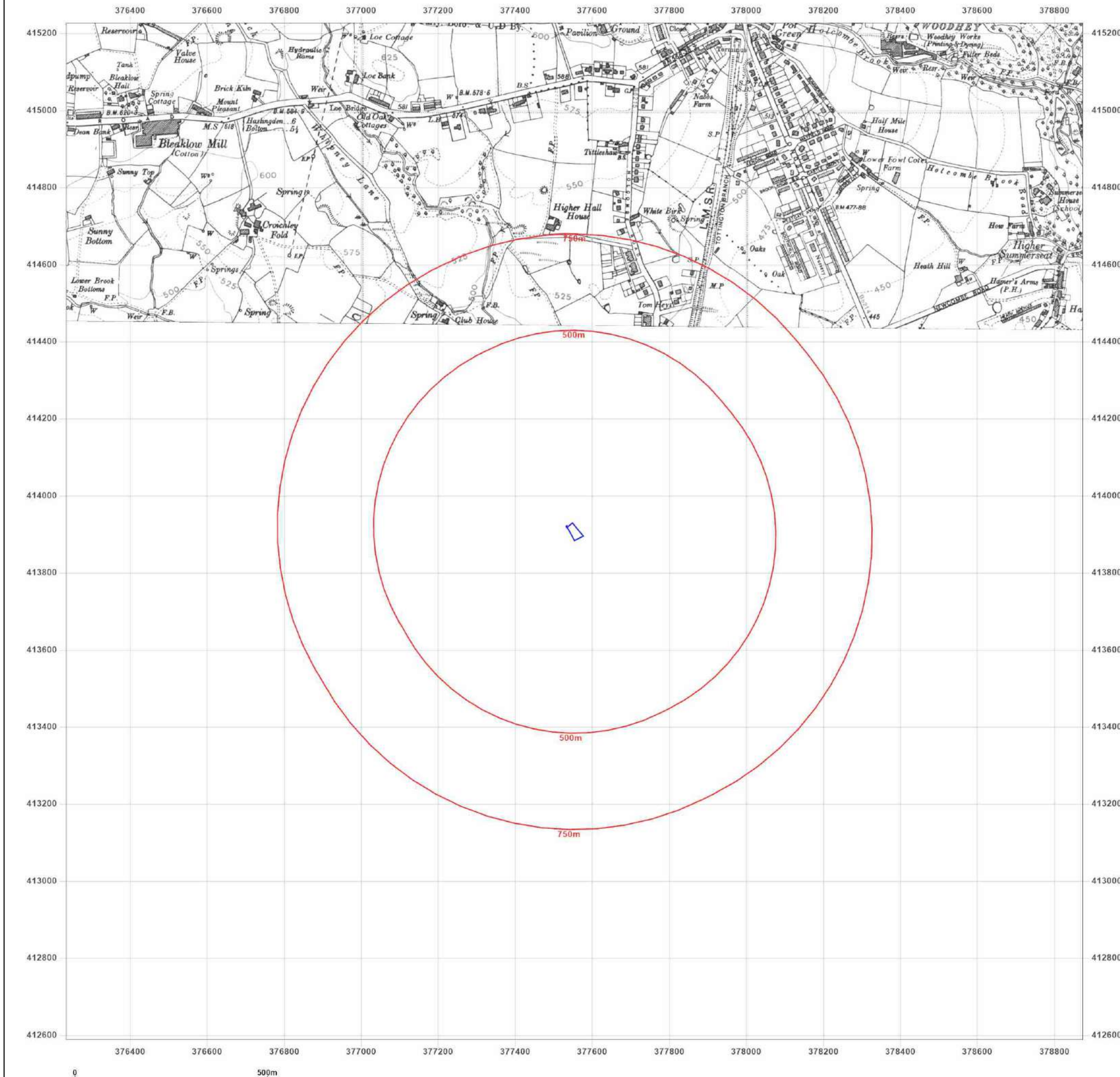


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#### Site Details:

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TOTTINGTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** Provisional

**Map date:** 1955-1956

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1949  
Revised 1949  
Edition N/A  
Copyright 1955  
Levelled N/A

Surveyed 1949  
Revised 1949  
Edition N/A  
Copyright 1956  
Levelled N/A

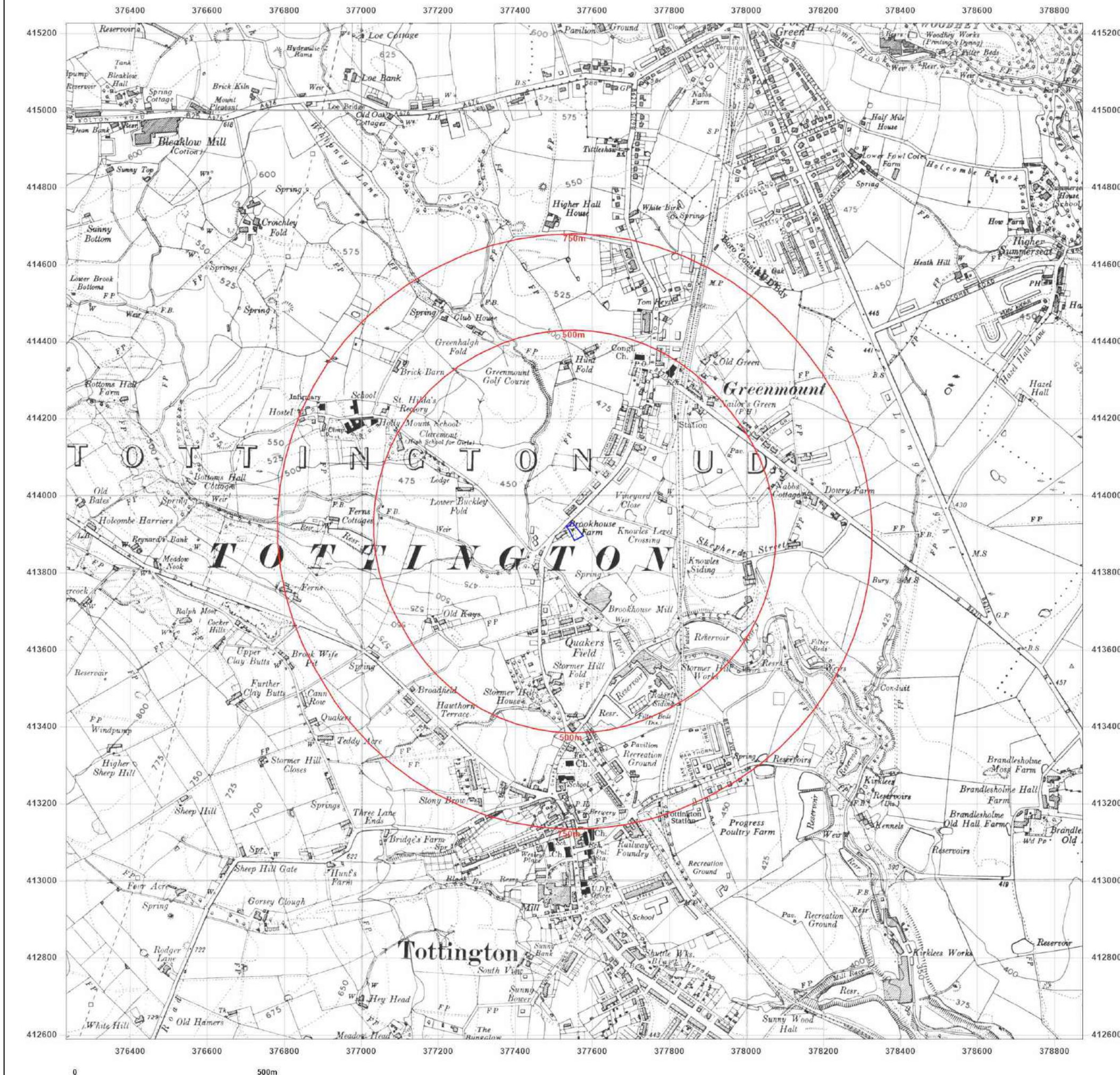


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#### Site Details:

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TOTTINGTTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** Provisional

**Map date:** 1968-1969

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1968  
Revised 1968  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1969  
Revised 1969  
Edition N/A  
Copyright N/A  
Levelled N/A

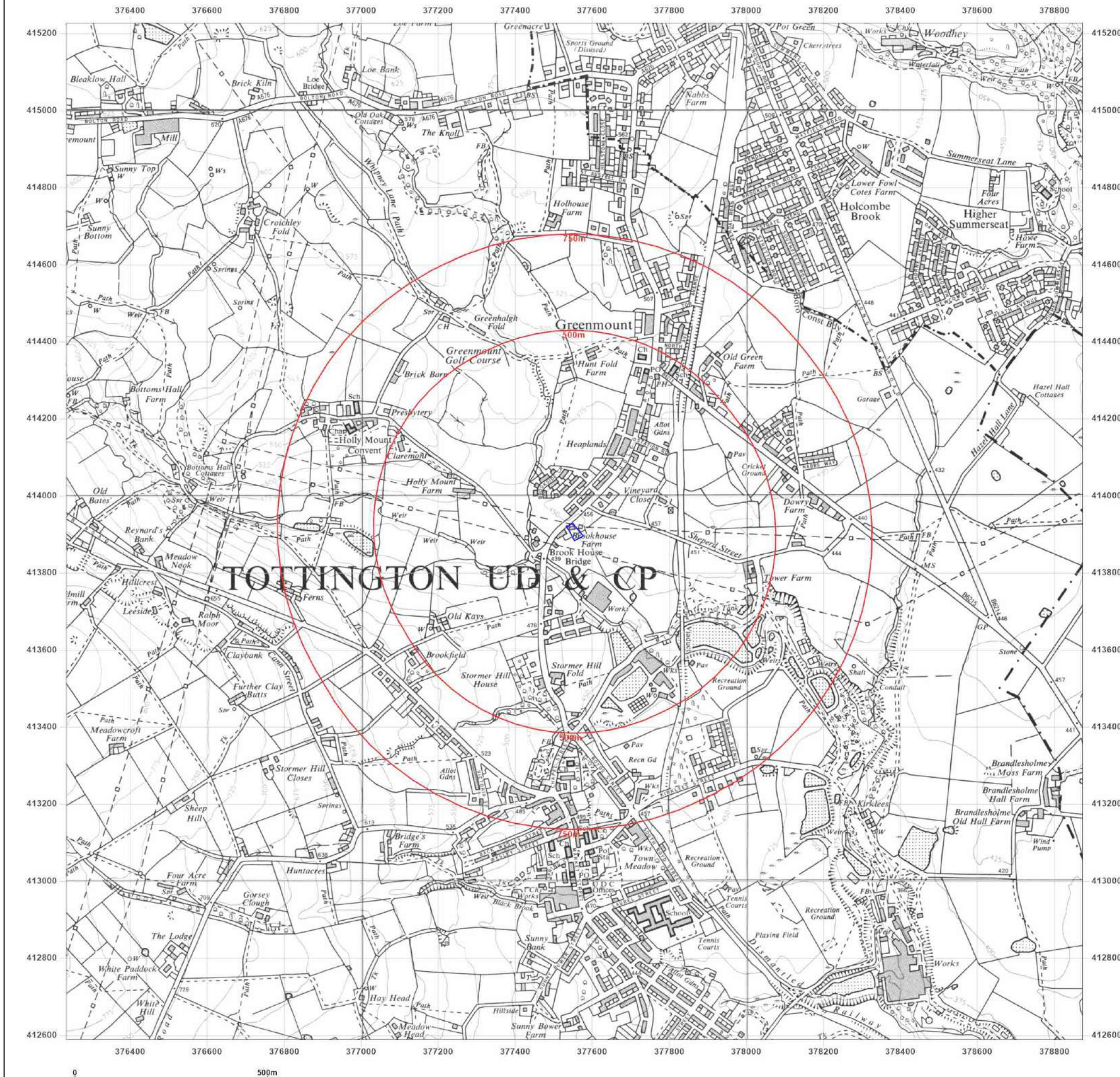


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#### Site Details:

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**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** National Grid

**Map date:** 1974

**Scale:** 1:10,000

**Printed at:** 1:10,000



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Revised 1974  
Edition N/A  
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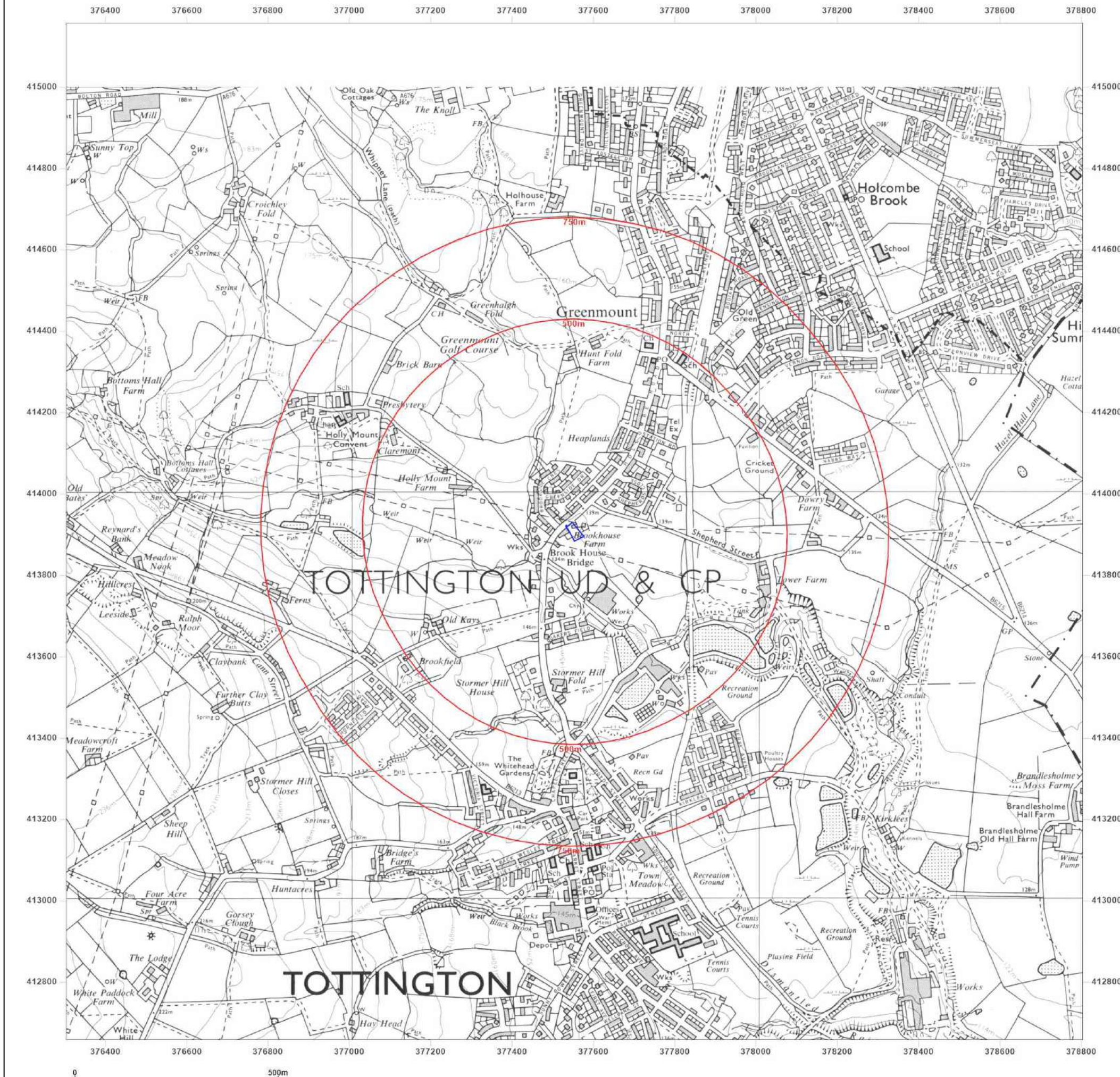


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#### Site Details:

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**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** National Grid

**Map date:** 1980

**Scale:** 1:10,000

**Printed at:** 1:10,000



Surveyed 1978  
Revised 1980  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1978  
Revised 1980  
Edition N/A  
Copyright N/A  
Levelled N/A

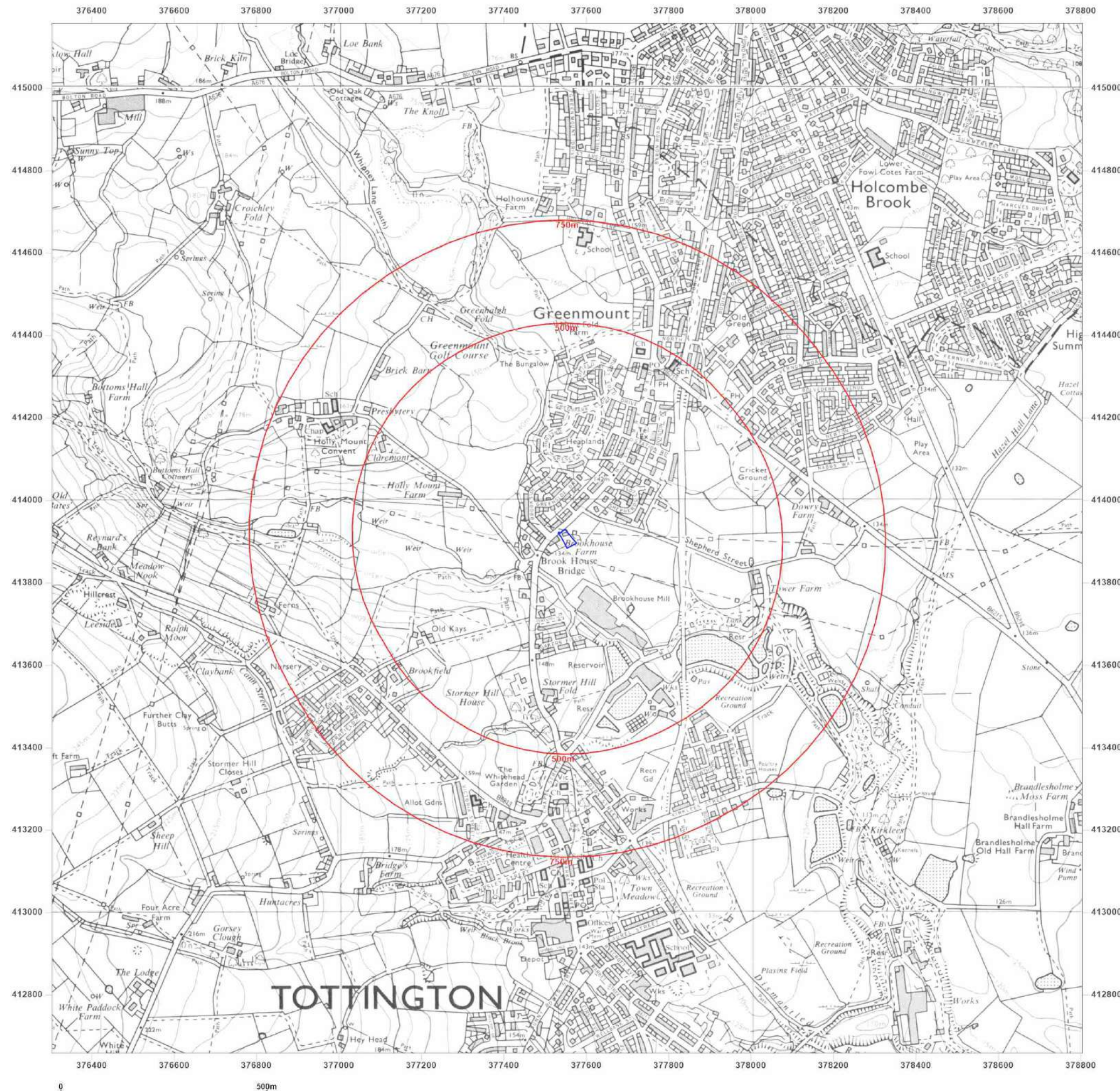


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#### Site Details:

216, HOLCOMBE ROAD,  
TOTTINGTTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** National Grid

**Map date:** 2001

**Scale:** 1:10,000

**Printed at:** 1:10,000



2001

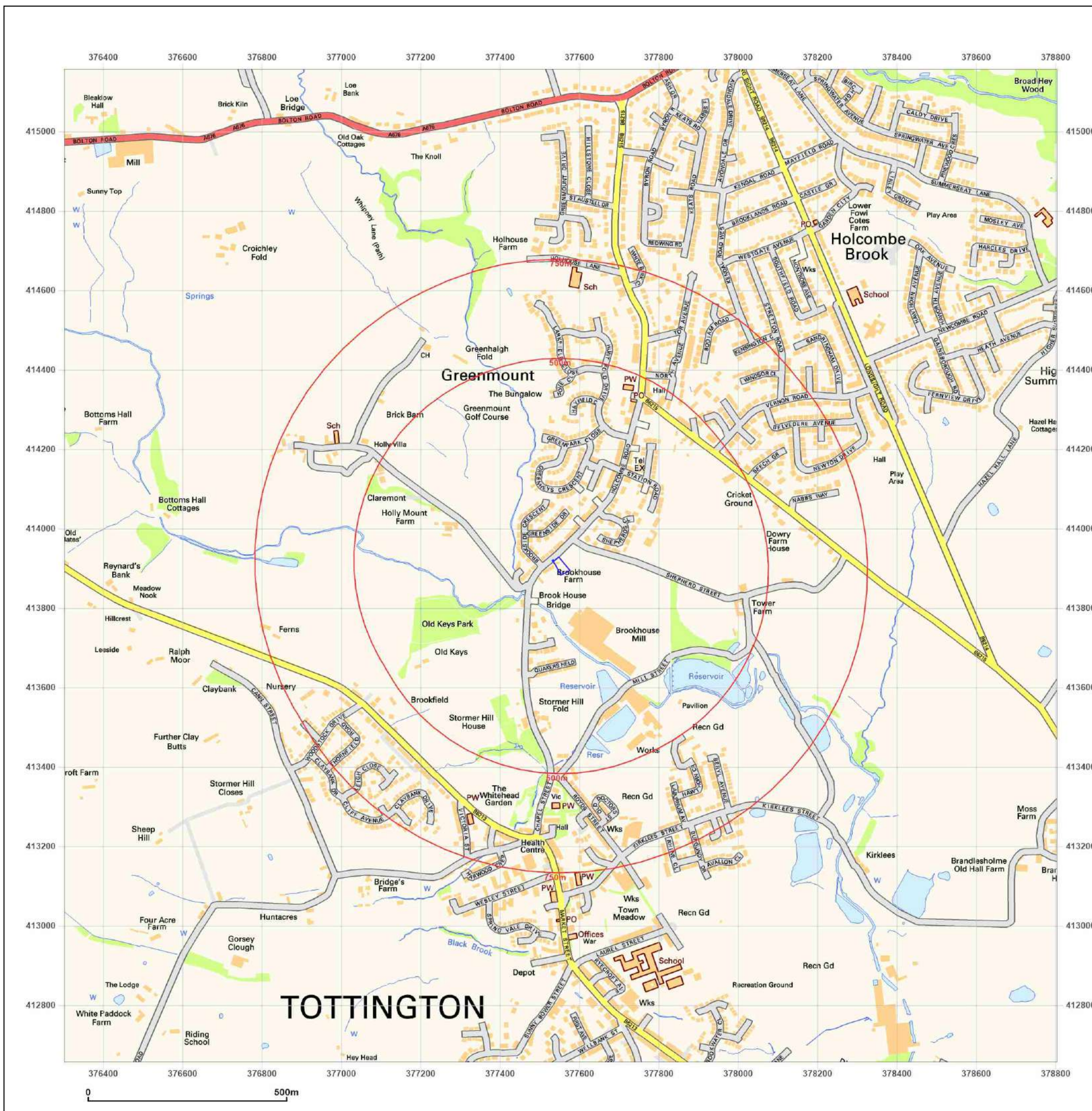


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#### Site Details:

216, HOLCOMBE ROAD,  
TOTTINGTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** National Grid

**Map date:** 2010

**Scale:** 1:10,000

**Printed at:** 1:10,000



2010

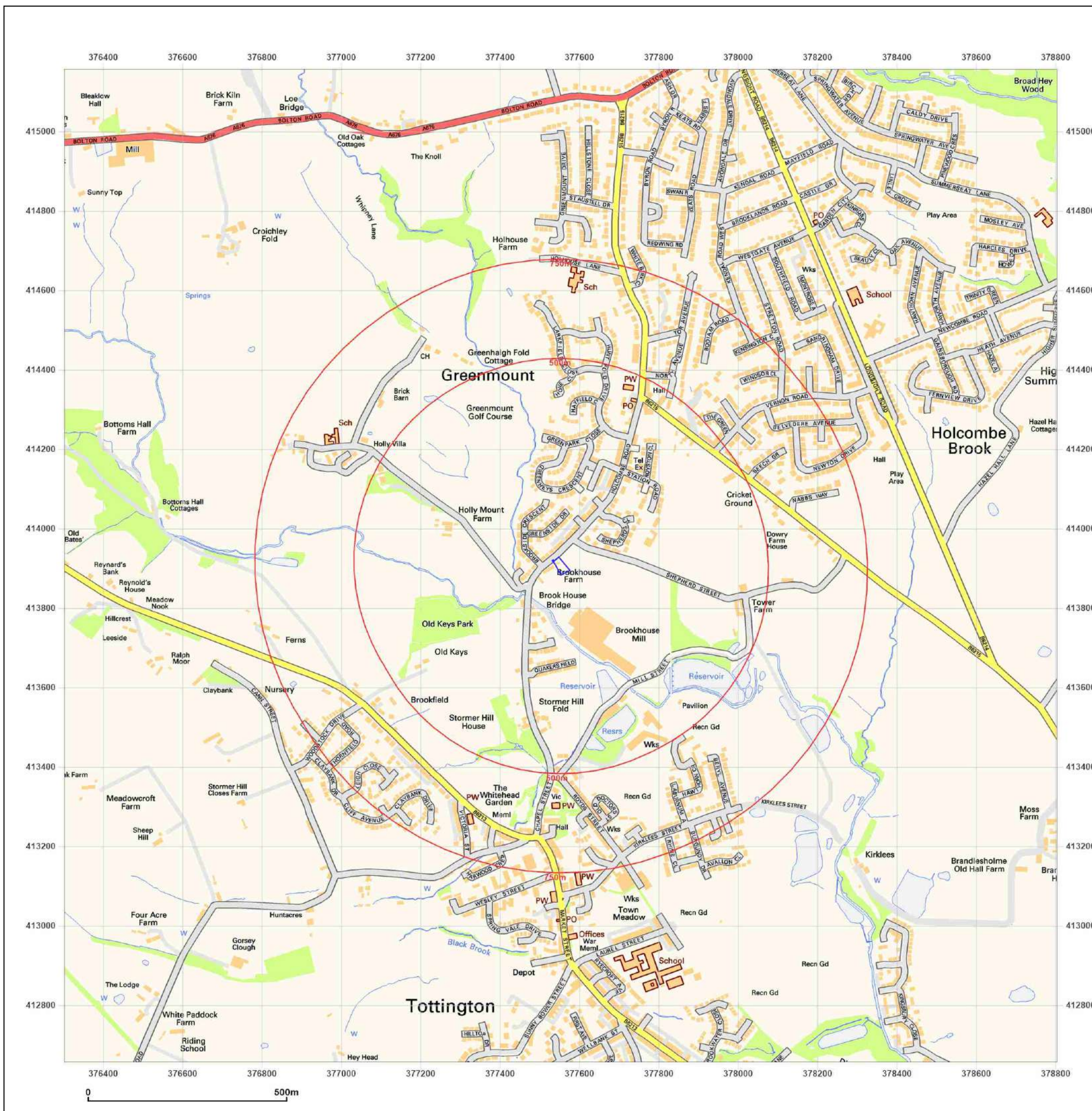


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#### Site Details:

216, HOLCOMBE ROAD,  
TOTTINGTON, BL8 4BQ

**Client Ref:** 7881-23101-AH  
**Report Ref:** GS-379-LFP-V7C-Z7Q  
**Grid Ref:** 377553, 413907

**Map Name:** National Grid

**Map date:** 2023

**Scale:** 1:10,000

**Printed at:** 1:10,000



2023

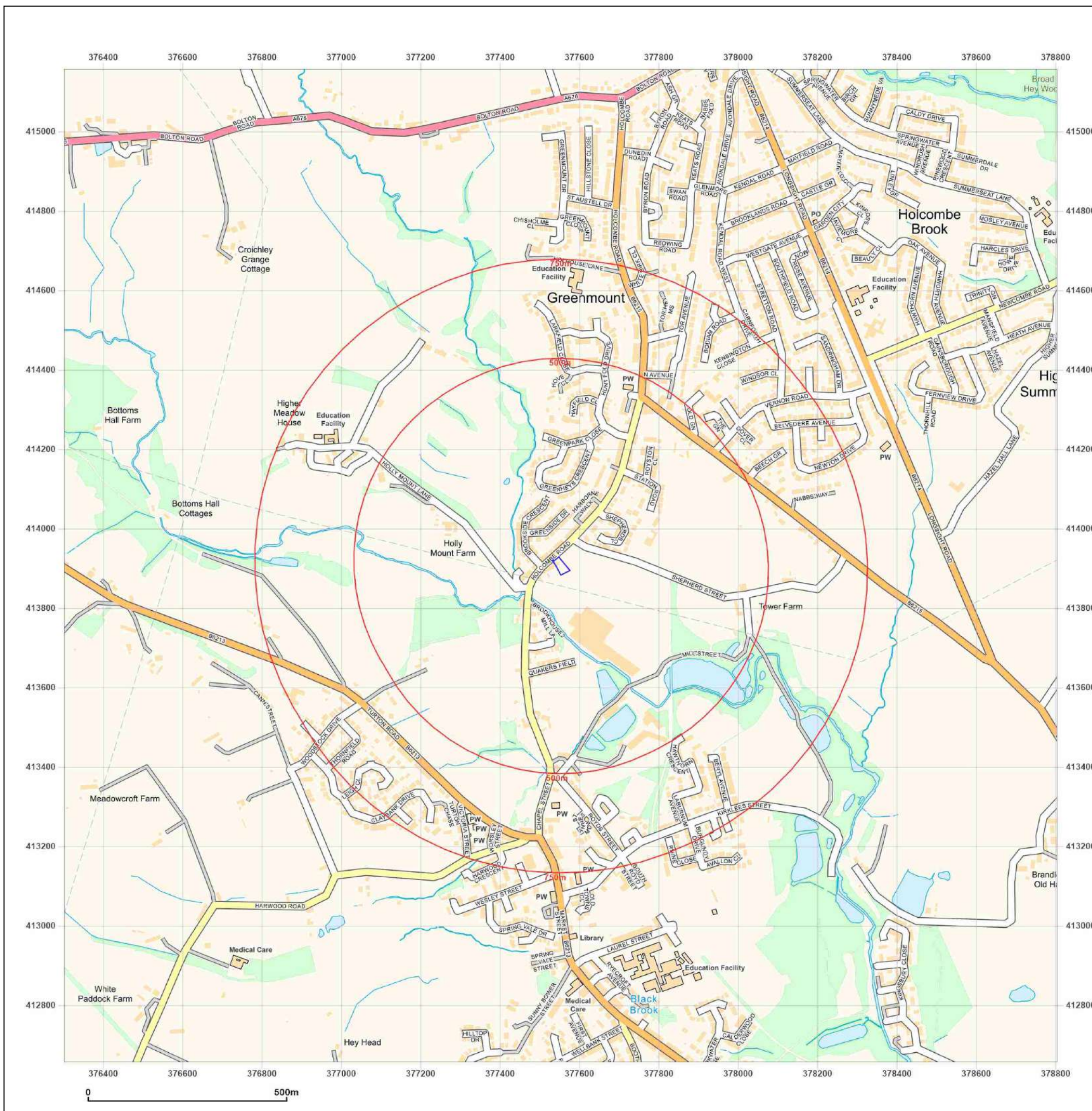


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## APPENDIX B

Enviro & Geo Insight Report

216, HOLCOMBE ROAD, TOTTINGTON, BL8 4BQ

## Order Details

**Date:** 28/07/2023  
**Your ref:** 7881-23101-AH  
**Our Ref:** GS-VFE-XID-Y59-18Q

## Site Details

**Location:** 377553 413906  
**Area:** 0.09 ha  
**Authority:** [Bury Metropolitan Borough Council](#) ↗



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[Summary of findings](#)

[p. 2 >](#)

[Aerial image](#)

[p. 9 >](#)

[OS MasterMap site plan](#)

[p.13 >](#)

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[info@groundsure.com](mailto:info@groundsure.com) ↗

01273 257 755

## Summary of findings

| Page                    | Section                  | <a href="#">Past land use &gt;</a>                   | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|-------------------------|--------------------------|------------------------------------------------------|---------|-------|---------|----------|-----------|
| <a href="#">14 &gt;</a> | <a href="#">1.1 &gt;</a> | <a href="#">Historical industrial land uses &gt;</a> | 0       | 0     | 17      | 33       | -         |
| <a href="#">16 &gt;</a> | <a href="#">1.2 &gt;</a> | <a href="#">Historical tanks &gt;</a>                | 0       | 0     | 3       | 8        | -         |
| <a href="#">17 &gt;</a> | <a href="#">1.3 &gt;</a> | <a href="#">Historical energy features &gt;</a>      | 0       | 0     | 5       | 3        | -         |
| 18                      | 1.4                      | Historical petrol stations                           | 0       | 0     | 0       | 0        | -         |
| <a href="#">18 &gt;</a> | <a href="#">1.5 &gt;</a> | <a href="#">Historical garages &gt;</a>              | 0       | 0     | 0       | 4        | -         |
| 19                      | 1.6                      | Historical military land                             | 0       | 0     | 0       | 0        | -         |
| Page                    | Section                  | <a href="#">Past land use - un-grouped &gt;</a>      | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">20 &gt;</a> | <a href="#">2.1 &gt;</a> | <a href="#">Historical industrial land uses &gt;</a> | 0       | 0     | 19      | 52       | -         |
| <a href="#">23 &gt;</a> | <a href="#">2.2 &gt;</a> | <a href="#">Historical tanks &gt;</a>                | 0       | 0     | 3       | 14       | -         |
| <a href="#">24 &gt;</a> | <a href="#">2.3 &gt;</a> | <a href="#">Historical energy features &gt;</a>      | 0       | 0     | 8       | 6        | -         |
| 25                      | 2.4                      | Historical petrol stations                           | 0       | 0     | 0       | 0        | -         |
| <a href="#">25 &gt;</a> | <a href="#">2.5 &gt;</a> | <a href="#">Historical garages &gt;</a>              | 0       | 0     | 0       | 5        | -         |
| Page                    | Section                  | <a href="#">Waste and landfill &gt;</a>              | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 26                      | 3.1                      | Active or recent landfill                            | 0       | 0     | 0       | 0        | -         |
| 26                      | 3.2                      | Historical landfill (BGS records)                    | 0       | 0     | 0       | 0        | -         |
| 27                      | 3.3                      | Historical landfill (LA/mapping records)             | 0       | 0     | 0       | 0        | -         |
| 27                      | 3.4                      | Historical landfill (EA/NRW records)                 | 0       | 0     | 0       | 0        | -         |
| 27                      | 3.5                      | Historical waste sites                               | 0       | 0     | 0       | 0        | -         |
| 27                      | 3.6                      | Licensed waste sites                                 | 0       | 0     | 0       | 0        | -         |
| <a href="#">27 &gt;</a> | <a href="#">3.7 &gt;</a> | <a href="#">Waste exemptions &gt;</a>                | 0       | 0     | 1       | 5        | -         |
| Page                    | Section                  | <a href="#">Current industrial land use &gt;</a>     | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">29 &gt;</a> | <a href="#">4.1 &gt;</a> | <a href="#">Recent industrial land uses &gt;</a>     | 0       | 0     | 6       | -        | -         |
| 30                      | 4.2                      | Current or recent petrol stations                    | 0       | 0     | 0       | 0        | -         |
| 30                      | 4.3                      | Electricity cables                                   | 0       | 0     | 0       | 0        | -         |
| 30                      | 4.4                      | Gas pipelines                                        | 0       | 0     | 0       | 0        | -         |
| 30                      | 4.5                      | Sites determined as Contaminated Land                | 0       | 0     | 0       | 0        | -         |



| 31             | 4.6              | Control of Major Accident Hazards (COMAH)       | 0                        | 0     | 0       | 0        | -         |
|----------------|------------------|-------------------------------------------------|--------------------------|-------|---------|----------|-----------|
| 31             | 4.7              | Regulated explosive sites                       | 0                        | 0     | 0       | 0        | -         |
| 31             | 4.8              | Hazardous substance storage/usage               | 0                        | 0     | 0       | 0        | -         |
| 31             | 4.9              | Historical licensed industrial activities (IPC) | 0                        | 0     | 0       | 0        | -         |
| 31             | 4.10             | Licensed industrial activities (Part A(1))      | 0                        | 0     | 0       | 0        | -         |
| 32             | 4.11             | Licensed pollutant release (Part A(2)/B)        | 0                        | 0     | 0       | 0        | -         |
| 32             | 4.12             | Radioactive Substance Authorisations            | 0                        | 0     | 0       | 0        | -         |
| 32             | 4.13             | Licensed Discharges to controlled waters        | 0                        | 0     | 0       | 0        | -         |
| 32             | 4.14             | Pollutant release to surface waters (Red List)  | 0                        | 0     | 0       | 0        | -         |
| 32             | 4.15             | Pollutant release to public sewer               | 0                        | 0     | 0       | 0        | -         |
| 33             | 4.16             | List 1 Dangerous Substances                     | 0                        | 0     | 0       | 0        | -         |
| 33             | 4.17             | List 2 Dangerous Substances                     | 0                        | 0     | 0       | 0        | -         |
| <b>33 &gt;</b> | <b>4.18 &gt;</b> | <b><u>Pollution Incidents (EA/NRW) &gt;</u></b> | 0                        | 0     | 0       | <b>1</b> | -         |
| 33             | 4.19             | Pollution inventory substances                  | 0                        | 0     | 0       | 0        | -         |
| 34             | 4.20             | Pollution inventory waste transfers             | 0                        | 0     | 0       | 0        | -         |
| 34             | 4.21             | Pollution inventory radioactive waste           | 0                        | 0     | 0       | 0        | -         |
| Page           | Section          | <b><u>Hydrogeology &gt;</u></b>                 | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <b>35 &gt;</b> | <b>5.1 &gt;</b>  | <b><u>Superficial aquifer &gt;</u></b>          | Identified (within 500m) |       |         |          |           |
| <b>37 &gt;</b> | <b>5.2 &gt;</b>  | <b><u>Bedrock aquifer &gt;</u></b>              | Identified (within 500m) |       |         |          |           |
| <b>38 &gt;</b> | <b>5.3 &gt;</b>  | <b><u>Groundwater vulnerability &gt;</u></b>    | Identified (within 50m)  |       |         |          |           |
| 39             | 5.4              | Groundwater vulnerability- soluble rock risk    | None (within 0m)         |       |         |          |           |
| 39             | 5.5              | Groundwater vulnerability- local information    | None (within 0m)         |       |         |          |           |
| <b>40 &gt;</b> | <b>5.6 &gt;</b>  | <b><u>Groundwater abstractions &gt;</u></b>     | 0                        | 0     | 0       | 7        | 13        |
| <b>45 &gt;</b> | <b>5.7 &gt;</b>  | <b><u>Surface water abstractions &gt;</u></b>   | 0                        | 0     | 0       | 6        | 6         |
| <b>48 &gt;</b> | <b>5.8 &gt;</b>  | <b><u>Potable abstractions &gt;</u></b>         | 0                        | 0     | 0       | 0        | 3         |
| 49             | 5.9              | Source Protection Zones                         | 0                        | 0     | 0       | 0        | -         |
| 50             | 5.10             | Source Protection Zones (confined aquifer)      | 0                        | 0     | 0       | 0        | -         |
| Page           | Section          | <b><u>Hydrology &gt;</u></b>                    | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <b>51 &gt;</b> | <b>6.1 &gt;</b>  | <b><u>Water Network (OS MasterMap) &gt;</u></b> | 0                        | 0     | 5       | -        | -         |



| <a href="#">52 &gt;</a> | <a href="#">6.2 &gt;</a>   | <a href="#">Surface water features &gt;</a>            | 0                                      | 0     | 4       | -        | -         |
|-------------------------|----------------------------|--------------------------------------------------------|----------------------------------------|-------|---------|----------|-----------|
| <a href="#">52 &gt;</a> | <a href="#">6.3 &gt;</a>   | <a href="#">WFD Surface water body catchments &gt;</a> | 1                                      | -     | -       | -        | -         |
| <a href="#">53 &gt;</a> | <a href="#">6.4 &gt;</a>   | <a href="#">WFD Surface water bodies &gt;</a>          | 0                                      | 0     | 1       | -        | -         |
| <a href="#">53 &gt;</a> | <a href="#">6.5 &gt;</a>   | <a href="#">WFD Groundwater bodies &gt;</a>            | 1                                      | -     | -       | -        | -         |
| Page                    | Section                    | River and coastal flooding                             | On site                                | 0-50m | 50-250m | 250-500m | 500-2000m |
| 54                      | 7.1                        | Risk of flooding from rivers and the sea               | None (within 50m)                      |       |         |          |           |
| 54                      | 7.2                        | Historical Flood Events                                | 0                                      | 0     | 0       | -        | -         |
| 54                      | 7.3                        | Flood Defences                                         | 0                                      | 0     | 0       | -        | -         |
| 55                      | 7.4                        | Areas Benefiting from Flood Defences                   | 0                                      | 0     | 0       | -        | -         |
| 55                      | 7.5                        | Flood Storage Areas                                    | 0                                      | 0     | 0       | -        | -         |
| 56                      | 7.6                        | Flood Zone 2                                           | None (within 50m)                      |       |         |          |           |
| 56                      | 7.7                        | Flood Zone 3                                           | None (within 50m)                      |       |         |          |           |
| Page                    | Section                    | <a href="#">Surface water flooding &gt;</a>            |                                        |       |         |          |           |
| <a href="#">57 &gt;</a> | <a href="#">8.1 &gt;</a>   | <a href="#">Surface water flooding &gt;</a>            | 1 in 30 year, 0.1m - 0.3m (within 50m) |       |         |          |           |
| Page                    | Section                    | <a href="#">Groundwater flooding &gt;</a>              |                                        |       |         |          |           |
| <a href="#">59 &gt;</a> | <a href="#">9.1 &gt;</a>   | <a href="#">Groundwater flooding &gt;</a>              | Low (within 50m)                       |       |         |          |           |
| Page                    | Section                    | <a href="#">Environmental designations &gt;</a>        | On site                                | 0-50m | 50-250m | 250-500m | 500-2000m |
| 60                      | 10.1                       | Sites of Special Scientific Interest (SSSI)            | 0                                      | 0     | 0       | 0        | 0         |
| 61                      | 10.2                       | Conserved wetland sites (Ramsar sites)                 | 0                                      | 0     | 0       | 0        | 0         |
| 61                      | 10.3                       | Special Areas of Conservation (SAC)                    | 0                                      | 0     | 0       | 0        | 0         |
| 61                      | 10.4                       | Special Protection Areas (SPA)                         | 0                                      | 0     | 0       | 0        | 0         |
| 61                      | 10.5                       | National Nature Reserves (NNR)                         | 0                                      | 0     | 0       | 0        | 0         |
| <a href="#">62 &gt;</a> | <a href="#">10.6 &gt;</a>  | <a href="#">Local Nature Reserves (LNR) &gt;</a>       | 0                                      | 0     | 1       | 1        | 4         |
| <a href="#">62 &gt;</a> | <a href="#">10.7 &gt;</a>  | <a href="#">Designated Ancient Woodland &gt;</a>       | 0                                      | 0     | 0       | 0        | 2         |
| 63                      | 10.8                       | Biosphere Reserves                                     | 0                                      | 0     | 0       | 0        | 0         |
| 63                      | 10.9                       | Forest Parks                                           | 0                                      | 0     | 0       | 0        | 0         |
| 63                      | 10.10                      | Marine Conservation Zones                              | 0                                      | 0     | 0       | 0        | 0         |
| <a href="#">63 &gt;</a> | <a href="#">10.11 &gt;</a> | <a href="#">Green Belt &gt;</a>                        | 1                                      | 0     | 0       | 0        | 2         |
| 64                      | 10.12                      | Proposed Ramsar sites                                  | 0                                      | 0     | 0       | 0        | 0         |



| 64                      | 10.13                      | Possible Special Areas of Conservation (pSAC)         | 0                        | 0     | 0       | 0        | 0         |
|-------------------------|----------------------------|-------------------------------------------------------|--------------------------|-------|---------|----------|-----------|
| 64                      | 10.14                      | Potential Special Protection Areas (pSPA)             | 0                        | 0     | 0       | 0        | 0         |
| 64                      | 10.15                      | Nitrate Sensitive Areas                               | 0                        | 0     | 0       | 0        | 0         |
| 65                      | 10.16                      | Nitrate Vulnerable Zones                              | 0                        | 0     | 0       | 0        | 0         |
| <a href="#">66 &gt;</a> | <a href="#">10.17 &gt;</a> | <a href="#">SSSI Impact Risk Zones &gt;</a>           | 1                        | -     | -       | -        | -         |
| 67                      | 10.18                      | SSSI Units                                            | 0                        | 0     | 0       | 0        | 0         |
| Page                    | Section                    | <a href="#">Visual and cultural designations &gt;</a> | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| 68                      | 11.1                       | World Heritage Sites                                  | 0                        | 0     | 0       | -        | -         |
| 69                      | 11.2                       | Area of Outstanding Natural Beauty                    | 0                        | 0     | 0       | -        | -         |
| 69                      | 11.3                       | National Parks                                        | 0                        | 0     | 0       | -        | -         |
| <a href="#">69 &gt;</a> | <a href="#">11.4 &gt;</a>  | <a href="#">Listed Buildings &gt;</a>                 | 0                        | 1     | 0       | -        | -         |
| 70                      | 11.5                       | Conservation Areas                                    | 0                        | 0     | 0       | -        | -         |
| 70                      | 11.6                       | Scheduled Ancient Monuments                           | 0                        | 0     | 0       | -        | -         |
| 70                      | 11.7                       | Registered Parks and Gardens                          | 0                        | 0     | 0       | -        | -         |
| Page                    | Section                    | <a href="#">Agricultural designations &gt;</a>        | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">71 &gt;</a> | <a href="#">12.1 &gt;</a>  | <a href="#">Agricultural Land Classification &gt;</a> | Grade 4 (within 250m)    |       |         |          |           |
| 72                      | 12.2                       | Open Access Land                                      | 0                        | 0     | 0       | -        | -         |
| 72                      | 12.3                       | Tree Felling Licences                                 | 0                        | 0     | 0       | -        | -         |
| 72                      | 12.4                       | Environmental Stewardship Schemes                     | 0                        | 0     | 0       | -        | -         |
| 72                      | 12.5                       | Countryside Stewardship Schemes                       | 0                        | 0     | 0       | -        | -         |
| Page                    | Section                    | <a href="#">Habitat designations &gt;</a>             | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">73 &gt;</a> | <a href="#">13.1 &gt;</a>  | <a href="#">Priority Habitat Inventory &gt;</a>       | 0                        | 0     | 10      | -        | -         |
| <a href="#">74 &gt;</a> | <a href="#">13.2 &gt;</a>  | <a href="#">Habitat Networks &gt;</a>                 | 1                        | 0     | 3       | -        | -         |
| 74                      | 13.3                       | Open Mosaic Habitat                                   | 0                        | 0     | 0       | -        | -         |
| 75                      | 13.4                       | Limestone Pavement Orders                             | 0                        | 0     | 0       | -        | -         |
| Page                    | Section                    | <a href="#">Geology 1:10,000 scale &gt;</a>           | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">76 &gt;</a> | <a href="#">14.1 &gt;</a>  | <a href="#">10k Availability &gt;</a>                 | Identified (within 500m) |       |         |          |           |
| <a href="#">77 &gt;</a> | <a href="#">14.2 &gt;</a>  | <a href="#">Artificial and made ground (10k) &gt;</a> | 0                        | 0     | 1       | 7        | -         |
| <a href="#">79 &gt;</a> | <a href="#">14.3 &gt;</a>  | <a href="#">Superficial geology (10k) &gt;</a>        | 1                        | 1     | 3       | 0        | -         |



| <a href="#">80</a> >  | <a href="#">14.4</a> >  | <a href="#">Landslip (10k)</a> >                                 | 0                        | 0     | 0       | 1        | -         |
|-----------------------|-------------------------|------------------------------------------------------------------|--------------------------|-------|---------|----------|-----------|
| <a href="#">81</a> >  | <a href="#">14.5</a> >  | <a href="#">Bedrock geology (10k)</a> >                          | 1                        | 1     | 3       | 3        | -         |
| <a href="#">82</a> >  | <a href="#">14.6</a> >  | <a href="#">Bedrock faults and other linear features (10k)</a> > | 0                        | 1     | 1       | 2        | -         |
| Page                  | Section                 | <a href="#">Geology 1:50,000 scale</a> >                         | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">83</a> >  | <a href="#">15.1</a> >  | <a href="#">50k Availability</a> >                               | Identified (within 500m) |       |         |          |           |
| 84                    | 15.2                    | Artificial and made ground (50k)                                 | 0                        | 0     | 0       | 0        | -         |
| 84                    | 15.3                    | Artificial ground permeability (50k)                             | 0                        | 0     | -       | -        | -         |
| <a href="#">85</a> >  | <a href="#">15.4</a> >  | <a href="#">Superficial geology (50k)</a> >                      | 1                        | 1     | 2       | 0        | -         |
| <a href="#">86</a> >  | <a href="#">15.5</a> >  | <a href="#">Superficial permeability (50k)</a> >                 | Identified (within 50m)  |       |         |          |           |
| 86                    | 15.6                    | Landslip (50k)                                                   | 0                        | 0     | 0       | 0        | -         |
| 86                    | 15.7                    | Landslip permeability (50k)                                      | None (within 50m)        |       |         |          |           |
| <a href="#">87</a> >  | <a href="#">15.8</a> >  | <a href="#">Bedrock geology (50k)</a> >                          | 1                        | 1     | 3       | 3        | -         |
| <a href="#">88</a> >  | <a href="#">15.9</a> >  | <a href="#">Bedrock permeability (50k)</a> >                     | Identified (within 50m)  |       |         |          |           |
| <a href="#">88</a> >  | <a href="#">15.10</a> > | <a href="#">Bedrock faults and other linear features (50k)</a> > | 0                        | 1     | 1       | 1        | -         |
| Page                  | Section                 | Boreholes                                                        | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| 89                    | 16.1                    | BGS Boreholes                                                    | 0                        | 0     | 0       | -        | -         |
| Page                  | Section                 | <a href="#">Natural ground subsidence</a> >                      |                          |       |         |          |           |
| <a href="#">90</a> >  | <a href="#">17.1</a> >  | <a href="#">Shrink swell clays</a> >                             | Very low (within 50m)    |       |         |          |           |
| <a href="#">91</a> >  | <a href="#">17.2</a> >  | <a href="#">Running sands</a> >                                  | Low (within 50m)         |       |         |          |           |
| <a href="#">93</a> >  | <a href="#">17.3</a> >  | <a href="#">Compressible deposits</a> >                          | Moderate (within 50m)    |       |         |          |           |
| <a href="#">95</a> >  | <a href="#">17.4</a> >  | <a href="#">Collapsible deposits</a> >                           | Very low (within 50m)    |       |         |          |           |
| <a href="#">96</a> >  | <a href="#">17.5</a> >  | <a href="#">Landslides</a> >                                     | Very low (within 50m)    |       |         |          |           |
| <a href="#">97</a> >  | <a href="#">17.6</a> >  | <a href="#">Ground dissolution of soluble rocks</a> >            | Negligible (within 50m)  |       |         |          |           |
| Page                  | Section                 | <a href="#">Mining and ground workings</a> >                     | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| 99                    | 18.1                    | BritPits                                                         | 0                        | 0     | 0       | 0        | -         |
| <a href="#">100</a> > | <a href="#">18.2</a> >  | <a href="#">Surface ground workings</a> >                        | 0                        | 0     | 7       | -        | -         |
| <a href="#">100</a> > | <a href="#">18.3</a> >  | <a href="#">Underground workings</a> >                           | 0                        | 0     | 0       | 0        | 4         |
| 101                   | 18.4                    | Underground mining extents                                       | 0                        | 0     | 0       | 0        | -         |
| 101                   | 18.5                    | Historical Mineral Planning Areas                                | 0                        | 0     | 0       | 0        | -         |



|                       |                         |                                                           |                          |       |         |          |           |
|-----------------------|-------------------------|-----------------------------------------------------------|--------------------------|-------|---------|----------|-----------|
| 101                   | 18.6                    | Non-coal mining                                           | 0                        | 0     | 0       | 0        | 0         |
| 101                   | 18.7                    | JPB mining areas                                          | None (within 0m)         |       |         |          |           |
| 101                   | 18.8                    | The Coal Authority non-coal mining                        | 0                        | 0     | 0       | 0        | -         |
| 102                   | 18.9                    | Researched mining                                         | 0                        | 0     | 0       | 0        | -         |
| 102                   | 18.10                   | Mining record office plans                                | 0                        | 0     | 0       | 0        | -         |
| 102                   | 18.11                   | BGS mine plans                                            | 0                        | 0     | 0       | 0        | -         |
| <a href="#">102</a> > | <a href="#">18.12</a> > | <a href="#">Coal mining</a> >                             | Identified (within 0m)   |       |         |          |           |
| 103                   | 18.13                   | Brine areas                                               | None (within 0m)         |       |         |          |           |
| 103                   | 18.14                   | Gypsum areas                                              | None (within 0m)         |       |         |          |           |
| 103                   | 18.15                   | Tin mining                                                | None (within 0m)         |       |         |          |           |
| 103                   | 18.16                   | Clay mining                                               | None (within 0m)         |       |         |          |           |
| Page                  | Section                 | Ground cavities and sinkholes                             | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| 104                   | 19.1                    | Natural cavities                                          | 0                        | 0     | 0       | 0        | -         |
| 104                   | 19.2                    | Mining cavities                                           | 0                        | 0     | 0       | 0        | 0         |
| 104                   | 19.3                    | Reported recent incidents                                 | 0                        | 0     | 0       | 0        | -         |
| 104                   | 19.4                    | Historical incidents                                      | 0                        | 0     | 0       | 0        | -         |
| 105                   | 19.5                    | National karst database                                   | 0                        | 0     | 0       | 0        | -         |
| Page                  | Section                 | <a href="#">Radon</a> >                                   |                          |       |         |          |           |
| <a href="#">106</a> > | <a href="#">20.1</a> >  | <a href="#">Radon</a> >                                   | Less than 1% (within 0m) |       |         |          |           |
| Page                  | Section                 | <a href="#">Soil chemistry</a> >                          | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| <a href="#">108</a> > | <a href="#">21.1</a> >  | <a href="#">BGS Estimated Background Soil Chemistry</a> > | 1                        | 2     | -       | -        | -         |
| 108                   | 21.2                    | BGS Estimated Urban Soil Chemistry                        | 0                        | 0     | -       | -        | -         |
| 108                   | 21.3                    | BGS Measured Urban Soil Chemistry                         | 0                        | 0     | -       | -        | -         |
| Page                  | Section                 | <a href="#">Railway infrastructure and projects</a> >     | On site                  | 0-50m | 50-250m | 250-500m | 500-2000m |
| 109                   | 22.1                    | Underground railways (London)                             | 0                        | 0     | 0       | -        | -         |
| 109                   | 22.2                    | Underground railways (Non-London)                         | 0                        | 0     | 0       | -        | -         |
| 110                   | 22.3                    | Railway tunnels                                           | 0                        | 0     | 0       | -        | -         |
| <a href="#">110</a> > | <a href="#">22.4</a> >  | <a href="#">Historical railway and tunnel features</a> >  | 0                        | 0     | 3       | -        | -         |
| 110                   | 22.5                    | Royal Mail tunnels                                        | 0                        | 0     | 0       | -        | -         |

|     |       |                     |   |   |   |   |   |
|-----|-------|---------------------|---|---|---|---|---|
| 110 | 22.6  | Historical railways | 0 | 0 | 0 | - | - |
| 111 | 22.7  | Railways            | 0 | 0 | 0 | - | - |
| 111 | 22.8  | Crossrail 1         | 0 | 0 | 0 | 0 | - |
| 111 | 22.9  | Crossrail 2         | 0 | 0 | 0 | 0 | - |
| 111 | 22.10 | HS2                 | 0 | 0 | 0 | 0 | - |



## Recent aerial photograph



Capture Date: 23/05/2019

Site Area: 0.09ha



## Recent site history - 2012 aerial photograph



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Capture Date: 26/03/2012

Site Area: 0.09ha



## Recent site history - 2001 aerial photograph



Capture Date: 07/05/2001

Site Area: 0.09ha



## Recent site history - 2000 aerial photograph



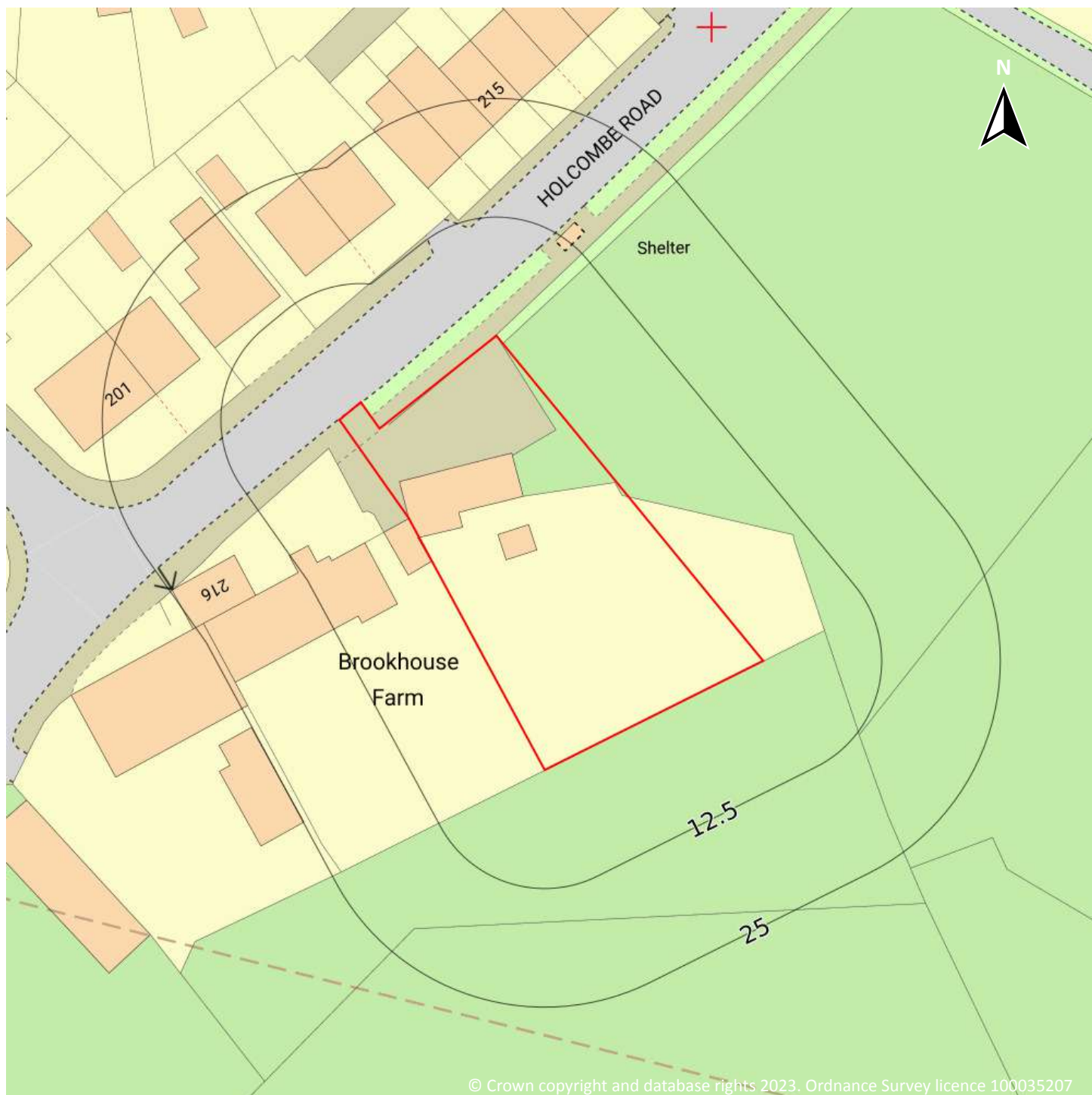
Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2023. All Rights Reserved.

Capture Date: 07/05/2000

Site Area: 0.09ha



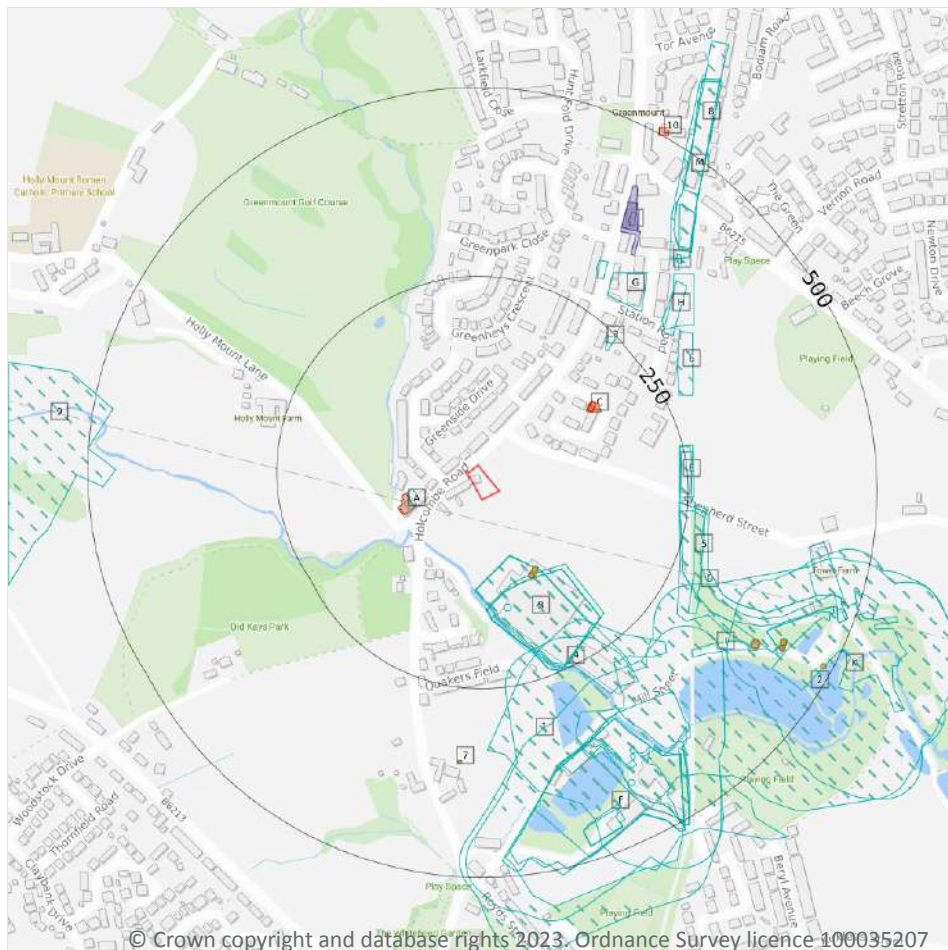
## OS MasterMap site plan



Site Area: 0.09ha



## 1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

### 1.1 Historical industrial land uses

Records within 500m

50

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14](#) >

| ID | Location | Land use          | Dates present | Group ID |
|----|----------|-------------------|---------------|----------|
| A  | 70m W    | Unspecified Works | 1974          | 678769   |



| ID | Location | Land use                 | Dates present | Group ID |
|----|----------|--------------------------|---------------|----------|
| B  | 83m S    | Unspecified Works        | 1969 - 1974   | 735835   |
| B  | 83m S    | Unspecified Mill         | 1980          | 705381   |
| B  | 117m S   | Unspecified Mill         | 1956          | 757527   |
| B  | 122m S   | Cotton Mill              | 1909          | 644080   |
| B  | 122m S   | Unspecified Mill         | 1928 - 1938   | 758109   |
| B  | 122m S   | Unspecified Mill         | 1891          | 784999   |
| B  | 142m S   | Chimney                  | 1974          | 684506   |
| 1  | 199m SE  | Unspecified Quarry       | 1890          | 667809   |
| 2  | 207m SE  | Dyeing and Printing Mill | 1909          | 683024   |
| 3  | 228m NE  | Unspecified Pit          | 1938          | 690900   |
| D  | 239m E   | Railway Sidings          | 1891          | 704268   |
| D  | 239m E   | Railway Sidings          | 1909          | 714861   |
| E  | 239m E   | Cuttings                 | 1928          | 732820   |
| E  | 239m E   | Cuttings                 | 1938          | 789368   |
| D  | 240m E   | Railway Sidings          | 1928 - 1938   | 737566   |
| E  | 240m E   | Cuttings                 | 1891          | 738541   |
| 5  | 260m E   | Railway Sidings          | 1956          | 726766   |
| 6  | 269m NE  | Cuttings                 | 1891          | 642637   |
| F  | 279m SE  | Bleach Works             | 1851 - 1891   | 713024   |
| G  | 283m NE  | Telephone Exchange       | 1980          | 675892   |
| G  | 294m NE  | Unspecified Work         | 1851          | 644792   |
| H  | 302m NE  | Railway Sidings          | 1891 - 1938   | 698899   |
| H  | 304m NE  | Railway Sidings          | 1956          | 695132   |
| I  | 331m SE  | Refuse Heap              | 1909          | 677367   |
| F  | 332m SE  | Unspecified Works        | 1969 - 1980   | 748944   |
| F  | 333m SE  | Unspecified Works        | 1956          | 766465   |
| F  | 337m SE  | Unspecified Works        | 1928          | 736194   |
| F  | 338m SE  | Unspecified Works        | 1938          | 737217   |



| ID | Location | Land use                 | Dates present | Group ID |
|----|----------|--------------------------|---------------|----------|
| F  | 345m SE  | Railway Sidings          | 1891          | 741074   |
| K  | 349m SE  | Unspecified Disused Mill | 1928          | 675673   |
| F  | 355m S   | Railway Sidings          | 1909 - 1928   | 759808   |
| L  | 367m NE  | Railway Station          | 1891 - 1938   | 779541   |
| M  | 374m NE  | Cuttings                 | 1938          | 700436   |
| L  | 377m NE  | Railway Station          | 1956          | 746439   |
| I  | 389m SE  | Unspecified Tanks        | 1909          | 666270   |
| M  | 390m NE  | Cuttings                 | 1891          | 716772   |
| M  | 390m NE  | Cuttings                 | 1909 - 1928   | 727143   |
| L  | 393m NE  | Cuttings                 | 1969          | 713983   |
| L  | 393m NE  | Cuttings                 | 1956          | 734608   |
| F  | 398m SE  | Railway Sidings          | 1938 - 1956   | 782725   |
| K  | 417m E   | Unspecified Mill         | 1851 - 1891   | 733974   |
| F  | 419m SE  | Unspecified Tank         | 1969          | 674753   |
| I  | 421m SE  | Unspecified Tanks        | 1909          | 666271   |
| I  | 422m SE  | Unspecified Tank         | 1969 - 1980   | 710074   |
| F  | 441m SE  | Disused Filter Beds      | 1938 - 1956   | 783650   |
| F  | 446m S   | Filter Beds              | 1909 - 1928   | 719081   |
| 8  | 455m NE  | Cuttings                 | 1956 - 1969   | 709613   |
| 9  | 463m W   | Bleach and Dye works     | 1890          | 641706   |
| K  | 488m E   | Refuse Heap              | 1969          | 677365   |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.2 Historical tanks

### Records within 500m

11

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.



Features are displayed on the Past land use map on [page 14 >](#)

| ID | Location | Land use         | Dates present | Group ID |
|----|----------|------------------|---------------|----------|
| B  | 110m SE  | Unspecified Tank | 1988          | 82492    |
| B  | 110m SE  | Tanks            | 1992          | 87234    |
| B  | 115m SE  | Unspecified Tank | 1976          | 82491    |
| 7  | 346m S   | Unspecified Tank | 1959 - 1992   | 100066   |
| I  | 389m SE  | Gasometer        | 1910          | 78034    |
| I  | 422m SE  | Unspecified Tank | 1959 - 1976   | 92192    |
| I  | 422m SE  | Unspecified Tank | 1963          | 103671   |
| I  | 424m SE  | Unspecified Tank | 1930          | 91240    |
| I  | 424m SE  | Gasometer        | 1891 - 1910   | 97545    |
| K  | 478m E   | Unspecified Tank | 1891          | 82493    |
| K  | 484m SE  | Unspecified Tank | 1891          | 82494    |

*This data is sourced from Ordnance Survey / Groundsure.*

### 1.3 Historical energy features

#### Records within 500m

8

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

| ID | Location | Land use               | Dates present | Group ID |
|----|----------|------------------------|---------------|----------|
| A  | 81m W    | Electricity Substation | 1976          | 45033    |
| C  | 157m NE  | Electricity Substation | 1970          | 47387    |
| C  | 158m NE  | Electricity Substation | 1977 - 1981   | 53561    |
| C  | 159m NE  | Electricity Substation | 1992          | 51788    |
| 4  | 240m SE  | Electricity Substation | 1976 - 1992   | 57573    |
| I  | 389m SE  | Gasometer              | 1910          | 46086    |



| ID | Location | Land use               | Dates present | Group ID |
|----|----------|------------------------|---------------|----------|
| I  | 424m SE  | Gasometer              | 1891 - 1910   | 53904    |
| 10 | 499m NE  | Electricity Substation | 1977 - 1992   | 54793    |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.4 Historical petrol stations

### Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.5 Historical garages

### Records within 500m

4

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

| ID | Location | Land use | Dates present | Group ID |
|----|----------|----------|---------------|----------|
| J  | 345m NE  | Garage   | 1963          | 15351    |
| J  | 368m NE  | Garage   | 1970          | 15939    |
| J  | 368m NE  | Garage   | 1981 - 1992   | 17814    |
| J  | 376m NE  | Garage   | 1977          | 15107    |

*This data is sourced from Ordnance Survey / Groundsure.*



## 1.6 Historical military land

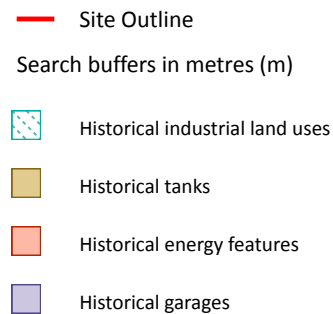
Records within 500m

0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

*This data is sourced from Ordnance Survey / Groundsure / other sources.*





| ID | Location | Land Use                 | Date | Group ID |
|----|----------|--------------------------|------|----------|
| B  | 83m S    | Unspecified Mill         | 1980 | 705381   |
| B  | 117m S   | Unspecified Mill         | 1956 | 757527   |
| B  | 122m S   | Unspecified Mill         | 1938 | 758109   |
| B  | 122m S   | Unspecified Mill         | 1928 | 758109   |
| B  | 122m S   | Cotton Mill              | 1909 | 644080   |
| B  | 122m S   | Unspecified Mill         | 1891 | 784999   |
| B  | 142m S   | Chimney                  | 1974 | 684506   |
| 1  | 199m SE  | Unspecified Quarry       | 1890 | 667809   |
| 2  | 207m SE  | Dyeing and Printing Mill | 1909 | 683024   |
| 3  | 228m NE  | Unspecified Pit          | 1938 | 690900   |
| D  | 239m E   | Railway Sidings          | 1909 | 714861   |
| D  | 239m E   | Railway Sidings          | 1891 | 704268   |
| E  | 239m E   | Cuttings                 | 1928 | 732820   |
| E  | 239m E   | Cuttings                 | 1938 | 789368   |
| D  | 240m E   | Railway Sidings          | 1928 | 737566   |
| E  | 240m E   | Cuttings                 | 1891 | 738541   |
| D  | 257m E   | Railway Sidings          | 1938 | 737566   |
| D  | 260m E   | Railway Sidings          | 1956 | 726766   |
| 4  | 269m NE  | Cuttings                 | 1891 | 642637   |
| G  | 279m SE  | Bleach Works             | 1891 | 713024   |
| H  | 283m NE  | Telephone Exchange       | 1980 | 675892   |
| H  | 294m NE  | Unspecified Work         | 1851 | 644792   |
| I  | 302m NE  | Railway Sidings          | 1938 | 698899   |
| I  | 302m NE  | Railway Sidings          | 1928 | 698899   |
| I  | 302m NE  | Railway Sidings          | 1909 | 698899   |
| I  | 302m NE  | Railway Sidings          | 1891 | 698899   |
| I  | 304m NE  | Railway Sidings          | 1956 | 695132   |
| J  | 331m SE  | Refuse Heap              | 1909 | 677367   |



| ID | Location | Land Use                 | Date | Group ID |
|----|----------|--------------------------|------|----------|
| G  | 332m SE  | Unspecified Works        | 1980 | 748944   |
| G  | 332m SE  | Unspecified Works        | 1969 | 748944   |
| G  | 332m SE  | Unspecified Works        | 1974 | 748944   |
| G  | 333m SE  | Unspecified Works        | 1956 | 766465   |
| G  | 337m SE  | Unspecified Works        | 1928 | 736194   |
| G  | 338m SE  | Unspecified Works        | 1938 | 737217   |
| G  | 345m SE  | Railway Sidings          | 1891 | 741074   |
| 5  | 349m S   | Bleach Works             | 1851 | 713024   |
| M  | 349m SE  | Unspecified Disused Mill | 1928 | 675673   |
| G  | 355m S   | Railway Sidings          | 1928 | 759808   |
| G  | 355m S   | Railway Sidings          | 1909 | 759808   |
| N  | 367m NE  | Railway Station          | 1938 | 779541   |
| N  | 367m NE  | Railway Station          | 1928 | 779541   |
| N  | 367m NE  | Railway Station          | 1909 | 779541   |
| N  | 367m NE  | Railway Station          | 1891 | 779541   |
| O  | 374m NE  | Cuttings                 | 1938 | 700436   |
| N  | 377m NE  | Railway Station          | 1956 | 746439   |
| J  | 389m SE  | Unspecified Tanks        | 1909 | 666270   |
| O  | 390m NE  | Cuttings                 | 1928 | 727143   |
| O  | 390m NE  | Cuttings                 | 1909 | 727143   |
| O  | 390m NE  | Cuttings                 | 1891 | 716772   |
| N  | 393m NE  | Cuttings                 | 1969 | 713983   |
| N  | 393m NE  | Cuttings                 | 1956 | 734608   |
| G  | 398m SE  | Railway Sidings          | 1956 | 782725   |
| G  | 405m SE  | Railway Sidings          | 1938 | 782725   |
| M  | 417m E   | Unspecified Mill         | 1891 | 733974   |
| G  | 419m SE  | Unspecified Tank         | 1969 | 674753   |
| J  | 421m SE  | Unspecified Tanks        | 1909 | 666271   |



| ID | Location | Land Use             | Date | Group ID |
|----|----------|----------------------|------|----------|
| J  | 422m SE  | Unspecified Tank     | 1980 | 710074   |
| J  | 422m SE  | Unspecified Tank     | 1969 | 710074   |
| J  | 422m SE  | Unspecified Tank     | 1974 | 710074   |
| G  | 441m SE  | Disused Filter Beds  | 1956 | 783650   |
| G  | 446m S   | Filter Beds          | 1928 | 719081   |
| G  | 446m S   | Disused Filter Beds  | 1938 | 783650   |
| G  | 448m S   | Filter Beds          | 1909 | 719081   |
| P  | 455m NE  | Cuttings             | 1969 | 709613   |
| P  | 455m NE  | Cuttings             | 1956 | 709613   |
| M  | 462m E   | Unspecified Mill     | 1851 | 733974   |
| 6  | 463m W   | Bleach and Dye works | 1890 | 641706   |
| M  | 488m E   | Refuse Heap          | 1969 | 677365   |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.2 Historical tanks

### Records within 500m

17

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 20](#) >

| ID | Location | Land Use         | Date | Group ID |
|----|----------|------------------|------|----------|
| B  | 110m SE  | Unspecified Tank | 1988 | 82492    |
| B  | 110m SE  | Tanks            | 1992 | 87234    |
| B  | 115m SE  | Unspecified Tank | 1976 | 82491    |
| L  | 346m S   | Unspecified Tank | 1959 | 100066   |
| L  | 346m S   | Unspecified Tank | 1976 | 100066   |
| L  | 346m S   | Unspecified Tank | 1963 | 100066   |
| L  | 347m S   | Unspecified Tank | 1988 | 100066   |
| L  | 347m S   | Unspecified Tank | 1992 | 100066   |



| ID | Location | Land Use         | Date | Group ID |
|----|----------|------------------|------|----------|
| J  | 389m SE  | Gasometer        | 1910 | 78034    |
| J  | 422m SE  | Unspecified Tank | 1959 | 92192    |
| J  | 422m SE  | Unspecified Tank | 1976 | 92192    |
| J  | 422m SE  | Unspecified Tank | 1963 | 103671   |
| J  | 424m SE  | Gasometer        | 1891 | 97545    |
| J  | 424m SE  | Gasometer        | 1910 | 97545    |
| J  | 424m SE  | Unspecified Tank | 1930 | 91240    |
| M  | 478m E   | Unspecified Tank | 1891 | 82493    |
| M  | 484m SE  | Unspecified Tank | 1891 | 82494    |

This data is sourced from Ordnance Survey / Groundsure.

## 2.3 Historical energy features

### Records within 500m

**14**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 20 >](#)

| ID | Location | Land Use               | Date | Group ID |
|----|----------|------------------------|------|----------|
| A  | 81m W    | Electricity Substation | 1976 | 45033    |
| C  | 157m NE  | Electricity Substation | 1970 | 47387    |
| C  | 158m NE  | Electricity Substation | 1981 | 53561    |
| C  | 159m NE  | Electricity Substation | 1992 | 51788    |
| C  | 159m NE  | Electricity Substation | 1977 | 53561    |
| F  | 240m SE  | Electricity Substation | 1976 | 57573    |
| F  | 240m SE  | Electricity Substation | 1988 | 57573    |
| F  | 241m SE  | Electricity Substation | 1992 | 57573    |
| J  | 389m SE  | Gasometer              | 1910 | 46086    |
| J  | 424m SE  | Gasometer              | 1891 | 53904    |
| J  | 424m SE  | Gasometer              | 1910 | 53904    |



| ID | Location | Land Use               | Date | Group ID |
|----|----------|------------------------|------|----------|
| Q  | 499m NE  | Electricity Substation | 1992 | 54793    |
| Q  | 499m NE  | Electricity Substation | 1977 | 54793    |
| Q  | 499m NE  | Electricity Substation | 1981 | 54793    |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.4 Historical petrol stations

### Records within 500m

**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.5 Historical garages

### Records within 500m

**5**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

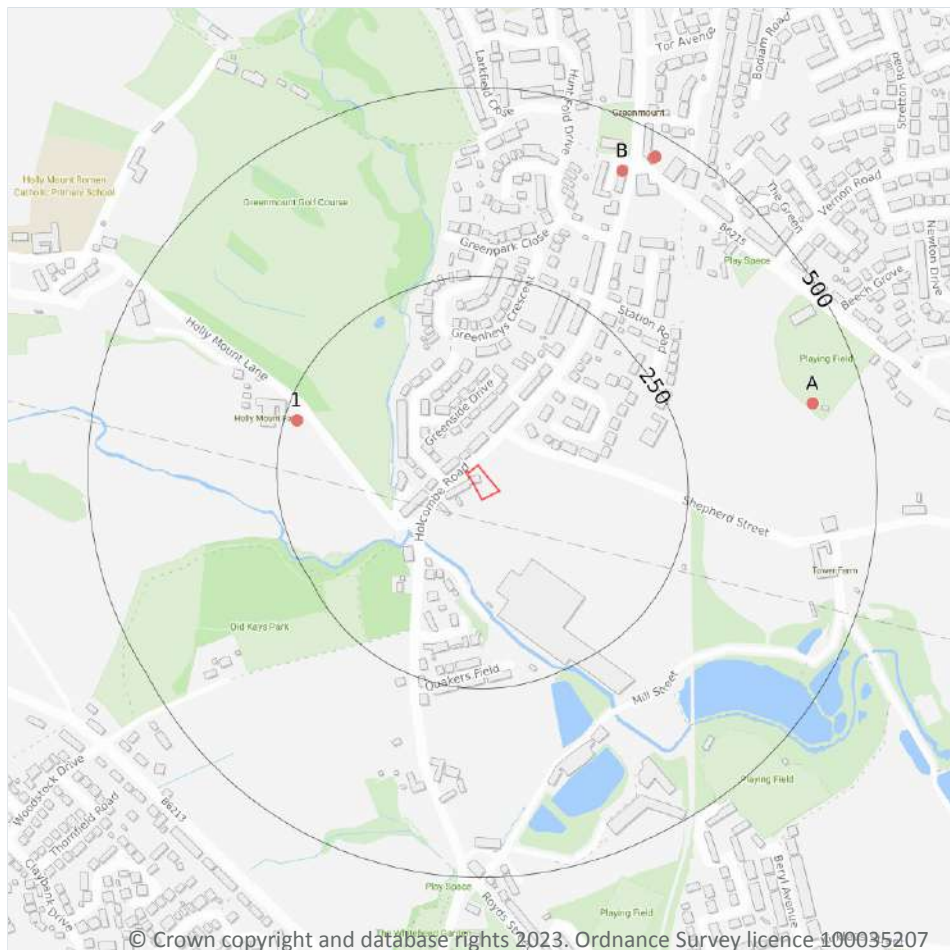
Features are displayed on the Past land use - un-grouped map on [page 20 >](#)

| ID | Location | Land Use | Date | Group ID |
|----|----------|----------|------|----------|
| K  | 345m NE  | Garage   | 1963 | 15351    |
| K  | 368m NE  | Garage   | 1970 | 15939    |
| K  | 368m NE  | Garage   | 1981 | 17814    |
| K  | 368m NE  | Garage   | 1992 | 17814    |
| K  | 376m NE  | Garage   | 1977 | 15107    |

*This data is sourced from Ordnance Survey / Groundsure.*



## 3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Waste exemptions

### 3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

*This data is sourced from the British Geological Survey.*



### 3.3 Historical landfill (LA/mapping records)

**Records within 500m****0**

Landfill sites identified from Local Authority records and high detail historical mapping.

*This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.*

### 3.4 Historical landfill (EA/NRW records)

**Records within 500m****0**

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.5 Historical waste sites

**Records within 500m****0**

Waste site records derived from Local Authority planning records and high detail historical mapping.

*This data is sourced from Ordnance Survey/Groundsure and Local Authority records.*

### 3.6 Licensed waste sites

**Records within 500m****0**

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.7 Waste exemptions

**Records within 500m****6**

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on [page 26 >](#)

| ID | Location | Site | Reference | Category              | Sub-Category | Description                  |
|----|----------|------|-----------|-----------------------|--------------|------------------------------|
| 1  | 234m W   | -    | WEX244121 | Using waste exemption | On a farm    | Use of waste in construction |

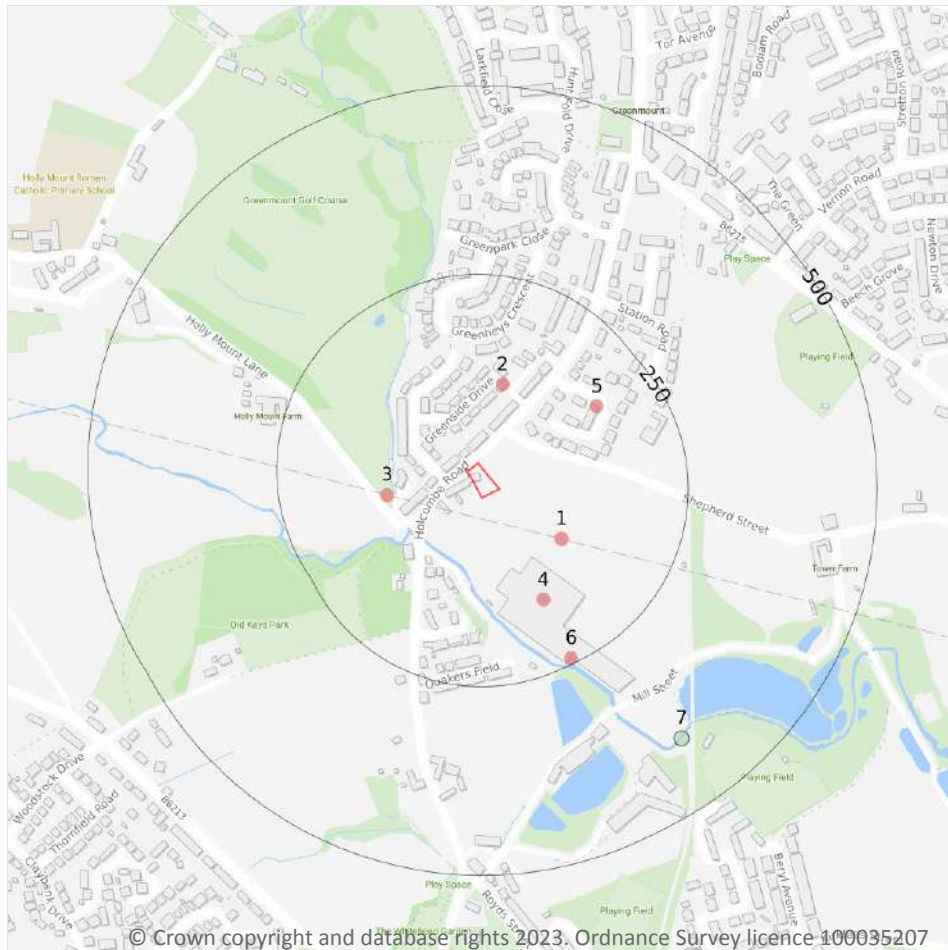


| ID | Location | Site                                                               | Reference             | Category                    | Sub-Category                       | Description                                                 |
|----|----------|--------------------------------------------------------------------|-----------------------|-----------------------------|------------------------------------|-------------------------------------------------------------|
| A  | 430m E   | Greenmount Cricket Club<br>Brandlesholme Road Bury<br>Bury BL8 4DX | EPR/TF0505FS<br>/A001 | Using waste<br>exemption    | Non-<br>Agricultural<br>Waste Only | Use of waste in construction                                |
| A  | 430m E   | Greenmount Cricket Club<br>Brandlesholme Road Bury<br>Bury BL8 4DX | EPR/TF0505FS<br>/A001 | Using waste<br>exemption    | Non-<br>Agricultural<br>Waste Only | Use of waste for a specified<br>purpose                     |
| B  | 433m NE  | 335 Holcombe Road BURY<br>Lancashire BL8 4BB                       | EPR/JE5486XY<br>/A002 | Treating waste<br>exemption | Non-<br>Agricultural<br>Waste Only | Sorting and de-naturing of<br>controlled drugs for disposal |
| B  | 467m NE  | -                                                                  | WEX269527             | Treating waste<br>exemption | Not on a farm                      | Sorting and de-naturing of<br>controlled drugs for disposal |
| B  | 470m NE  | 1, Brandlesholme Road,<br>Bolton, BL8 4DS                          | WEX129136             | Treating waste<br>exemption | Not on a farm                      | Sorting and de-naturing of<br>controlled drugs for disposal |

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Pollution Incidents (EA/NRW)

### 4.1 Recent industrial land uses

Records within 250m

6

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 29 >](#)

| ID | Location | Company                      | Address                                                      | Activity             | Category                      |
|----|----------|------------------------------|--------------------------------------------------------------|----------------------|-------------------------------|
| 1  | 105m SE  | Pylon                        | Greater Manchester, BL8                                      | Electrical Features  | Infrastructure and Facilities |
| 2  | 109m N   | Atlantis Intruder Alarms Ltd | 28, Greenside Drive, Tottington, Greater Manchester, BL8 4BE | Electronic Equipment | Industrial Products           |



| ID | Location | Company                 | Address                                                                 | Activity                                     | Category                      |
|----|----------|-------------------------|-------------------------------------------------------------------------|----------------------------------------------|-------------------------------|
| 3  | 109m W   | Pylon                   | Greater Manchester, BL8                                                 | Electrical Features                          | Infrastructure and Facilities |
| 4  | 157m SE  | Cormar Carpets          | Brookhouse Mill, Holcombe Road, Tottington, Greater Manchester, BL8 4HR | Carpets, Flooring, Rugs and Soft Furnishings | Consumer Products             |
| 5  | 169m NE  | Electricity Sub Station | Greater Manchester, BL8                                                 | Electrical Features                          | Infrastructure and Facilities |
| 6  | 243m SE  | Electricity Sub Station | Greater Manchester, BL8                                                 | Electrical Features                          | Infrastructure and Facilities |

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

Open, closed, under development and obsolete petrol stations.

*This data is sourced from Experian.*

## 4.3 Electricity cables

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*

## 4.4 Gas pipelines

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*

## 4.5 Sites determined as Contaminated Land

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

*This data is sourced from Local Authority records.*

## 4.6 Control of Major Accident Hazards (COMAH)

**Records within 500m****0**

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

*This data is sourced from the Health and Safety Executive.*

## 4.7 Regulated explosive sites

**Records within 500m****0**

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

*This data is sourced from the Health and Safety Executive.*

## 4.8 Hazardous substance storage/usage

**Records within 500m****0**

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

**Records within 500m****0**

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.10 Licensed industrial activities (Part A(1))

**Records within 500m****0**

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



#### 4.11 Licensed pollutant release (Part A(2)/B)

**Records within 500m****0**

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

*This data is sourced from Local Authority records.*

#### 4.12 Radioactive Substance Authorisations

**Records within 500m****0**

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.13 Licensed Discharges to controlled waters

**Records within 500m****0**

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.14 Pollutant release to surface waters (Red List)

**Records within 500m****0**

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.15 Pollutant release to public sewer

**Records within 500m****0**

Discharges of Special Category Effluents to the public sewer.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.16 List 1 Dangerous Substances

**Records within 500m****0**

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.17 List 2 Dangerous Substances

**Records within 500m****0**

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.18 Pollution Incidents (EA/NRW)

**Records within 500m****1**

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 29](#) >

| ID | Location | Details                                                                                                                             |                                                                                                               |
|----|----------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 7  | 408m SE  | Incident Date: 25/08/2001<br>Incident Identification: 26834<br>Pollutant: Oils and Fuel<br>Pollutant Description: Gas and Fuel Oils | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.19 Pollution inventory substances

**Records within 500m****0**

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*



## 4.20 Pollution inventory waste transfers

Records within 500m

0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*

## 4.21 Pollution inventory radioactive waste

Records within 500m

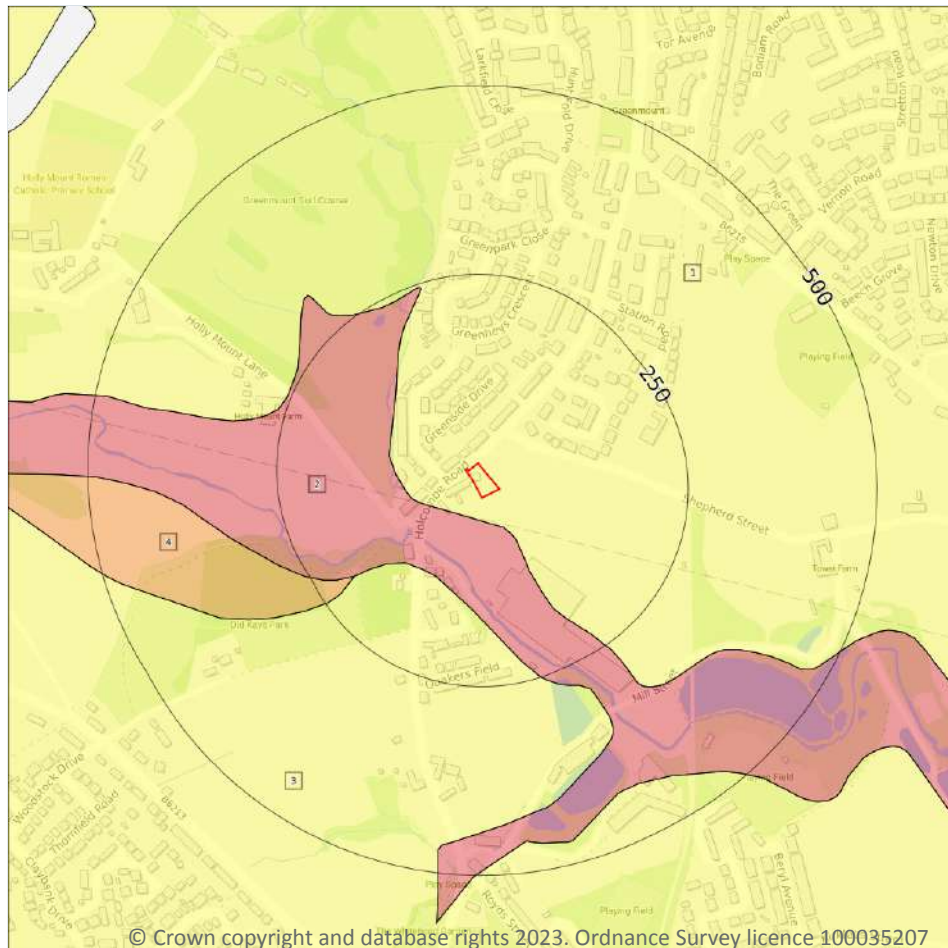
0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*



## 5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
  - Secondary A
  - Secondary B
  - Secondary Undifferentiated
  - Unproductive
  - Unknown

### 5.1 Superficial aquifer

Records within 500m

4

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 35](#) >

| ID | Location | Designation                | Description                                                                                                                                                                                                                                             |
|----|----------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 2  | 30m S    | 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                  |

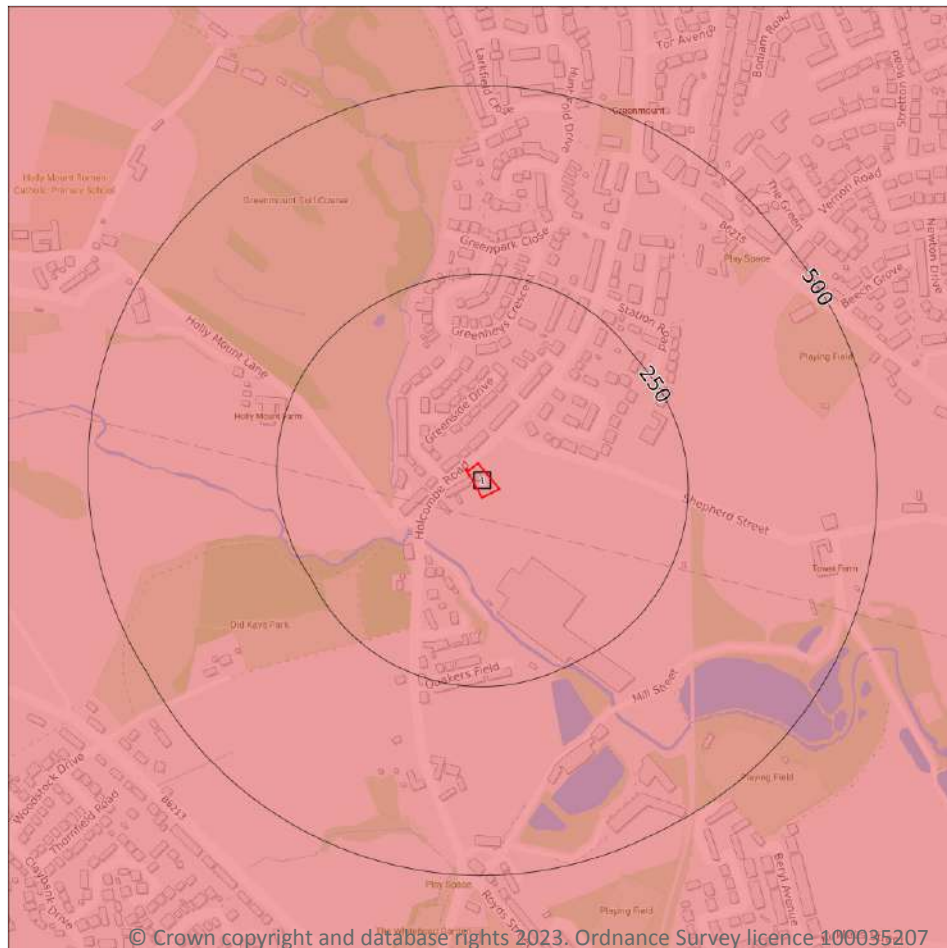


| ID | Location | Designation                   | Description                                                                                                                                                                                                                                             |
|----|----------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3  | 121m SW  | Secondary<br>Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 4  | 198m SW  | Secondary B                   | Predominantly lower permeability layers which may store/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 |

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*



## Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
  - Secondary A
  - Secondary B
  - Secondary Undifferentiated
  - Unproductive

### 5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

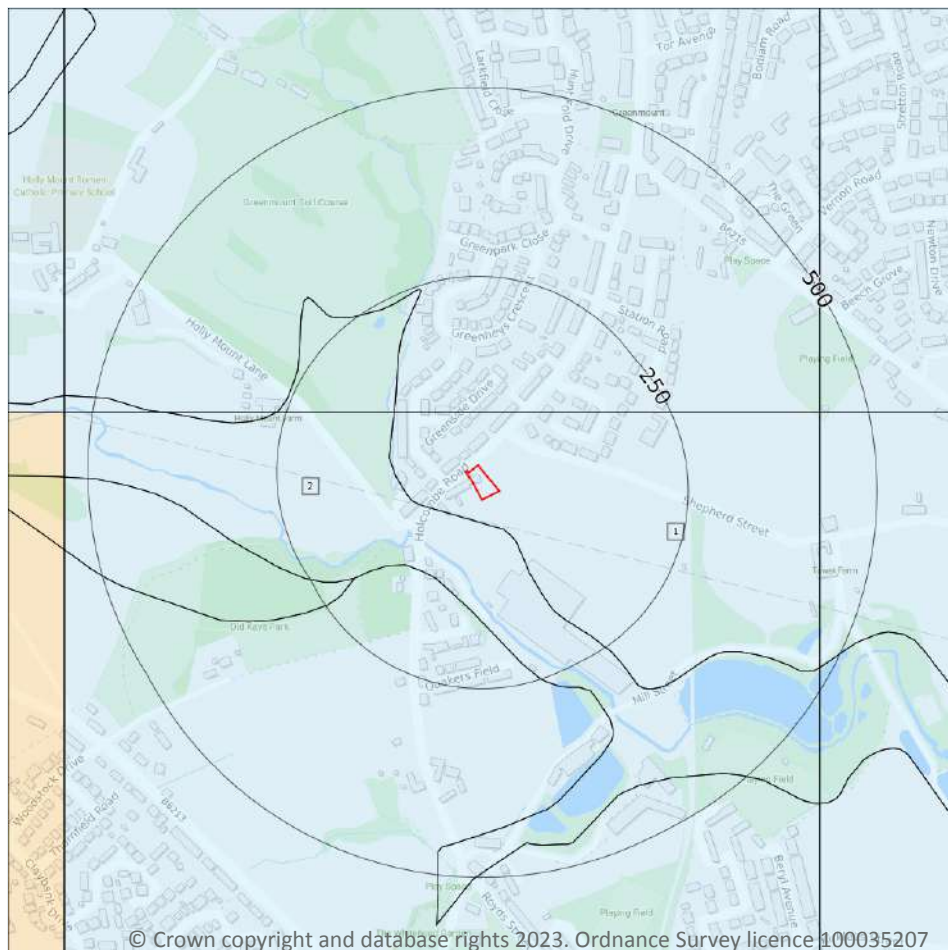
Features are displayed on the Bedrock aquifer map on [page 37](#) >

| ID | Location | Designation | Description                                                                                                                                                                                                                            |
|----|----------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | 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 |

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*



## Groundwater vulnerability



### Site Outline

### Search buffers in metres (m)

#### Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

#### Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

#### Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

## 5.3 Groundwater vulnerability

### Records within 50m

2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 38](#) >

| ID | Location | Summary                                                                                                                                                                                       | Soil / surface                                                                                            | Superficial geology                                                                                                                                     | Bedrock geology                                                                                                      |
|----|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | <b>Summary Classification:</b><br>Secondary superficial aquifer<br>- Low Vulnerability<br><b>Combined classification:</b><br>Productive Bedrock Aquifer,<br>Productive Superficial<br>Aquifer | <b>Leaching class:</b> Low<br><b>Infiltration value:</b><br><40%<br><b>Dilution value:</b><br>>550mm/year | <b>Vulnerability:</b> Low<br><b>Aquifer type:</b> Secondary<br><b>Thickness:</b> <3m<br><b>Patchiness value:</b> >90%<br><b>Recharge potential:</b> Low | <b>Vulnerability:</b> Low<br><b>Aquifer type:</b><br>Secondary<br><b>Flow mechanism:</b> Well<br>connected fractures |
| 2  | 29m S    | <b>Summary Classification:</b><br>Secondary superficial aquifer<br>- Low Vulnerability<br><b>Combined classification:</b><br>Productive Bedrock Aquifer,<br>Productive Superficial<br>Aquifer | <b>Leaching class:</b> Low<br><b>Infiltration value:</b><br><40%<br><b>Dilution value:</b><br>>550mm/year | <b>Vulnerability:</b> Low<br><b>Aquifer type:</b> Secondary<br><b>Thickness:</b> <3m<br><b>Patchiness value:</b> >90%<br><b>Recharge potential:</b> Low | <b>Vulnerability:</b> Low<br><b>Aquifer type:</b> Secondary<br><b>Flow mechanism:</b> Well<br>connected fractures    |

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*

## 5.4 Groundwater vulnerability- soluble rock risk

|                        |          |
|------------------------|----------|
| <b>Records on site</b> | <b>0</b> |
|------------------------|----------|

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

*This data is sourced from the British Geological Survey and the Environment Agency.*

## 5.5 Groundwater vulnerability- local information

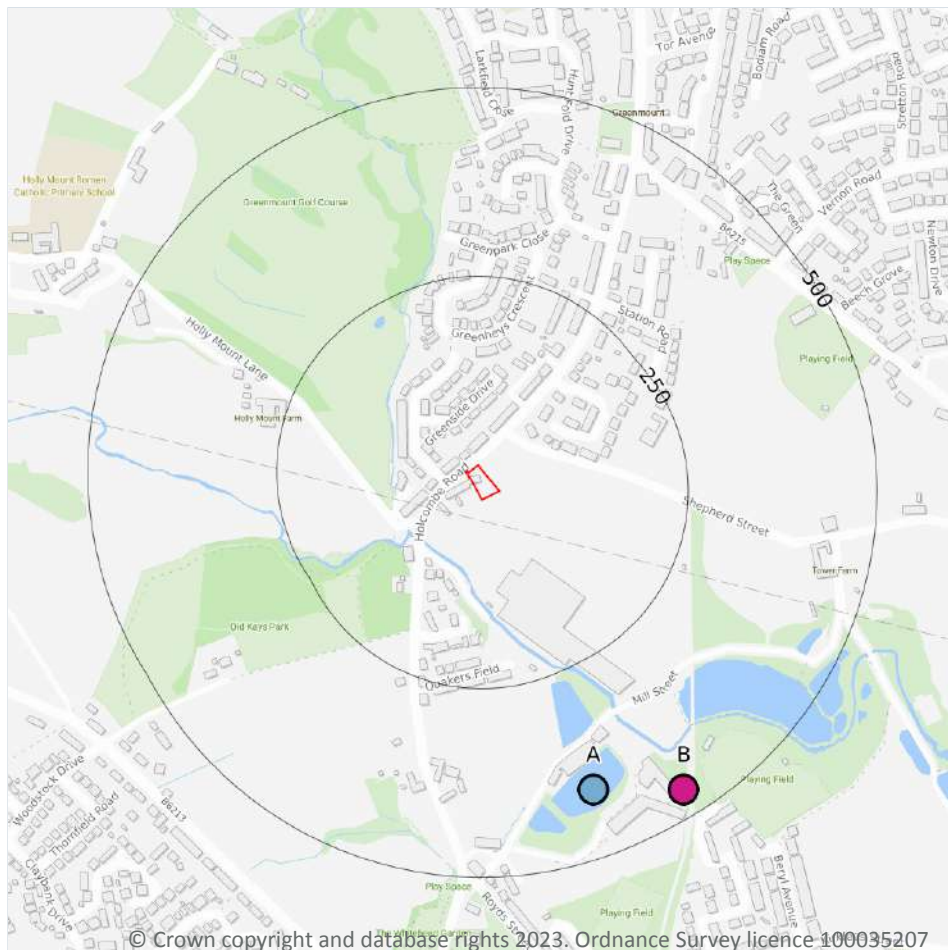
|                        |          |
|------------------------|----------|
| <b>Records on site</b> | <b>0</b> |
|------------------------|----------|

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk) ↗.

*This data is sourced from the British Geological Survey and the Environment Agency.*



## Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1  
Inner catchment
- Source Protection Zone 2  
Outer catchment
- Source Protection Zone 3  
Total catchment
- Source Protection Zone 4  
Zone of Special Interest
- Source Protection Zone 1c  
Inner catchment - confined aquifer
- Source Protection Zone 2c  
Outer catchment - confined aquifer
- Source Protection Zone 3c  
Total catchment - confined aquifer
- Drinking water abstraction licences  
Polygon features
- Drinking water abstraction licences  
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

### 5.6 Groundwater abstractions

Records within 2000m

20

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 40 >](#)

| ID | Location | Details                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                             |
|----|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B  | 465m SE  | Status: Historical<br>Licence No: 2569001253<br>Details: Process water<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT STORMER HILL,TOTTINGTON"<br>Data Type: Point<br>Name: EDWARD TURNBULL & CO LTD<br>Easting: 377820<br>Northing: 413500                  | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: -<br>Expiry Date: 31-Dec-08<br>Issue No: 100<br>Version Start Date: 05/10/1998<br>Version End Date: -                     |
| B  | 465m SE  | Status: Historical<br>Licence No: 2569001253<br>Details: Process water<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT STORMER HILL,TOTTINGTON<br>Data Type: Point<br>Name: EDWARD TURNBULL & CO LTD<br>Easting: 377820<br>Northing: 413500                    | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: -<br>Expiry Date: 31/12/2008<br>Issue No: 100<br>Version Start Date: 05/10/1998<br>Version End Date: -                    |
| B  | 465m SE  | Status: Historical<br>Licence No: 2569001253<br>Details: Process Water<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT STORMER HILL, TOTTINGTON<br>Data Type: Point<br>Name: EDWARD TURNBULL LTD<br>Easting: 377820<br>Northing: 413500                        | Annual Volume (m <sup>3</sup> ): 100000<br>Max Daily Volume (m <sup>3</sup> ): 363.64<br>Original Application No: -<br>Original Start Date: 05/10/1998<br>Expiry Date: 31/12/2008<br>Issue No: 101<br>Version Start Date: 04/12/2007<br>Version End Date: - |
| B  | 465m SE  | Status: Historical<br>Licence No: 2569001253R1<br>Details: Process Water<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT EDWARD TURNBULL,<br>TOTTINGTON, BURY<br>Data Type: Point<br>Name: EDWARD TURNBULL LTD<br>Easting: 377820<br>Northing: 413500          | Annual Volume (m <sup>3</sup> ): 39000<br>Max Daily Volume (m <sup>3</sup> ): 200<br>Original Application No: -<br>Original Start Date: 27/02/2009<br>Expiry Date: 31/03/2015<br>Issue No: 1<br>Version Start Date: 27/02/2009<br>Version End Date: -       |
| B  | 465m SE  | Status: Historical<br>Licence No: 25/69/001/253/R02<br>Details: Process Water<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT EDWARD TURNBULL,<br>TOTTINGTON, BURY<br>Data Type: Point<br>Name: Turnbull Prints Limited<br>Easting: 377820<br>Northing: 413500 | Annual Volume (m <sup>3</sup> ): 39000<br>Max Daily Volume (m <sup>3</sup> ): 200<br>Original Application No: -<br>Original Start Date: 01/04/2015<br>Expiry Date: 31/3/2027<br>Issue No: 1<br>Version Start Date: 01/04/2015<br>Version End Date: -        |



| ID | Location | Details                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                   |
|----|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B  | 465m SE  | Status: Historical<br>Licence No: 2569001253R02<br>Details: Process Water<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT EDWARD TURNBULL,<br>TOTTINGTON, BURY<br>Data Type: Point<br>Name: Turnbull Prints Limited<br>Easting: 377820<br>Northing: 413500                                                  | Annual Volume (m <sup>3</sup> ): 39000<br>Max Daily Volume (m <sup>3</sup> ): 200<br>Original Application No: -<br>Original Start Date: 01/04/2015<br>Expiry Date: 31/03/2027<br>Issue No: 1<br>Version Start Date: 01/04/2015<br>Version End Date: -             |
| B  | 465m SE  | Status: Active<br>Licence No: 2569001253/R02<br>Details: Process Water<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT EDWARD TURNBULL,<br>TOTTINGTON, BURY<br>Data Type: Point<br>Name: Turnbull Prints Limited<br>Easting: 377820<br>Northing: 413500                                                     | Annual Volume (m <sup>3</sup> ): 39000<br>Max Daily Volume (m <sup>3</sup> ): 200<br>Original Application No: NPS/WR/034831<br>Original Start Date: 01/04/2015<br>Expiry Date: 31/03/2027<br>Issue No: 3<br>Version Start Date: 16/12/2020<br>Version End Date: - |
| -  | 1033m SW | Status: Historical<br>Licence No: 2569001113<br>Details: General use relating to Secondary Category<br>(Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: "WELL AT STORMER HILL CLOSES FARM,<br>TOTTINGTON, NR BURY"<br>Data Type: Point<br>Name: PETER & JANET HOYLE<br>Easting: 376700<br>Northing: 413300 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 19/01/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 03/09/2000<br>Version End Date: -                          |
| -  | 1033m SW | Status: Historical<br>Licence No: 2569001113<br>Details: General use relating to Secondary Category<br>(Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: WELL AT STORMER HILL CLOSES FARM,<br>TOTTINGTON, NR BURY<br>Data Type: Point<br>Name: PETER & JANET HOYLE<br>Easting: 376700<br>Northing: 413300   | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 19/01/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 03/09/2000<br>Version End Date: -                          |



| ID | Location | Details                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                        |
|----|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1068m NW | Status: Historical<br>Licence No: 2569001042<br>Details: General use relating to Secondary Category (Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: "SPRING AT HIGHER HALL HOUSE (HOLHOUSE) FARM, GREENMO"<br>Data Type: Point<br>Name: DUXBURY<br>Easting: 377100<br>Northing: 414900 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 12/01/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 12/01/1966<br>Version End Date: -               |
| -  | 1068m NW | Status: Historical<br>Licence No: 2569001042<br>Details: General use relating to Secondary Category (Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: SPRING AT HIGHER HALL HOUSE (HOLHOUSE) FARM, GREENMO<br>Data Type: Point<br>Name: DUXBURY<br>Easting: 377100<br>Northing: 414900   | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 12/01/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 12/01/1966<br>Version End Date: -               |
| -  | 1673m E  | Status: Historical<br>Licence No: 2569001208<br>Details: General use relating to Secondary Category (Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT SUMMERSEAT, BURY"<br>Data Type: Point<br>Name: JOHN KENYON & SONS<br>Easting: 379200<br>Northing: 414300              | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 27/07/1979<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 27/07/1979<br>Version End Date: -               |
| -  | 1673m E  | Status: Active<br>Licence No: 2569001208<br>Details: General Use Relating To Secondary Category (Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT SUMMERSEAT, BURY<br>Data Type: Point<br>Name: KENYON<br>Easting: 379200<br>Northing: 414300                                | Annual Volume (m <sup>3</sup> ): 14974.52<br>Max Daily Volume (m <sup>3</sup> ): 40.91<br>Original Application No: 2554<br>Original Start Date: 27/07/1979<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 26/11/2007<br>Version End Date: - |



| ID | Location | Details                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                          |
|----|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1870m N  | Status: Historical<br>Licence No: 2569001204<br>Details: General use relating to Secondary Category (Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT HOLCOMBE, BURY<br>Data Type: Point<br>Name: DAVENPORT<br>Easting: 377600<br>Northing: 415800                                                       | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 30/07/1979<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 30/07/1979<br>Version End Date: - |
| -  | 1870m N  | Status: Historical<br>Licence No: 2569001204<br>Details: General use relating to Secondary Category (Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT HOLCOMBE, BURY"<br>Data Type: Point<br>Name: DAVENPORT<br>Easting: 377600<br>Northing: 415800                                                     | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 30/07/1979<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 30/07/1979<br>Version End Date: - |
| -  | 1887m N  | Status: Historical<br>Licence No: 2569001228<br>Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services"<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS"<br>Data Type: Point<br>Name: DARUL ULOOM<br>Easting: 377800<br>Northing: 415800 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 20/06/1990<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 20/06/1990<br>Version End Date: - |
| -  | 1887m N  | Status: Historical<br>Licence No: 2569001228<br>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS<br>Data Type: Point<br>Name: DARUL ULOOM<br>Easting: 377800<br>Northing: 415800     | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 20/06/1990<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 20/06/1990<br>Version End Date: - |



| ID | Location | Details                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                     |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1887m N  | Status: Active<br>Licence No: 2569001228<br>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS<br>Data Type: Point<br>Name: DARUL ULOOM<br>Easting: 377800<br>Northing: 415800 | Annual Volume (m <sup>3</sup> ): 22730<br>Max Daily Volume (m <sup>3</sup> ): 90.92<br>Original Application No: 2785<br>Original Start Date: 20/06/1990<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 20/06/1990<br>Version End Date: - |
| -  | 1939m SW | Status: Historical<br>Licence No: 2569001019<br>Details: General use relating to Secondary Category (Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT ISHERWOODS FARM, WALSHAW"<br>Data Type: Point<br>Name: HOUGHTON<br>Easting: 376100<br>Northing: 412600                                    | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 12/01/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 12/01/1966<br>Version End Date: -            |
| -  | 1939m SW | Status: Historical<br>Licence No: 2569001019<br>Details: General use relating to Secondary Category (Medium Loss)<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT ISHERWOODS FARM, WALSHAW<br>Data Type: Point<br>Name: HOUGHTON<br>Easting: 376100<br>Northing: 412600                                      | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 12/01/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 12/01/1966<br>Version End Date: -            |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.7 Surface water abstractions

### Records within 2000m

**12**

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 40 >](#)



| ID | Location | Details                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                          |
|----|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A  | 411m S   | Status: Historical<br>Licence No: 2569001009<br>Details: Boiler Feed<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "RESERVOIR FED BY UNNAMED TRIB OF KIRKLEES BRK, TOTTINGTON"<br>Data Type: Point<br>Name: SITE ELECTRICAL PH LTD<br>Easting: 377700<br>Northing: 413500   | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 08/11/1996<br>Version End Date: - |
| A  | 411m S   | Status: Historical<br>Licence No: 2569001009<br>Details: Process water<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "RESERVOIR FED BY UNNAMED TRIB OF KIRKLEES BRK, TOTTINGTON"<br>Data Type: Point<br>Name: SITE ELECTRICAL PH LTD<br>Easting: 377700<br>Northing: 413500 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 08/11/1996<br>Version End Date: - |
| A  | 411m S   | Status: Historical<br>Licence No: 2569001009<br>Details: Boiler Feed<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: RESERVOIR FED BY UNNAMED TRIB OF KIRKLEES BRK, TOTTINGTON<br>Data Type: Point<br>Name: SITE ELECTRICAL PH LTD<br>Easting: 377700<br>Northing: 413500       | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 08/11/1996<br>Version End Date: - |
| A  | 411m S   | Status: Historical<br>Licence No: 2569001009<br>Details: Process water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: RESERVOIR FED BY UNNAMED TRIB OF KIRKLEES BRK, TOTTINGTON<br>Data Type: Point<br>Name: SITE ELECTRICAL PH LTD<br>Easting: 377700<br>Northing: 413500     | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 08/11/1996<br>Version End Date: - |



| ID | Location | Details                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                  |
|----|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A  | 411m S   | Status: Historical<br>Licence No: 2569001009<br>Details: Process Water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: RESERVOIR FED BY UNNAMED TRIBUTAR Y<br>KIRKLEES BROOK<br>Data Type: Point<br>Name: Greenwood & Coope Limited<br>Easting: 377700<br>Northing: 413500 | Annual Volume (m <sup>3</sup> ): 27276.57<br>Max Daily Volume (m <sup>3</sup> ): 136.38<br>Original Application No: NPS/WR/024456<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 103<br>Version Start Date: 02/09/2016<br>Version End Date: - |
| A  | 411m S   | Status: Historical<br>Licence No: 2569001009<br>Details: Boiler Feed<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: RESERVOIR FED BY UNNAMED TRIBUTAR Y<br>KIRKLEES BROOK<br>Data Type: Point<br>Name: Greenwood & Coope Limited<br>Easting: 377700<br>Northing: 413500   | Annual Volume (m <sup>3</sup> ): 27276.57<br>Max Daily Volume (m <sup>3</sup> ): 136.38<br>Original Application No: NPS/WR/024456<br>Original Start Date: 02/02/1966<br>Expiry Date: -<br>Issue No: 103<br>Version Start Date: 02/09/2016<br>Version End Date: - |
| -  | 1618m NE | Status: Historical<br>Licence No: 2569001038<br>Details: Process Water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: RIVER IRWELL IN RAMSBOTTOM<br>Data Type: Point<br>Name: GREENLEAF ENTERPRISES LTD<br>Easting: 378950<br>Northing: 414750                            | Annual Volume (m <sup>3</sup> ): 23639.7<br>Max Daily Volume (m <sup>3</sup> ): 90.92<br>Original Application No: -<br>Original Start Date: 25/01/1966<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 01/03/2003<br>Version End Date: -               |
| -  | 1792m SE | Status: Historical<br>Licence No: 2569001170<br>Details: Process water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: KIRKLEES BRK AT WOOLFOLD, BURY93<br>Data Type: Line<br>Name: ACTIVECRAFT LTD PAPERMAKERS<br>Easting: 378700<br>Northing: 412500                     | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 23/03/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 16/06/1995<br>Version End Date: -                         |
| -  | 1792m SE | Status: Historical<br>Licence No: 2569001170<br>Details: Process water<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "KIRKLEES BRK AT WOOLFOLD, BURY \$93"<br>Data Type: Line<br>Name: ACTIVECRAFT LTD PAPERMAKERS<br>Easting: 378700<br>Northing: 412500              | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 23/03/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 16/06/1995<br>Version End Date: -                         |



| ID | Location | Details                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                    |
|----|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1792m SE | Status: Historical<br>Licence No: 2569001170<br>Details: Process water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: KIRKLEES BRK AT WOOLFOLD, BURY \$93<br>Data Type: Line<br>Name: ACTIVECRAFT LTD PAPERMAKERS<br>Easting: 378700<br>Northing: 412500             | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 23/03/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 16/06/1995<br>Version End Date: -           |
| -  | 1792m SE | Status: Historical<br>Licence No: 2569001170<br>Details: Process Water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: KIRKLEES BRK AT WOOLFOLD, BURY<br>Data Type: Line<br>Name: ACTIVECRAFT LTD PAPERMAKERS<br>Easting: 378700<br>Northing: 412500                  | Annual Volume (m <sup>3</sup> ): 850102<br>Max Daily Volume (m <sup>3</sup> ): 3182.2<br>Original Application No: -<br>Original Start Date: 23/03/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 16/06/1995<br>Version End Date: - |
| -  | 1919m NW | Status: Historical<br>Licence No: 2569001149<br>Details: Process water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: UNNAMED TRIBUTARY OF KIRKLEES BROOK AT HAWKSHAW<br>Data Type: Point<br>Name: WOODHEY DYEING COMPANY LTD<br>Easting: 376100<br>Northing: 415200 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 15/02/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 11/12/1996<br>Version End Date: -           |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.8 Potable abstractions

### Records within 2000m

**3**

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 40 >](#)



| ID | Location | Details                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                     |
|----|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1887m N  | Status: Historical<br>Licence No: 2569001228<br>Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services"<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT HOLCOMBE, NEAR BURY, LANCs"<br>Data Type: Point<br>Name: DARUL ULOOM<br>Easting: 377800<br>Northing: 415800 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 20/06/1990<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 20/06/1990<br>Version End Date: -            |
| -  | 1887m N  | Status: Historical<br>Licence No: 2569001228<br>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT HOLCOMBE, NEAR BURY, LANCs<br>Data Type: Point<br>Name: DARUL ULOOM<br>Easting: 377800<br>Northing: 415800     | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 20/06/1990<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 20/06/1990<br>Version End Date: -            |
| -  | 1887m N  | Status: Active<br>Licence No: 2569001228<br>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT HOLCOMBE, NEAR BURY, LANCs<br>Data Type: Point<br>Name: DARUL ULOOM<br>Easting: 377800<br>Northing: 415800         | Annual Volume (m <sup>3</sup> ): 22730<br>Max Daily Volume (m <sup>3</sup> ): 90.92<br>Original Application No: 2785<br>Original Start Date: 20/06/1990<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 20/06/1990<br>Version End Date: - |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.9 Source Protection Zones

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 5.10 Source Protection Zones (confined aquifer)

Records within 500m

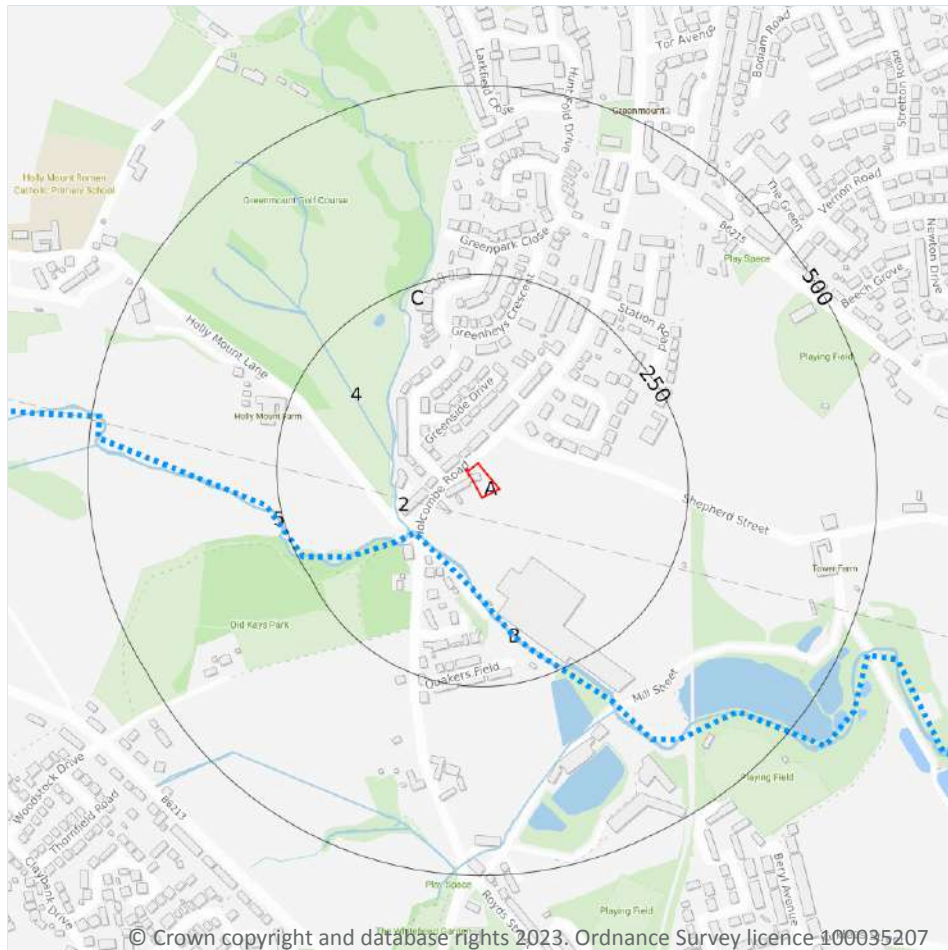
0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

### 6.1 Water Network (OS MasterMap)

Records within 250m

5

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 51](#) >

| ID | Location | Type of water feature                               | Ground level      | Permanence                                                      | Name |
|----|----------|-----------------------------------------------------|-------------------|-----------------------------------------------------------------|------|
| B  | 91m SW   | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | -    |



| ID | Location | Type of water feature                               | Ground level      | Permanence                                                      | Name |
|----|----------|-----------------------------------------------------|-------------------|-----------------------------------------------------------------|------|
| 2  | 95m W    | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | -    |
| 4  | 98m W    | Inland river not influenced by normal tidal action. | Not provided      | Watercourse contains water year round (in normal circumstances) | -    |
| C  | 98m W    | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | -    |
| 5  | 105m SW  | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | -    |

*This data is sourced from the Ordnance Survey.*

## 6.2 Surface water features

|                            |          |
|----------------------------|----------|
| <b>Records within 250m</b> | <b>4</b> |
|----------------------------|----------|

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 51 >](#)

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

|                        |          |
|------------------------|----------|
| <b>Records on site</b> | <b>1</b> |
|------------------------|----------|

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on [page 51 >](#)

| ID | Location | Type  | Water body catchment | Water body ID  | Operational catchment | Management catchment |
|----|----------|-------|----------------------|----------------|-----------------------|----------------------|
| A  | On site  | River | Kirklees Brook       | GB112069064610 | Croal Irwell          | Irwell               |

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 6.4 WFD Surface water bodies

### Records identified

**1**

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 51 >](#)

| ID | Location | Type  | Name           | Water body ID                    | Overall rating | Chemical rating | Ecological rating | Year |
|----|----------|-------|----------------|----------------------------------|----------------|-----------------|-------------------|------|
| 1  | 95m SW   | River | Kirklees Brook | <a href="#">GB112069064610</a> ↗ | Moderate       | Fail            | Moderate          | 2019 |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 6.5 WFD Groundwater bodies

### Records on site

**1**

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on [page 51 >](#)

| ID | Location | Name                                       | Water body ID                    | Overall rating | Chemical rating | Quantitative | Year |
|----|----------|--------------------------------------------|----------------------------------|----------------|-----------------|--------------|------|
| A  | On site  | Northern Manchester Carboniferous Aquifers | <a href="#">GB41202G101800</a> ↗ | Poor           | Poor            | Good         | 2019 |

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 7 River and coastal flooding

### 7.1 Risk of flooding from rivers and the sea

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 7.2 Historical Flood Events

Records within 250m

0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 7.3 Flood Defences

Records within 250m

0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 7.4 Areas Benefiting from Flood Defences

Records within 250m

0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## River and coastal flooding - Flood Zones

### 7.6 Flood Zone 2

Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 7.7 Flood Zone 3

Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

### 8.1 Surface water flooding

**Highest risk on site**

**Negligible**

**Highest risk within 50m**

**1 in 30 year, 0.1m - 0.3m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 57 >](#)

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

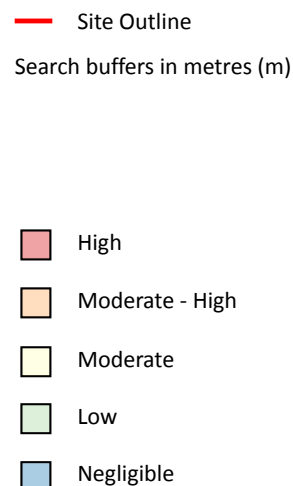
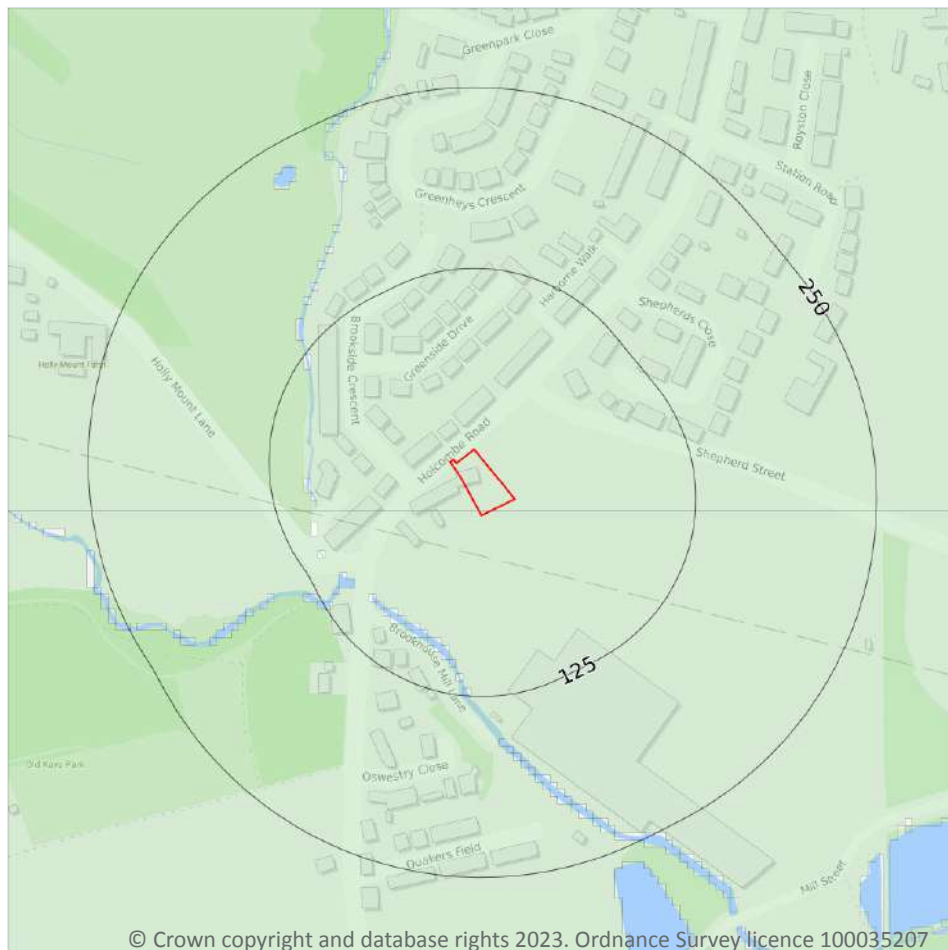
The table below shows the maximum flood depths for a range of return periods for the site.

| Return period  | Maximum modelled depth |
|----------------|------------------------|
| 1 in 1000 year | Negligible             |
| 1 in 250 year  | Negligible             |
| 1 in 100 year  | Negligible             |
| 1 in 30 year   | Negligible             |

*This data is sourced from Ambiantal Risk Analytics.*



## 9 Groundwater flooding



### 9.1 Groundwater flooding

**Highest risk on site**

**Low**

**Highest risk within 50m**

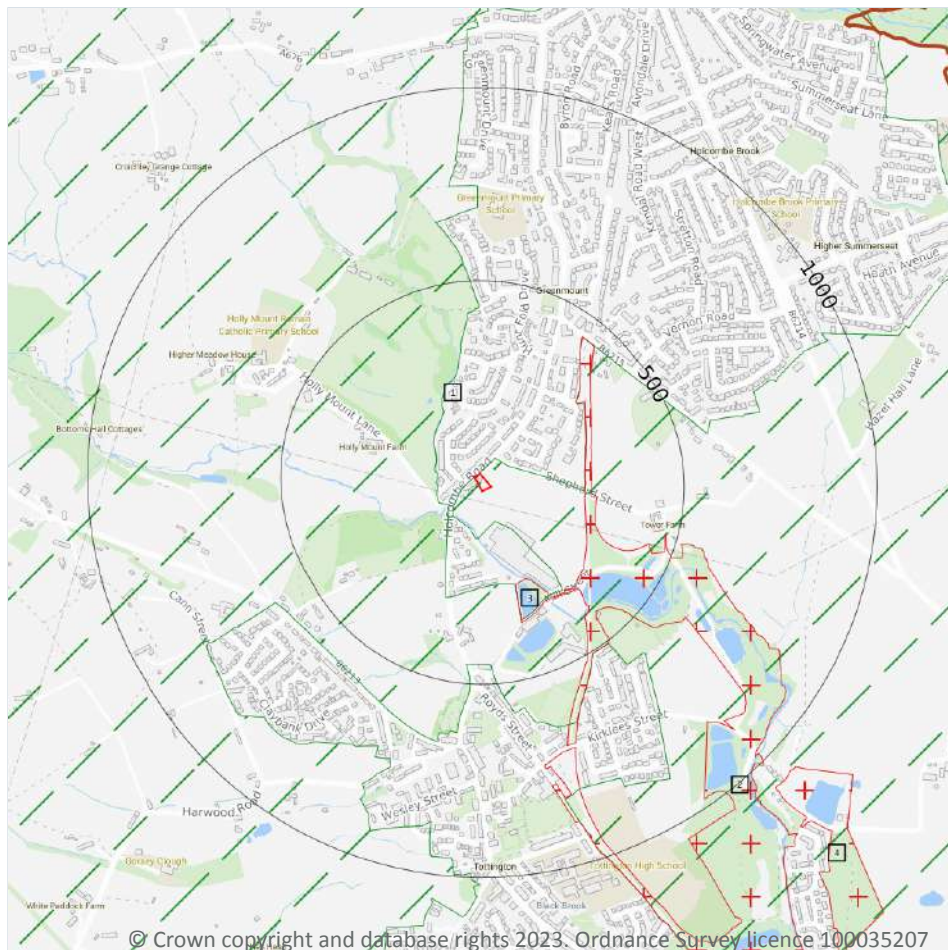
**Low**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 59 >](#)

*This data is sourced from Ambiantal Risk Analytics.*

## 10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- + Local Nature Reserves (LNR)
- ▨ Designated Ancient Woodland
- ▨ Green Belt

### 10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.2 Conserved wetland sites (Ramsar sites)

**Records within 2000m****0**

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.3 Special Areas of Conservation (SAC)

**Records within 2000m****0**

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.4 Special Protection Areas (SPA)

**Records within 2000m****0**

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.5 National Nature Reserves (NNR)

**Records within 2000m****0**

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.6 Local Nature Reserves (LNR)

### Records within 2000m

6

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

Features are displayed on the Environmental designations map on [page 60 >](#)

| ID | Location | Name            | Data source     |
|----|----------|-----------------|-----------------|
| 2  | 243m E   | Kirklees Valley | Natural England |
| 3  | 252m SE  | Kirklees Valley | Natural England |
| 4  | 1068m SE | Kirklees Valley | Natural England |
| -  | 1487m N  | Redisher Wood   | Natural England |
| -  | 1713m SE | Kirklees Valley | Natural England |
| -  | 1831m SE | Kirklees Valley | Natural England |

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.7 Designated Ancient Woodland

### Records within 2000m

2

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on [page 60 >](#)

| ID | Location | Name            | Woodland Type                   |
|----|----------|-----------------|---------------------------------|
| 6  | 1501m NE | Broad Hey Wood  | Ancient & Semi-Natural Woodland |
| -  | 1549m N  | Dawes Bank Wood | Ancient & Semi-Natural Woodland |

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*



## 10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.9 Forest Parks

Records within 2000m

0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

*This data is sourced from the Forestry Commission.*

## 10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.11 Green Belt

Records within 2000m

3

Areas designated to prevent urban sprawl by keeping land permanently open.

Features are displayed on the Environmental designations map on [page 60 >](#)

| ID | Location | Name                              | Local Authority name |
|----|----------|-----------------------------------|----------------------|
| 1  | On site  | Merseyside and Greater Manchester | Bury                 |
| -  | 1751m S  | Merseyside and Greater Manchester | Bury                 |
| -  | 1883m SW | Merseyside and Greater Manchester | Bolton               |

*This data is sourced from the Ministry of Housing, Communities and Local Government.*



## 10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

*This data is sourced from Natural England and Natural Resources Wales.*

## 10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

*This data is sourced from Natural England.*



## 10.16 Nitrate Vulnerable Zones

Records within 2000m

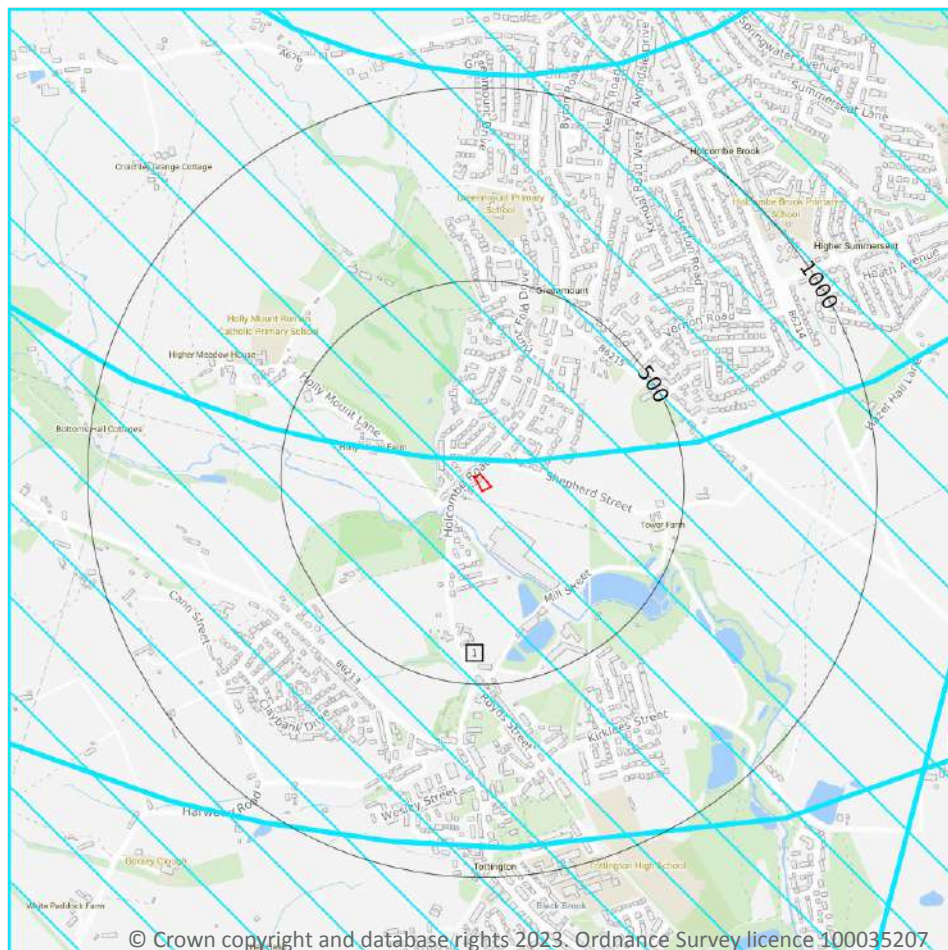
0

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

*This data is sourced from Natural England and Natural Resources Wales.*



## SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

### 10.17 SSSI Impact Risk Zones

#### Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on [page 66](#) >

| ID | Location | Type of developments requiring consultation                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | <p><b>Infrastructure - Airports, helipads and other aviation proposals.</b></p> <p><b>Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil &amp; gas exploration/extraction.</b></p> <p><b>Air pollution - Livestock &amp; poultry units with floorspace &gt; 500m<sup>2</sup>, slurry lagoons &amp; digestate stores &gt; 750m<sup>2</sup>, manure stores &gt; 3500t.</b></p> |



*This data is sourced from Natural England.*

## 10.18 SSSI Units

Records within 2000m

0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

*This data is sourced from Natural England and Natural Resources Wales.*



## 11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

### 11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

*This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.*

## 11.4 Listed Buildings

Records within 250m

1

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on [page 68 >](#)

| ID | Location | Name                 | Grade | Reference Number | Listed date |
|----|----------|----------------------|-------|------------------|-------------|
| 1  | 33m W    | Brookhouse Farm Barn | II    | 1432188          | 18/12/2015  |

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*



## 11.5 Conservation Areas

**Records within 250m****0**

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.6 Scheduled Ancient Monuments

**Records within 250m****0**

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.7 Registered Parks and Gardens

**Records within 250m****0**

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*



## 12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

### 12.1 Agricultural Land Classification

Records within 250m

1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on [page 71](#) >

| ID | Location | Classification | Description                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----|----------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | Grade 4        | Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land. |



*This data is sourced from Natural England.*

## 12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

*This data is sourced from Natural England and Natural Resources Wales.*

## 12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

*This data is sourced from the Forestry Commission.*

## 12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

*This data is sourced from Natural England.*

## 12.5 Countryside Stewardship Schemes

Records within 250m

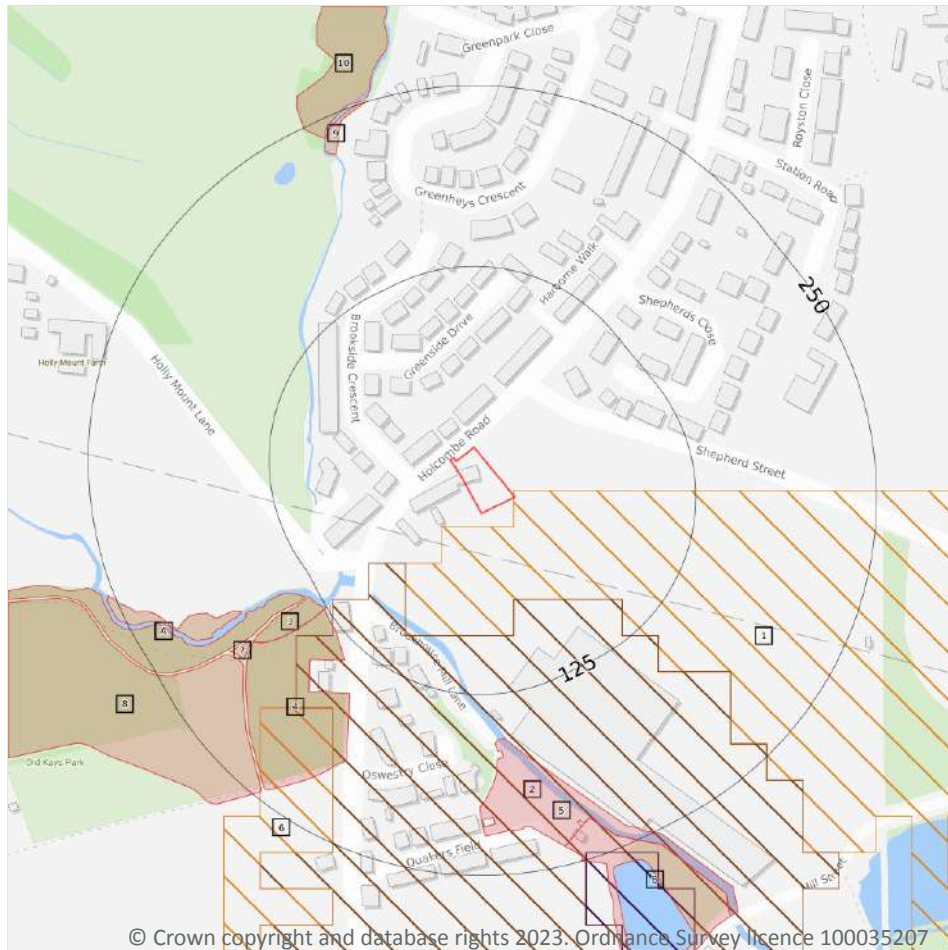
0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

*This data is sourced from Natural England.*



## 13 Habitat designations



- Site Outline**
- Search buffers in metres (m)
- Priority Habitat Inventory
  - Open Mosaic Habitat
  - Limestone Pavement Orders
- Habitat Networks**
- Primary Habitat
  - Restorable Habitat
  - Associated Habitats
  - Habitat Restoration-Creation
  - Network Enhancement Zone 1
  - Network Enhancement Zone 2

### 13.1 Priority Habitat Inventory

Records within 250m

10

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on [page 73](#) >

| ID | Location | Main Habitat       | Other habitats                  |
|----|----------|--------------------|---------------------------------|
| 3  | 126m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 4  | 126m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| A  | 134m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 5  | 156m S   | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |



| ID | Location | Main Habitat       | Other habitats                  |
|----|----------|--------------------|---------------------------------|
| A  | 178m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 7  | 182m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 8  | 195m SW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| B  | 223m S   | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 9  | 224m NW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |
| 10 | 237m NW  | Deciduous woodland | Main habitat: DWOOD (INV > 50%) |

*This data is sourced from Natural England.*

## 13.2 Habitat Networks

### Records within 250m

4

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

Features are displayed on the Habitat designations map on [page 73 >](#)

| ID | Location | Type                       | Habitat       |
|----|----------|----------------------------|---------------|
| 1  | On site  | Network Enhancement Zone 1 | Not specified |
| 2  | 63m SW   | Network Enhancement Zone 2 | Not specified |
| 6  | 169m SW  | Network Enhancement Zone 1 | Not specified |
| B  | 245m S   | Primary Habitat            | Lowland fens  |

*This data is sourced from Natural England.*

## 13.3 Open Mosaic Habitat

### Records within 250m

0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

*This data is sourced from Natural England.*



## 13.4 Limestone Pavement Orders

Records within 250m

0

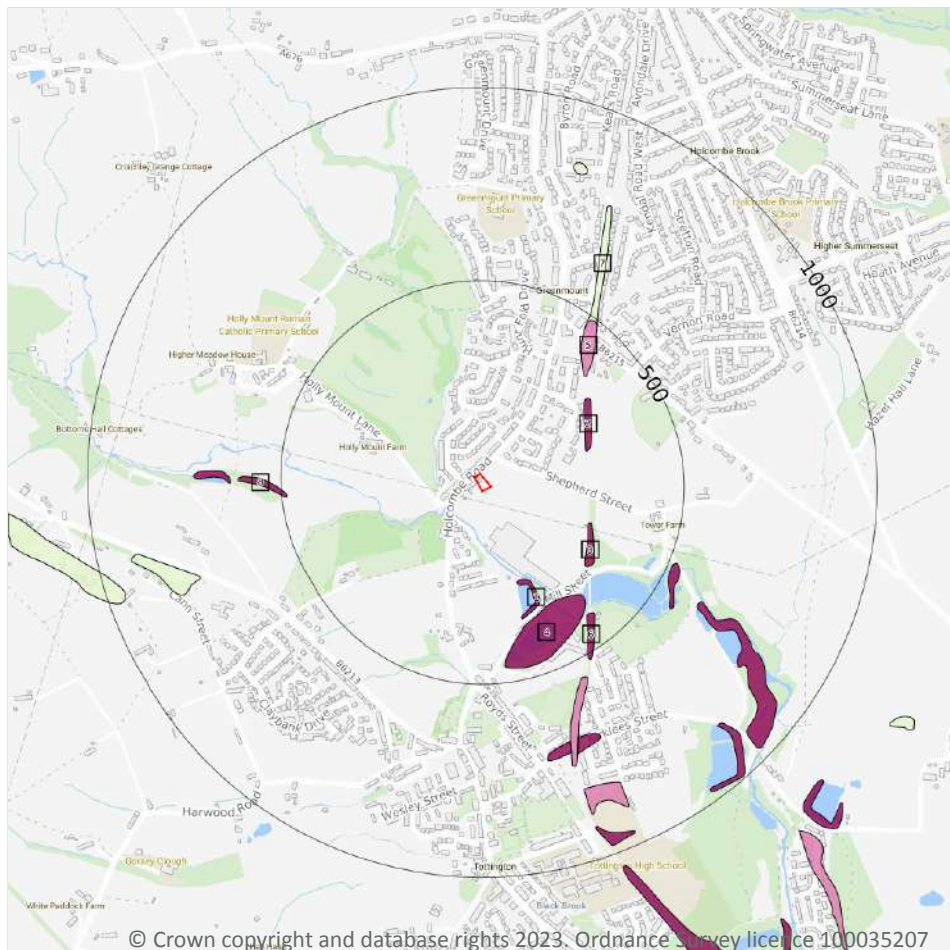
Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

*This data is sourced from Natural England.*





## Geology 1:10,000 scale - Artificial and made ground



— Site Outline  
Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

### 14.2 Artificial and made ground (10k)

Records within 500m

8

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 77](#) >

| ID | Location | LEX Code  | Description             | Rock description   |
|----|----------|-----------|-------------------------|--------------------|
| 1  | 249m S   | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| 2  | 263m E   | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| 3  | 270m E   | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| 4  | 338m SE  | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |



| ID | Location | LEX Code   | Description               | Rock description   |
|----|----------|------------|---------------------------|--------------------|
| 5  | 370m NE  | WGR-VOID   | Worked Ground (Undivided) | Void               |
| 6  | 414m SE  | MGR-ARTDP  | Made Ground (Undivided)   | Artificial Deposit |
| 7  | 481m NE  | WMGR-ARTDP | Infilled Ground           | Artificial Deposit |
| 8  | 487m W   | MGR-ARTDP  | Made Ground (Undivided)   | Artificial Deposit |

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Superficial



**Site Outline**

Search buffers in metres (m)

**Landslip (10k)**

**Superficial geology (10k)**  
Please see table for more details.

### 14.3 Superficial geology (10k)

#### Records within 500m

5

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 79 >](#)

| ID | Location | LEX Code   | Description                            | Rock description            |
|----|----------|------------|----------------------------------------|-----------------------------|
| 1  | On site  | TILLD-DMTN | Till, Devensian - Diamicton            | Diamicton                   |
| 2  | 30m S    | ALV-XCZSV  | Alluvium - Clay, Silt, Sand And Gravel | Clay, Silt, Sand And Gravel |
| 3  | 99m SW   | TILLD-DMTN | Till, Devensian - Diamicton            | Diamicton                   |



| ID | Location | LEX Code   | Description                                         | Rock description            |
|----|----------|------------|-----------------------------------------------------|-----------------------------|
| 4  | 103m W   | ALF-XCZSV  | Alluvial Fan Deposits - Clay, Silt, Sand And Gravel | Clay, Silt, Sand And Gravel |
| 5  | 175m SW  | HEAD-XCZSV | Head - Clay, Silt, Sand And Gravel                  | Clay, Silt, Sand And Gravel |

*This data is sourced from the British Geological Survey.*

## 14.4 Landslip (10k)

### Records within 500m

**1**

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

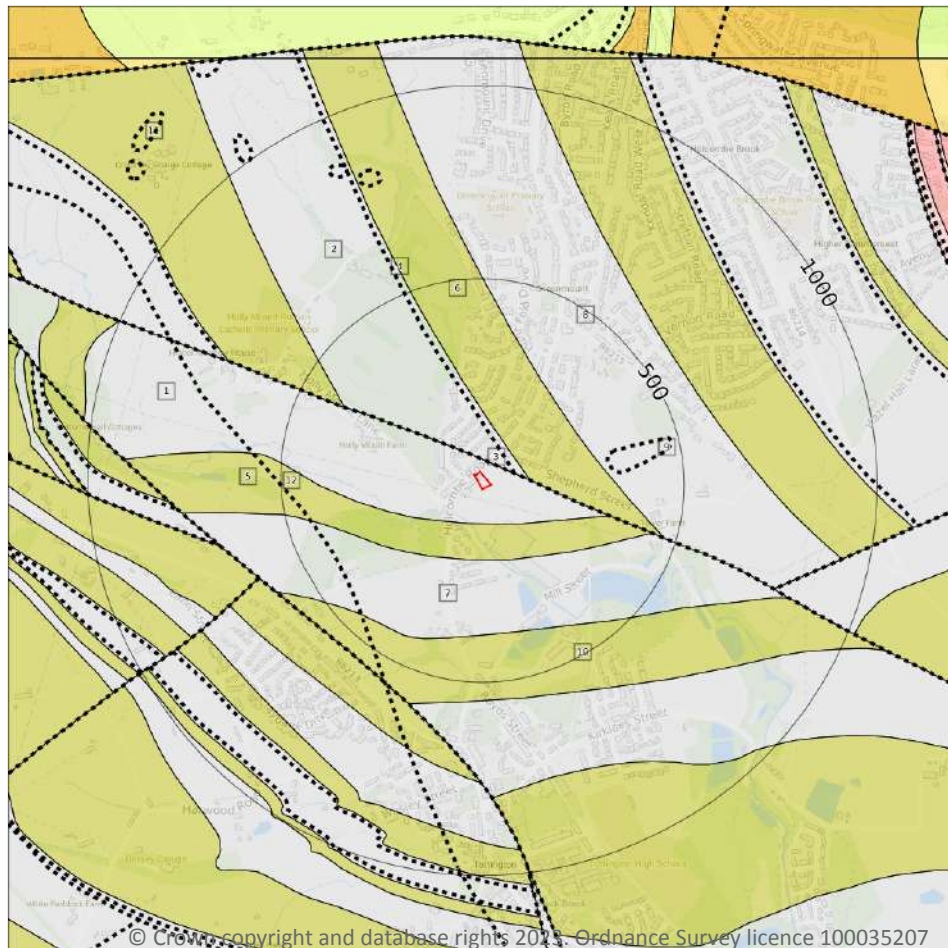
Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 79](#) >

| ID | Location | LEX Code     | Description        | Rock description           |
|----|----------|--------------|--------------------|----------------------------|
| 6  | 323m SE  | SLIP-UNKNOWN | Landslide Deposits | Unknown/unclassified Entry |

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

Bedrock geology (10k)  
Please see table for more details.

### 14.5 Bedrock geology (10k)

Records within 500m

8

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 81](#) >

| ID | Location | LEX Code  | Description                                                               | Rock age            |
|----|----------|-----------|---------------------------------------------------------------------------|---------------------|
| 1  | On site  | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 2  | 32m N    | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 5  | 89m S    | HER-SDST  | Helpet Edge Rock - Sandstone                                              | Langsettian Sub-age |



| ID | Location | LEX Code  | Description                                                               | Rock age            |
|----|----------|-----------|---------------------------------------------------------------------------|---------------------|
| 6  | 90m NE   | GAS-SDST  | Great Arc Sandstone - Sandstone                                           | Langsettian Sub-age |
| 7  | 183m S   | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 8  | 258m NE  | PLCM-MDSS | Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone | Langsettian Sub-age |
| 10 | 376m S   | MLRS-SDST | Milnrow Sandstone - Sandstone                                             | Langsettian Sub-age |
| 11 | 378m NW  | HER-SDST  | Helpet Edge Rock - Sandstone                                              | Langsettian Sub-age |

*This data is sourced from the British Geological Survey.*

## 14.6 Bedrock faults and other linear features (10k)

**Records within 500m**

**4**

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

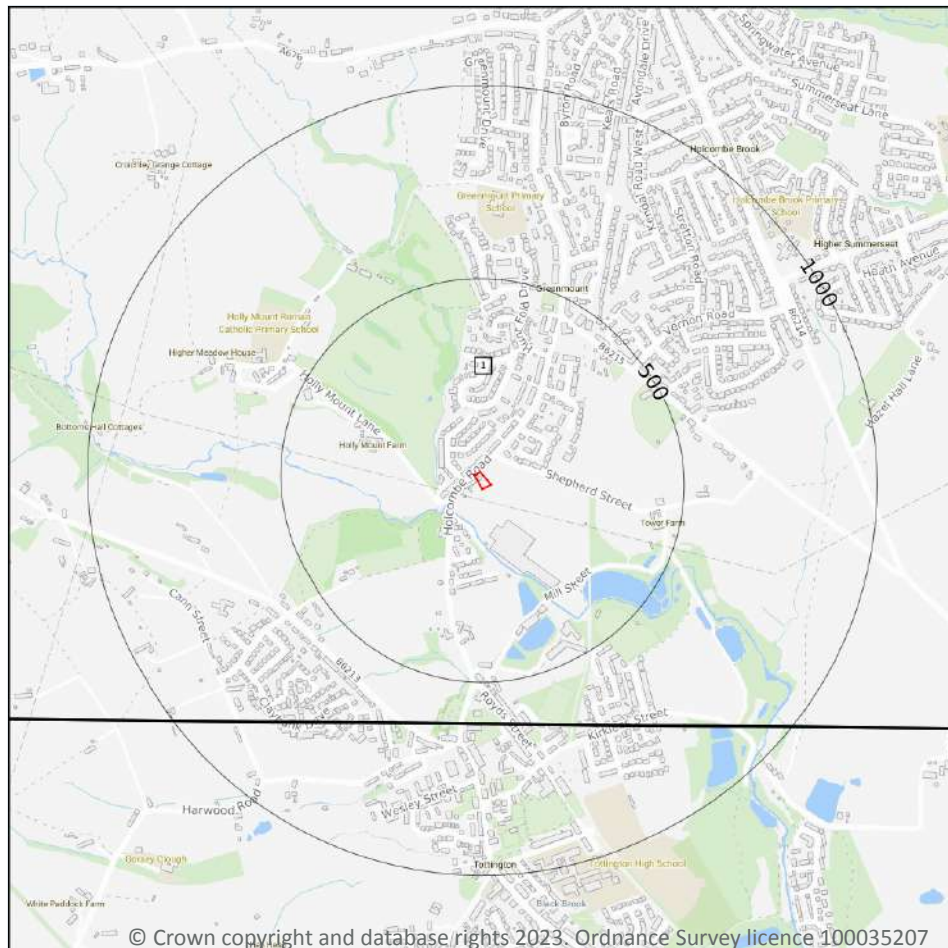
Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 81](#) >

| ID | Location | Category | Description                                          |
|----|----------|----------|------------------------------------------------------|
| 3  | 32m N    | FAULT    | Normal fault, inferred; crossmarks on downthrow side |
| 4  | 68m E    | ROCK     | Coal seam, inferred                                  |
| 9  | 308m E   | LANDFORM | Kettle hole; closed hollow                           |
| 12 | 417m SW  | LANDFORM | Buried channel or valley margin                      |

*This data is sourced from the British Geological Survey.*



## 15 Geology 1:50,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

□ Geological map tile

### 15.1 50k Availability

#### Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on [page 83](#) >

| ID | Location | Artificial  | Superficial | Bedrock | Mass movement | Sheet No.         |
|----|----------|-------------|-------------|---------|---------------|-------------------|
| 1  | On site  | No coverage | Full        | Full    | Full          | EW076_rochdale_v4 |

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Artificial and made ground

### 15.2 Artificial and made ground (50k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

*This data is sourced from the British Geological Survey.*

### 15.3 Artificial ground permeability (50k)

Records within 50m

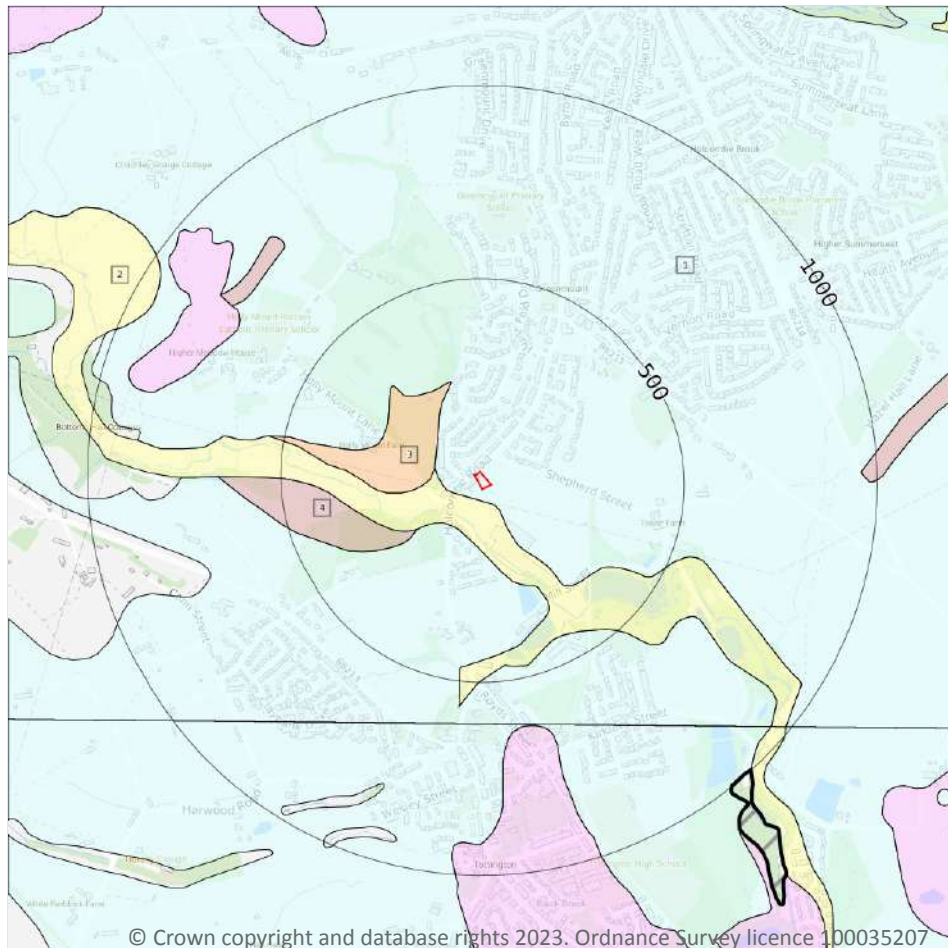
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Superficial



**Site Outline**

Search buffers in metres (m)

**Landslip (50k)**

**Superficial geology (50k)**  
Please see table for more details.

### 15.4 Superficial geology (50k)

#### Records within 500m

4

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 85](#) >

| ID | Location | LEX Code   | Description               | Rock description            |
|----|----------|------------|---------------------------|-----------------------------|
| 1  | On site  | TILLD-DMTN | TILL, DEVANSIAN           | DIAMICTON                   |
| 2  | 30m S    | ALV-XCZSV  | ALLUVIUM                  | CLAY, SILT, SAND AND GRAVEL |
| 3  | 103m W   | RTD1-XSV   | RIVER TERRACE DEPOSITS, 1 | SAND AND GRAVEL             |



| ID | Location | LEX Code  | Description | Rock description |
|----|----------|-----------|-------------|------------------|
| 4  | 198m SW  | HEAD-DMTN | HEAD        | DIAMICTON        |

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

|                           |          |
|---------------------------|----------|
| <b>Records within 50m</b> | <b>2</b> |
|---------------------------|----------|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

| Location       | Flow type     | Maximum permeability | Minimum permeability |
|----------------|---------------|----------------------|----------------------|
| <b>On site</b> | <b>Mixed</b>  | <b>High</b>          | <b>Low</b>           |
| 30m S          | Intergranular | High                 | Very Low             |

*This data is sourced from the British Geological Survey.*

## 15.6 Landslip (50k)

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*

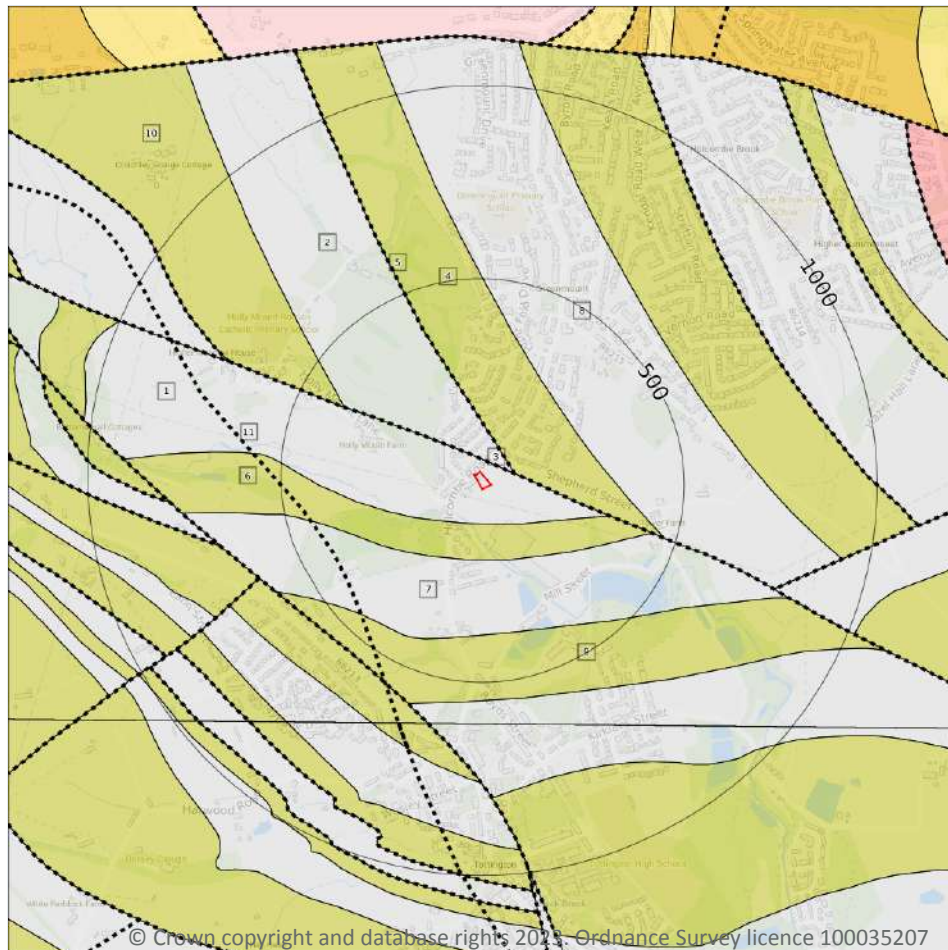
## 15.7 Landslip permeability (50k)

|                           |          |
|---------------------------|----------|
| <b>Records within 50m</b> | <b>0</b> |
|---------------------------|----------|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*

## Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

Bedrock geology (50k)  
Please see table for more details.

### 15.8 Bedrock geology (50k)

Records within 500m

8

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 87](#) >

| ID | Location | LEX Code  | Description                                                               | Rock age    |
|----|----------|-----------|---------------------------------------------------------------------------|-------------|
| 1  | On site  | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 2  | 31m N    | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 4  | 67m E    | GAS-SDST  | GREAT ARC SANDSTONE - SANDSTONE                                           | WESTPHALIAN |



| ID | Location | LEX Code  | Description                                                               | Rock age    |
|----|----------|-----------|---------------------------------------------------------------------------|-------------|
| 6  | 89m S    | HER-SDST  | HELPET EDGE ROCK - SANDSTONE                                              | WESTPHALIAN |
| 7  | 183m S   | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 8  | 258m NE  | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 9  | 376m S   | MLRS-SDST | MILNROW SANDSTONE - SANDSTONE                                             | WESTPHALIAN |
| 10 | 379m NW  | HER-SDST  | HELPET EDGE ROCK - SANDSTONE                                              | WESTPHALIAN |

*This data is sourced from the British Geological Survey.*

## 15.9 Bedrock permeability (50k)

|                           |          |
|---------------------------|----------|
| <b>Records within 50m</b> | <b>1</b> |
|---------------------------|----------|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

| Location | Flow type | Maximum permeability | Minimum permeability |
|----------|-----------|----------------------|----------------------|
| On site  | Fracture  | Moderate             | Low                  |

*This data is sourced from the British Geological Survey.*

## 15.10 Bedrock faults and other linear features (50k)

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>3</b> |
|----------------------------|----------|

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 87 >](#)

| ID | Location | Category | Description                                                                 |
|----|----------|----------|-----------------------------------------------------------------------------|
| 3  | 31m N    | FAULT    | Fault, inferred                                                             |
| 5  | 67m E    | ROCK     | Coal seam, inferred                                                         |
| 11 | 416m SW  | LANDFORM | Approximate margin of buried (superficial deposit-filled) channel or valley |

*This data is sourced from the British Geological Survey.*



## 16 Boreholes

### 16.1 BGS Boreholes

Records within 250m

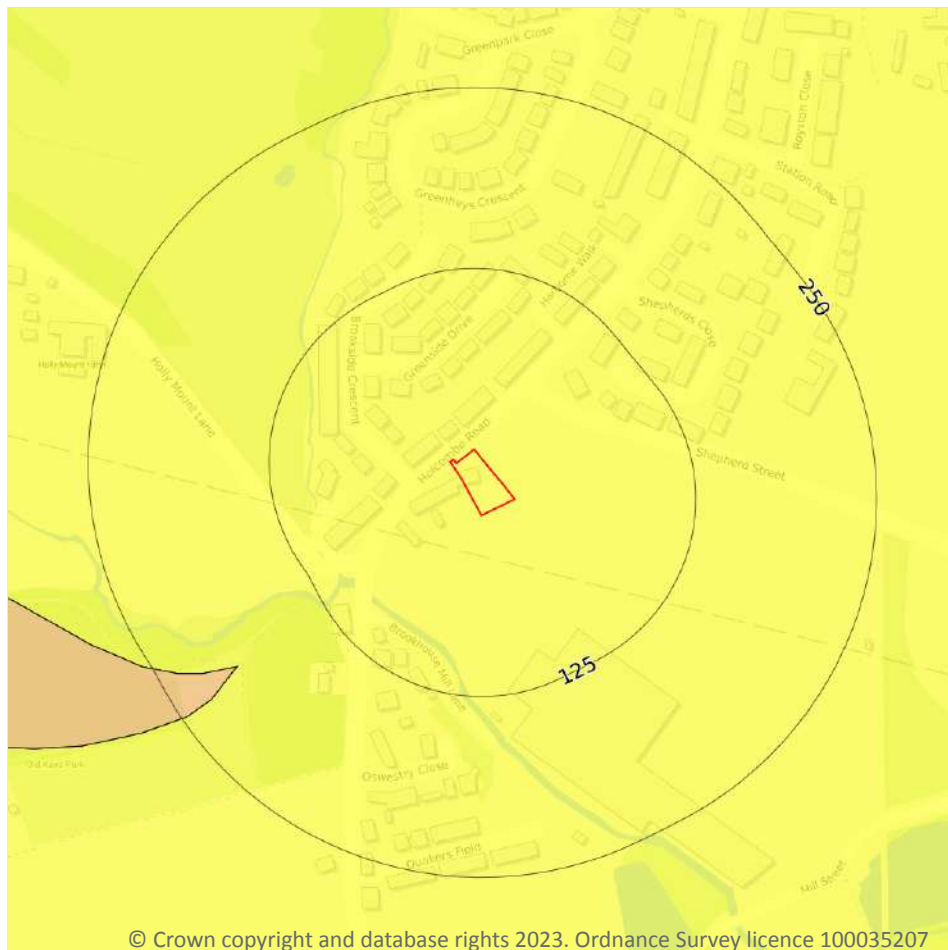
0

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

*This data is sourced from the British Geological Survey.*



## 17 Natural ground subsidence - Shrink swell clays



- Site Outline**
- Search buffers in metres (m)**
- ☐ No data
  - ☐ Negligible
  - ☒ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.1 Shrink swell clays

#### Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 90 >](#)

| Location | Hazard rating | Details                                         |
|----------|---------------|-------------------------------------------------|
| On site  | Very low      | Ground conditions predominantly low plasticity. |

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☒ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.2 Running sands

#### Records within 50m

2

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on [page 91](#) >

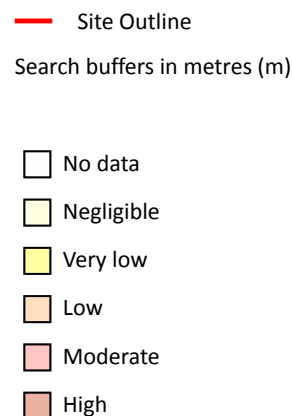
| Location | Hazard rating | Details                                                                                                                                 |
|----------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| On site  | Very low      | Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly. |

| Location | Hazard rating | Details                                                                                                                              |
|----------|---------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 30m S    | Low           | Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water. |

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Compressible deposits



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### 17.3 Compressible deposits

#### Records within 50m

2

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 93](#) >

| Location | Hazard rating | Details                                                                                                                                                    |
|----------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On site  | Negligible    | Compressible strata are not thought to occur.                                                                                                              |
| 30m S    | Moderate      | Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site. |



*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.4 Collapsible deposits

#### Records within 50m

2

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

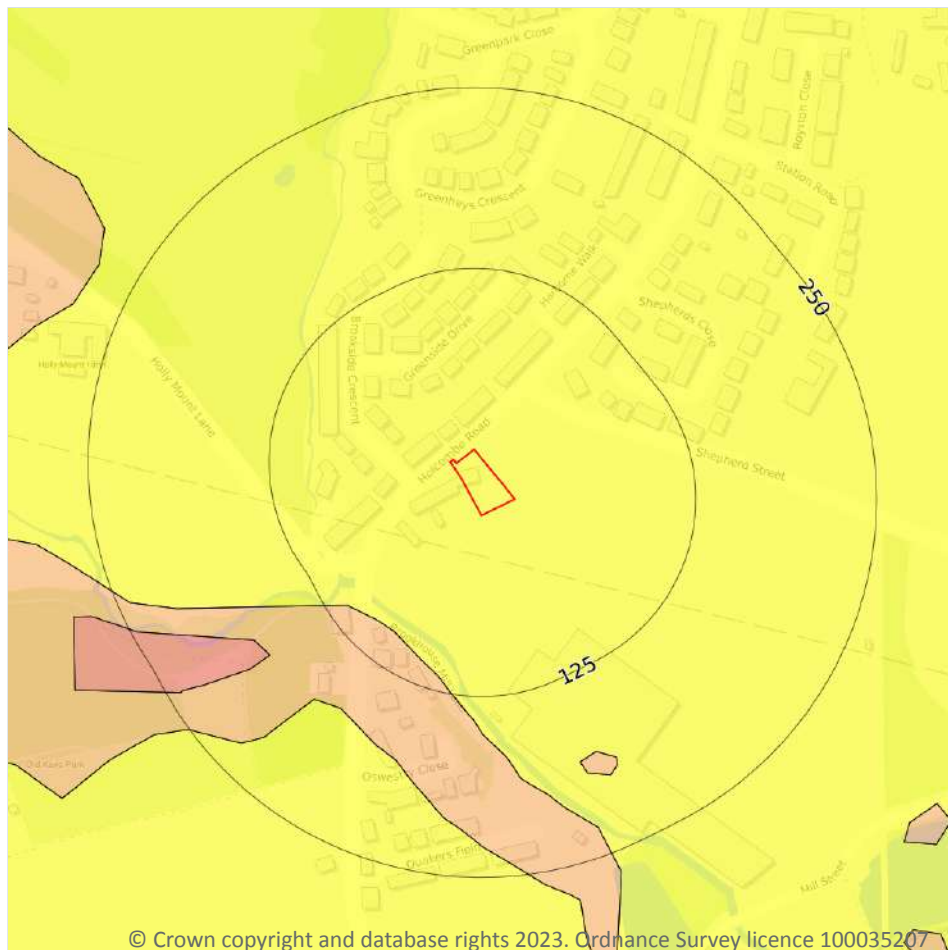
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 95 >](#)

| Location | Hazard rating | Details                                                                                       |
|----------|---------------|-----------------------------------------------------------------------------------------------|
| On site  | Very low      | Deposits with potential to collapse when loaded and saturated are unlikely to be present.     |
| 30m S    | Negligible    | Deposits with potential to collapse when loaded and saturated are believed not to be present. |

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.5 Landslides

#### Records within 50m

1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

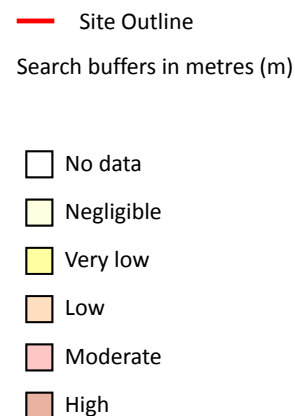
Features are displayed on the Natural ground subsidence - Landslides map on [page 96 >](#)

| Location | Hazard rating | Details                                                                                                                                                         |
|----------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On site  | Very low      | Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered. |

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Ground dissolution of soluble rocks



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### 17.6 Ground dissolution of soluble rocks

#### Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 97](#) >

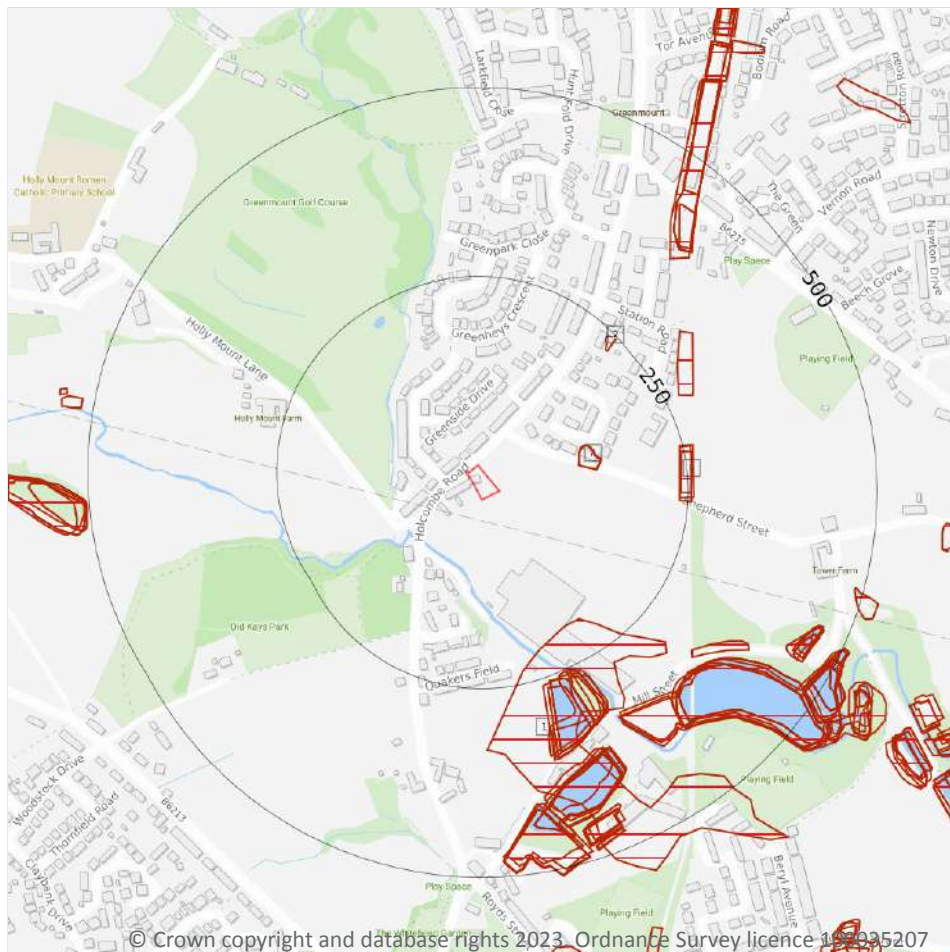
| Location | Hazard rating | Details                                                                                                                                             |
|----------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| On site  | Negligible    | Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present. |



*This data is sourced from the British Geological Survey.*



## 18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- ▢ Surface ground workings
- ▢ Underground workings
- ▢ Underground mining extents
- ▢ Historical mineral planning areas
- ▢ TCA non-coal mining
- Non Coal Mining
- ▢ Sporadic underground mining of restricted extent possible
- ▢ Localised small scale underground mining possible
- ▢ Small scale mining possible
- ▢ Underground mining known or likely within or in close proximity
- ▢ Underground mining known within or in very close proximity

### 18.1 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

*This data is sourced from the British Geological Survey.*

## 18.2 Surface ground workings

### Records within 250m

7

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on [page 99](#) >

| ID | Location | Land Use           | Year of mapping | Mapping scale |
|----|----------|--------------------|-----------------|---------------|
| A  | 111m E   | Pond               | 1928            | 1:10560       |
| A  | 112m E   | Pond               | 1938            | 1:10560       |
| 1  | 199m SE  | Unspecified Quarry | 1890            | 1:10560       |
| 2  | 228m NE  | Unspecified Pit    | 1938            | 1:10560       |
| B  | 239m E   | Cuttings           | 1928            | 1:10560       |
| B  | 239m E   | Cuttings           | 1938            | 1:10560       |
| B  | 240m E   | Cuttings           | 1891            | 1:10560       |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.3 Underground workings

### Records within 1000m

4

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

Features are displayed on the Mining and ground workings map on [page 99](#) >

| ID | Location | Land Use              | Year of mapping | Mapping scale |
|----|----------|-----------------------|-----------------|---------------|
| -  | 775m SE  | Unspecified Shaft     | 1980            | 1:10000       |
| -  | 775m SE  | Unspecified Shaft     | 1969            | 1:10560       |
| -  | 775m SE  | Unspecified Shaft     | 1974            | 1:10000       |
| -  | 920m W   | Unspecified Old Shaft | 1891            | 1:10560       |

*This is data is sourced from Ordnance Survey/Groundsure.*



## 18.4 Underground mining extents

**Records within 500m****0**

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

*This data is sourced from Groundsure.*

## 18.5 Historical Mineral Planning Areas

**Records within 500m****0**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

*This data is sourced from the British Geological Survey.*

## 18.6 Non-coal mining

**Records within 1000m****0**

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

*This data is sourced from the British Geological Survey.*

## 18.7 JPB mining areas

**Records on site****0**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

*This data is sourced from Johnson Poole and Bloomer.*

## 18.8 The Coal Authority non-coal mining

**Records within 500m****0**

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the



Coal Authority and permission should be sought from Groundsure prior to any re-use.

*This data is sourced from The Coal Authority.*

## 18.9 Researched mining

**Records within 500m**

**0**

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

*This data is sourced from Groundsure.*

## 18.10 Mining record office plans

**Records within 500m**

**0**

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

## 18.11 BGS mine plans

**Records within 500m**

**0**

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

## 18.12 Coal mining

**Records on site**

**1**

Areas which could be affected by past, current or future coal mining.

| Location | Details                                                                                                                                                                                                                                                              |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On site  | The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider. |

*This data is sourced from the Coal Authority.*



### 18.13 Brine areas

|                 |   |
|-----------------|---|
| Records on site | 0 |
|-----------------|---|

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

*This data is sourced from the Cheshire Brine Subsidence Compensation Board.*

### 18.14 Gypsum areas

|                 |   |
|-----------------|---|
| Records on site | 0 |
|-----------------|---|

Generalised areas that may be affected by gypsum extraction.

*This data is sourced from British Gypsum.*

### 18.15 Tin mining

|                 |   |
|-----------------|---|
| Records on site | 0 |
|-----------------|---|

Generalised areas that may be affected by historical tin mining.

*This data is sourced from Groundsure.*

### 18.16 Clay mining

|                 |   |
|-----------------|---|
| Records on site | 0 |
|-----------------|---|

Generalised areas that may be affected by kaolin and ball clay extraction.

*This data is sourced from the Kaolin and Ball Clay Association (UK).*

## 19 Ground cavities and sinkholes

### 19.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

*This data is sourced from Stantec UK Ltd.*

### 19.2 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

*This data is sourced from Stantec UK Ltd.*

### 19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

*This data is sourced from Groundsure.*

### 19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



*This data is sourced from Groundsure.*

## 19.5 National karst database

Records within 500m

0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

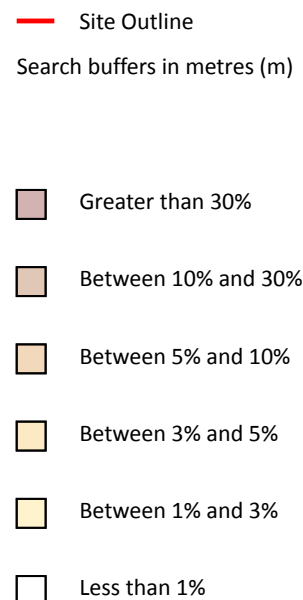
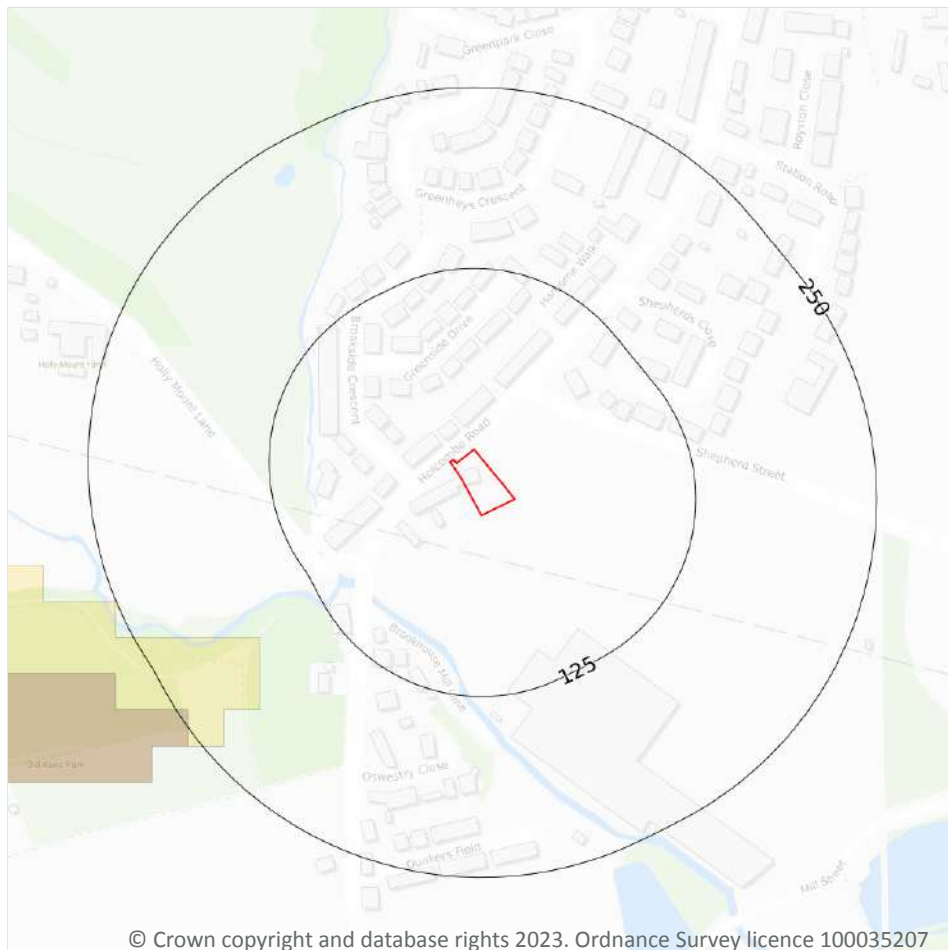
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

*This data is sourced from the British Geological Survey.*



## 20 Radon



### 20.1 Radon

#### Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 106 >](#)

| Location | Estimated properties affected | Radon Protection Measures required |
|----------|-------------------------------|------------------------------------|
| On site  | Less than 1%                  | None                               |



*This data is sourced from the British Geological Survey and UK Health Security Agency.*



## 21 Soil chemistry

### 21.1 BGS Estimated Background Soil Chemistry

Records within 50m

3

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km<sup>2</sup>. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km<sup>2</sup>; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

| Location | Arsenic       | Bioaccessible Arsenic | Lead            | Bioaccessible Lead | Cadmium   | Chromium      | Nickel        |
|----------|---------------|-----------------------|-----------------|--------------------|-----------|---------------|---------------|
| On site  | 15 - 25 mg/kg | No data               | 100 - 200 mg/kg | 60 - 120 mg/kg     | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 24m N    | 15 - 25 mg/kg | No data               | 100 - 200 mg/kg | 60 - 120 mg/kg     | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 31m W    | 15 - 25 mg/kg | No data               | 100 - 200 mg/kg | 60 - 120 mg/kg     | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |

*This data is sourced from the British Geological Survey.*

### 21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km<sup>2</sup>).

*This data is sourced from the British Geological Survey.*

### 21.3 BGS Measured Urban Soil Chemistry

Records within 50m

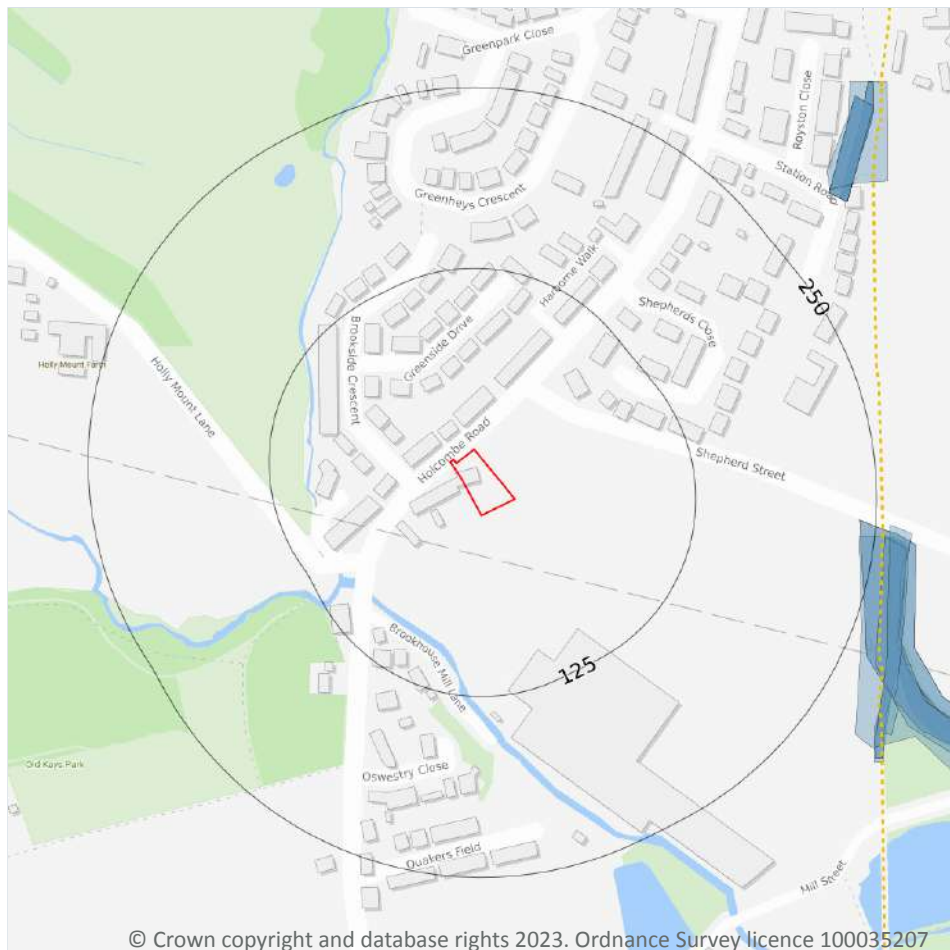
0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km<sup>2</sup>.

*This data is sourced from the British Geological Survey.*



## 22 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

### 22.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

*This data is sourced from publicly available information by Groundsure.*

### 22.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



*This data is sourced from publicly available information by Groundsure.*

## 22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

*This data is sourced from the Ordnance Survey.*

## 22.4 Historical railway and tunnel features

Records within 250m

3

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on [page 109 >](#)

| Location | Land Use        | Year of mapping | Mapping scale |
|----------|-----------------|-----------------|---------------|
| 239m E   | Railway Sidings | 1909            | 10560         |
| 239m E   | Railway Sidings | 1891            | 10560         |
| 240m E   | Railway Sidings | 1928            | 10560         |

*This data is sourced from Ordnance Survey/Groundsure.*

## 22.5 Royal Mail tunnels

Records within 250m

0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

*This data is sourced from Groundsure/the Postal Museum.*

## 22.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

*This data is sourced from OpenStreetMap.*



## 22.7 Railways

Records within 250m

0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

*This data is sourced from Ordnance Survey and OpenStreetMap.*

## 22.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

*This data is sourced from publicly available information by Groundsure.*

## 22.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

*This data is sourced from publicly available information by Groundsure.*

## 22.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

*This data is sourced from HS2 Ltd.*

## Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

## Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: <https://www.groundsure.com/terms-and-conditions-april-2023/> ↗.



## APPENDIX C

Preliminary Conceptual Model

| POTENTIAL RECEPTOR                        | COMMENTS                                                                                                                                                                                                                                                                                                                                                  | Include in PCM |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>PROPERTY: Other</b>                    |                                                                                                                                                                                                                                                                                                                                                           |                |
| On Site                                   |                                                                                                                                                                                                                                                                                                                                                           |                |
| Crops                                     | None intended on site                                                                                                                                                                                                                                                                                                                                     | ✗              |
| Domestic Produce                          | May be grown in residential gardens                                                                                                                                                                                                                                                                                                                       | ✓              |
| Livestock                                 | None anticipated on site                                                                                                                                                                                                                                                                                                                                  | ✗              |
| Domestic Animals                          | May be owned by residents                                                                                                                                                                                                                                                                                                                                 | ✓              |
| Game                                      | None on site                                                                                                                                                                                                                                                                                                                                              | ✗              |
| Off Site                                  |                                                                                                                                                                                                                                                                                                                                                           |                |
| Crops                                     | Possibly in fields to the east and west of site                                                                                                                                                                                                                                                                                                           | ✓              |
| Domestic Produce                          | Possibly in houses in vicinity of the site                                                                                                                                                                                                                                                                                                                | ✓              |
| Livestock                                 | Possible in fields to the east and west of site                                                                                                                                                                                                                                                                                                           | ✓              |
| Domestic Animals                          | May belong to adjacent residents                                                                                                                                                                                                                                                                                                                          | ✓              |
| Game                                      | Unlikely                                                                                                                                                                                                                                                                                                                                                  | ✗              |
| <b>PROPERTY: Buildings</b>                |                                                                                                                                                                                                                                                                                                                                                           |                |
| On Site                                   |                                                                                                                                                                                                                                                                                                                                                           |                |
|                                           | Residential Properties, services, flora                                                                                                                                                                                                                                                                                                                   | ✓              |
| Off Site                                  |                                                                                                                                                                                                                                                                                                                                                           |                |
|                                           | Residential/commercial Properties, services, flora                                                                                                                                                                                                                                                                                                        | ✓              |
| <b>HUMANS</b>                             |                                                                                                                                                                                                                                                                                                                                                           |                |
| On Site                                   |                                                                                                                                                                                                                                                                                                                                                           |                |
| Residents                                 | Future Residents                                                                                                                                                                                                                                                                                                                                          | ✓              |
| Construction workers                      | During ground excavations                                                                                                                                                                                                                                                                                                                                 | ✓              |
| Employees                                 | Landscape Gardeners                                                                                                                                                                                                                                                                                                                                       | ✓              |
| Surface water users                       | No current surface water abstractions located on site                                                                                                                                                                                                                                                                                                     | ✗              |
| Off Site                                  |                                                                                                                                                                                                                                                                                                                                                           |                |
| Residents                                 | Residents adjacent to the site                                                                                                                                                                                                                                                                                                                            | ✓              |
| Recreational users                        | Recreational walkers                                                                                                                                                                                                                                                                                                                                      | ✓              |
| Groundwater users                         | No groundwater abstractions within 250 m.                                                                                                                                                                                                                                                                                                                 | ✗              |
| <b>Controlled Waters</b>                  |                                                                                                                                                                                                                                                                                                                                                           |                |
| On Site                                   |                                                                                                                                                                                                                                                                                                                                                           |                |
| Surface Waters                            | There are no surface water features located on site.                                                                                                                                                                                                                                                                                                      | ✗              |
| Groundwater                               | The bedrock Secondary A Aquifer represents a significant potential receptor.                                                                                                                                                                                                                                                                              | ✓              |
| Off Site                                  |                                                                                                                                                                                                                                                                                                                                                           |                |
| Controlled Waters                         | There are surface water features located 91 m south-west and 95 m west of the site                                                                                                                                                                                                                                                                        | ✓              |
| <b>Ecological Systems</b>                 |                                                                                                                                                                                                                                                                                                                                                           |                |
| On/Off Site                               |                                                                                                                                                                                                                                                                                                                                                           |                |
| SSSIs, national nature reserves, SACs etc | The 'Kirklees Valley' is located approximately 243 m east of the site and is classified as a local nature reserve (LNR). However, given the expected contaminant profile of the site and the considerable distance of the reserve from the site, the risk to this receptor is considered to be very low to negligible and will not be considered further. | ✗              |

**Table A:** Potential Receptors to be Considered in the Preliminary Conceptual Model

| Link | Source             | Hazard                                    | Transport Mechanism                                                                               | Pathway                                     | Medium of Exposure | Receptor                                 | Risk Summary* |
|------|--------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------|------------------------------------------|---------------|
| 1    | Contaminated soils | Direct contact /ingestion of soil or dust | Direct contact with contaminated soil                                                             | Dermal contact/ingestion of soil at surface | Soil               | Humans (on-site/off-site), domestic pets | Low           |
| 2    | Contaminated soils | Particulate inhalation                    | Wind blown particulates                                                                           | Inhalation of particulates                  | Air                | Humans (on-site/off-site), domestic pets | Low           |
| 3    | Contaminated Soils | Impaired produce growth                   | Uptake of contaminants by homegrown produce resulting in loss                                     | Uptake during growth                        | Vegetable produce  | Property (domestic produce)              | Low           |
| 4    | Contaminated Soils | Ingestion of Contaminants                 | Uptake of contaminants by homegrown produce                                                       | Consumption of homegrown produce            | Vegetable produce  | Humans                                   | Low           |
| 5    | Contaminated Soils | Vapour/ground gas Inhalation              | Volatilisation of organic compounds through unsaturated zone of soil leading to inhalation        | Inhalation of Vapours and/or ground gas     | Air                | Humans (on-site/off-site, domestic pets) | Low           |
| 6    | Contaminated Soils | Damage to structure/services              | Direct contact of contaminants with building structures/services                                  | Direct contact                              | Soil/Water         | Flora, services                          | Low           |
| 7    | Contaminated Soils | Degradation of perched water quality      | Dissolution or suspension of contaminants into perched waters and migration to off-site receptors | Dissolution or Suspension                   | Water              | Perched Waters, surface waters           | Low           |
| 8    | Contaminated Soils | Pollution of underlying groundwater       | Dissolution or suspension of contaminants into groundwaters (Bedrock Aquifer)                     | Dissolution or Suspension                   | Water              | Groundwaters                             | Low           |

**Table B: Preliminary Conceptual Model**

**\*Relative Risk Screening and Prioritisation for further Investigation & or Assessment**

|               |                                                                                                                                                                                                                                                            |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>High</b>   | Higher probability of occurrence and identification of primary sources of contamination with respect to most sensitive receptors.                                                                                                                          |
| <b>Medium</b> | Pollutant linkage generally dependent on the presence of other primary pollutant linkages and/or where pollutant linkage generally associated with less sensitive receptors.                                                                               |
| <b>Low</b>    | Lower probability of occurrence such as based on requirement for significant migration pathway or where pollutant linkage requires the presence of source contaminants at concentration likely to be much higher than other identified pollutant linkages. |

## APPENDIX D

### Site Photographs



**P1:** Gravel/paved driveway and garages in the north of the site. Photo facing west.



**P2:** Overgrown area in the north of the site. Photo facing south-east.



**P3:** View of the western site periphery. Photo facing south-east.



**P4:** Garages and driveway in the north of the site. Photo facing east.



**P5:** View inside one of the garages located in the north of the site.



**P6:** Overgrown area to the rear of the garages in the centre of the site. Photo facing north.

**Comments:**



**Photographs 1 to 6**

This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project

**Site:** Holcombe Road, Bury  
**Title:** Appendix D - Site Photographs

**Project No:** 23101  
**Created By:** A Hope  
**Date:** August 2023

**Client:** Nick Mordin

|                                                                                                                                    |                                      |                                                                                                           |                       |                      |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------|----------------------|
|                                                    |                                      |                          |                       |                      |
| P7: View of the overgrown area in the south of the site, facing west.                                                              |                                      | P8: View of the overgrown area in the south of the site, facing east.                                     |                       |                      |
|                                                  |                                      |                        |                       |                      |
| P9: View of the access to the south of the site via a gate, facing south.                                                          |                                      | P10: View of the western site periphery from the access gate in the south of the site, facing north-west. |                       |                      |
| Comments:                                                                                                                          |                                      |                       |                       |                      |
|                                                                                                                                    |                                      | Photographs 7 to 10                                                                                       |                       |                      |
| This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project | Site: Holcombe Road, Bury            | Project No:<br>23101                                                                                      | Created By:<br>A Hope | Date:<br>August 2023 |
|                                                                                                                                    | Title: Appendix D - Site Photographs | Client: Nick Mordin                                                                                       |                       |                      |

## APPENDIX E

Drawings



LEGEND

 SITE LOCATION

| REV | DESCRIPTION | DATE | BY |
|-----|-------------|------|----|
|     |             |      |    |



GEO-ENVIRONMENTAL CONSULTING ENGINEERS  
Suite One, No 3 Mitton Road Business Park,  
Mitton Road, Whalley, Lancashire, BB7 9YE  
Tel: 01254 377 622  
Email: mbuckley@bekenviro.co.uk  
Web: www.bekenviro.co.uk

|             |
|-------------|
| CLIENT.     |
| MR N MORDIN |

|                                            |
|--------------------------------------------|
| JOB TITLE.                                 |
| 216-218 HOLCOMBE ROAD,<br>GREENMOUNT, BURY |

|                    |
|--------------------|
| DRAWING TITLE.     |
| SITE LOCATION PLAN |

|                        |                   |                      |                   |
|------------------------|-------------------|----------------------|-------------------|
| SCALE © A3.<br>N'TS    | DRAWN BY.<br>D.E. | APPROVED BY.<br>M.B. | DATE.<br>28/07/23 |
| DRAWING No.<br>23101-1 |                   |                      | REV.<br>-         |



# LEGEND

— SITE FOOTPRINT

|     |             |      |    |
|-----|-------------|------|----|
|     |             |      |    |
|     |             |      |    |
| REV | DESCRIPTION | DATE | BY |



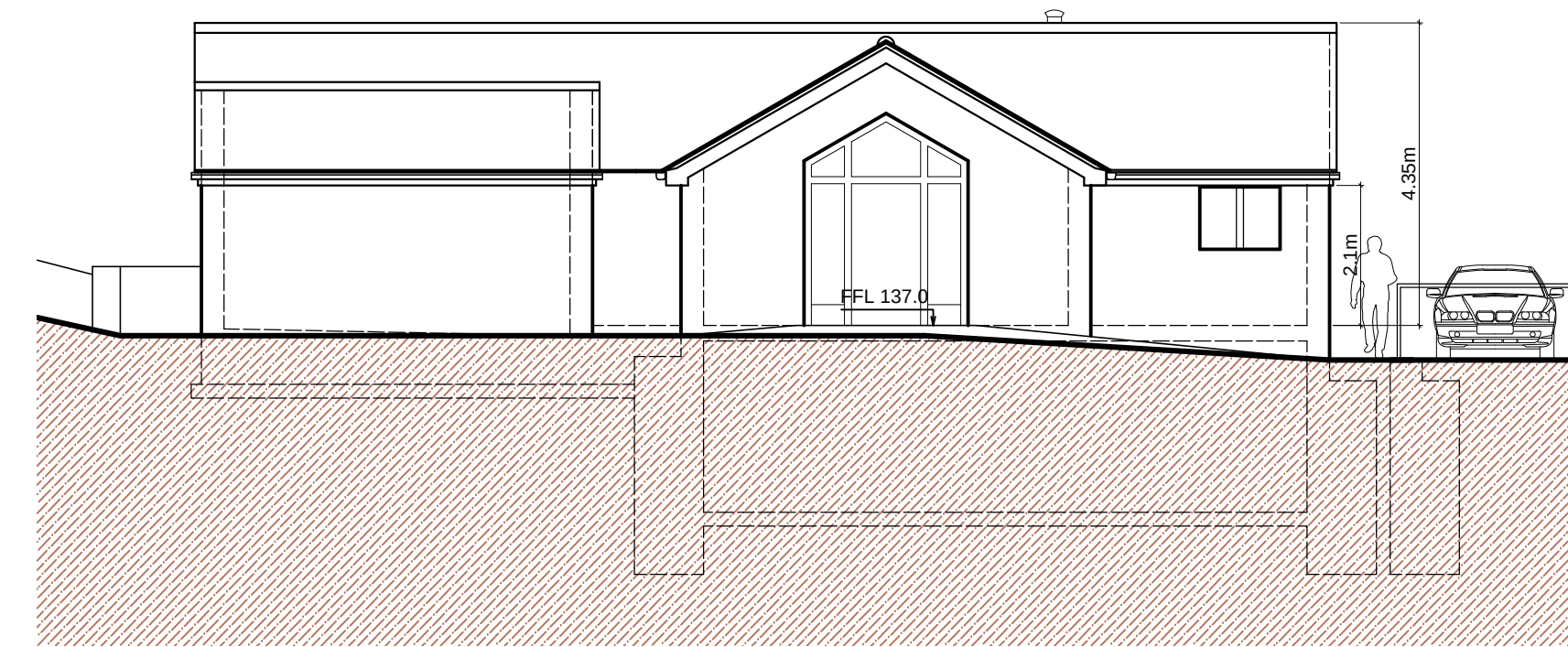
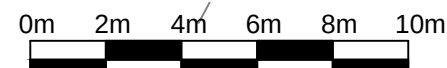
GEO-ENVIRONMENTAL CONSULTING ENGINEERS  
Suite One, No 3 Mitton Road Business Park,  
Mitton Road, Whalley, Lancashire, BB7 9YE  
Tel: 01254 377 622  
Email: mbuckley@bekenviro.co.uk  
Web: www.bekenviro.co.uk

|             |
|-------------|
| CLIENT.     |
| MR N MORDIN |

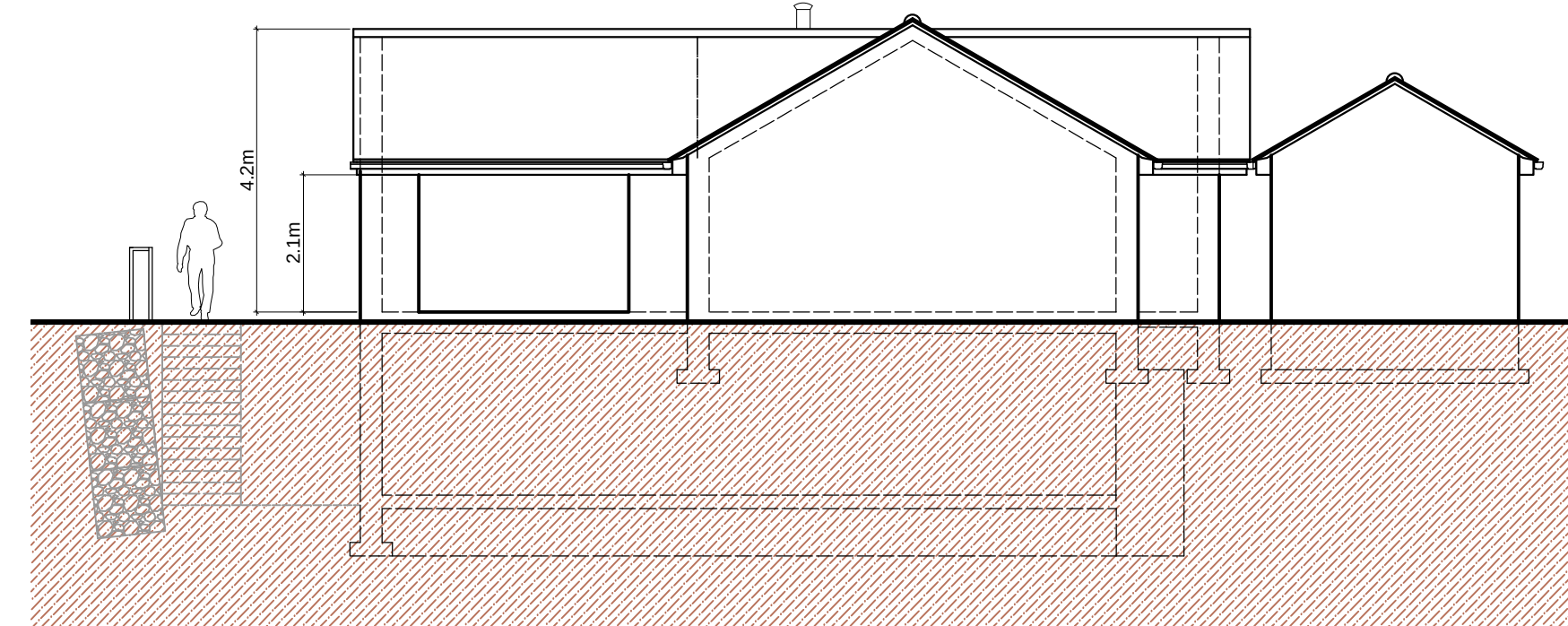
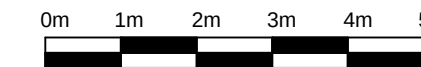
|                                            |
|--------------------------------------------|
| JOB TITLE.                                 |
| 216-218 HOLCOMBE ROAD,<br>GREENMOUNT, BURY |

|                  |
|------------------|
| DRAWING TITLE.   |
| SITE LAYOUT PLAN |

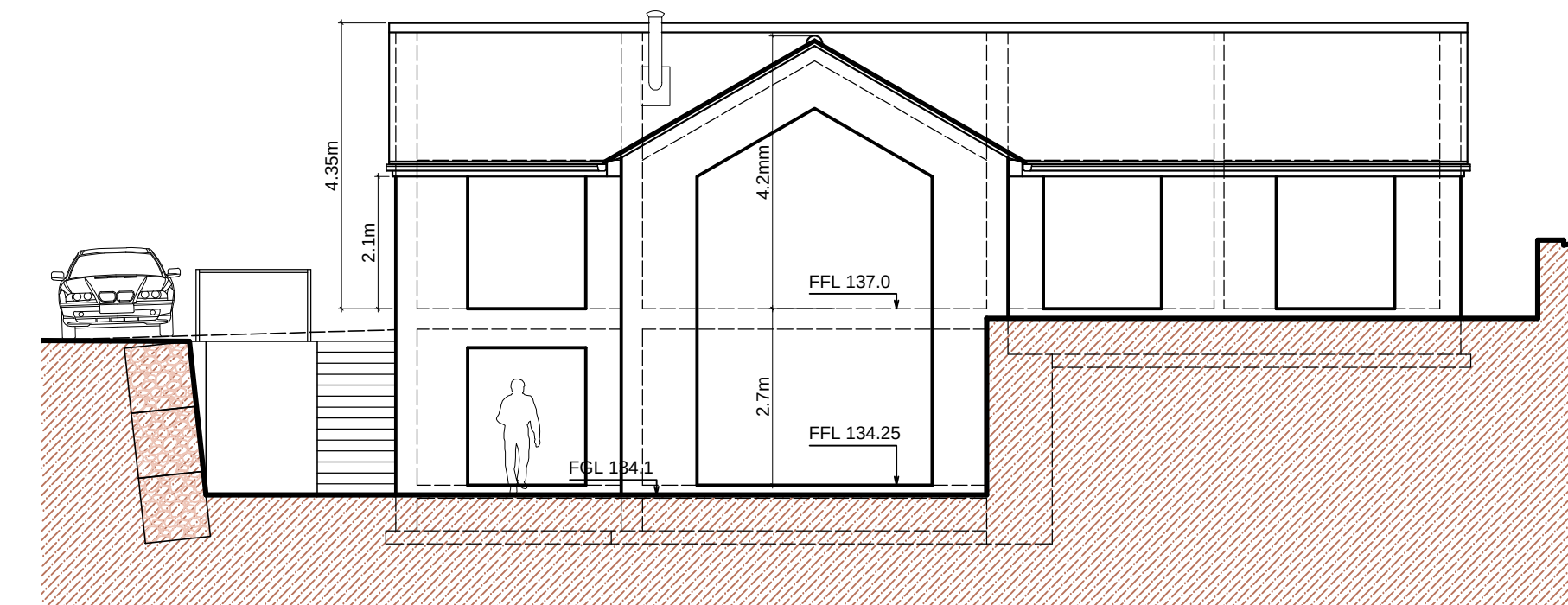
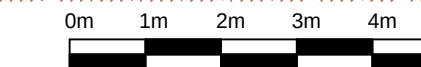
|                        |                   |                      |                   |
|------------------------|-------------------|----------------------|-------------------|
| SCALE © A3.<br>NTS     | DRAWN BY.<br>D.E. | APPROVED BY.<br>M.B. | DATE.<br>28/07/23 |
| DRAWING No.<br>23101-2 | REV.<br>-         |                      |                   |



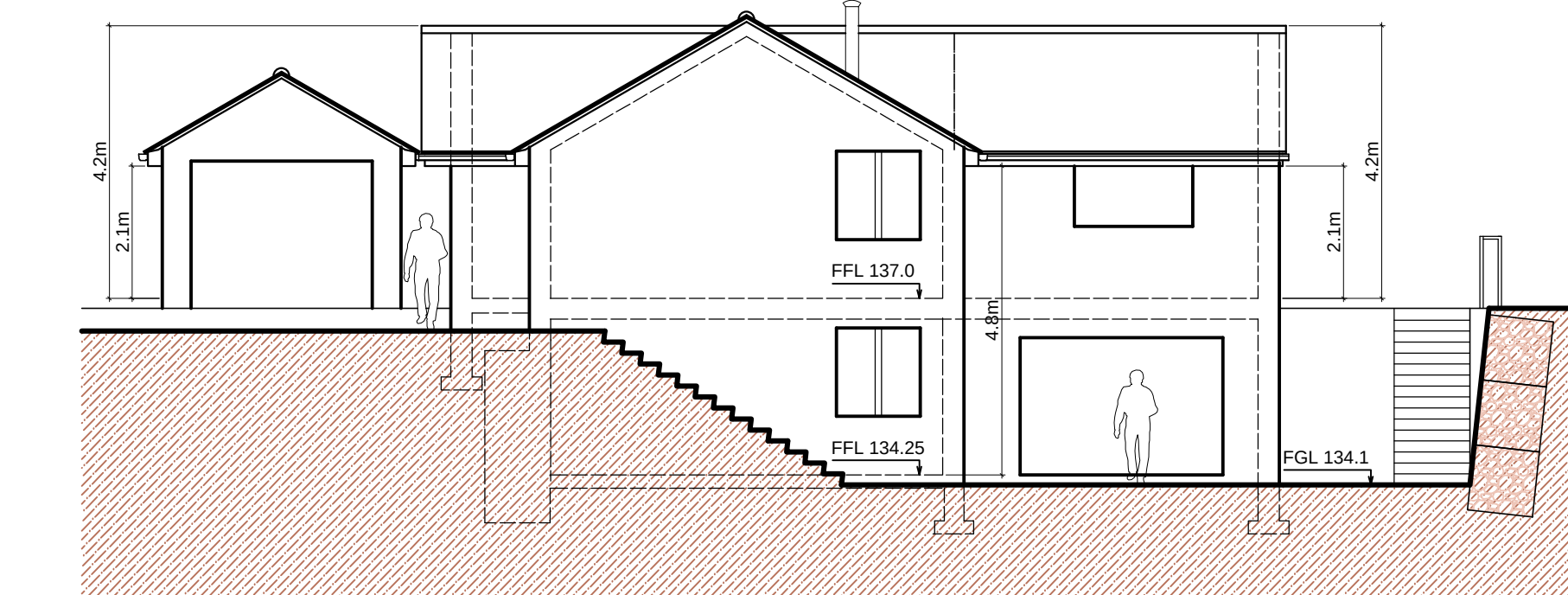
Elevation A schematic @ 1:100



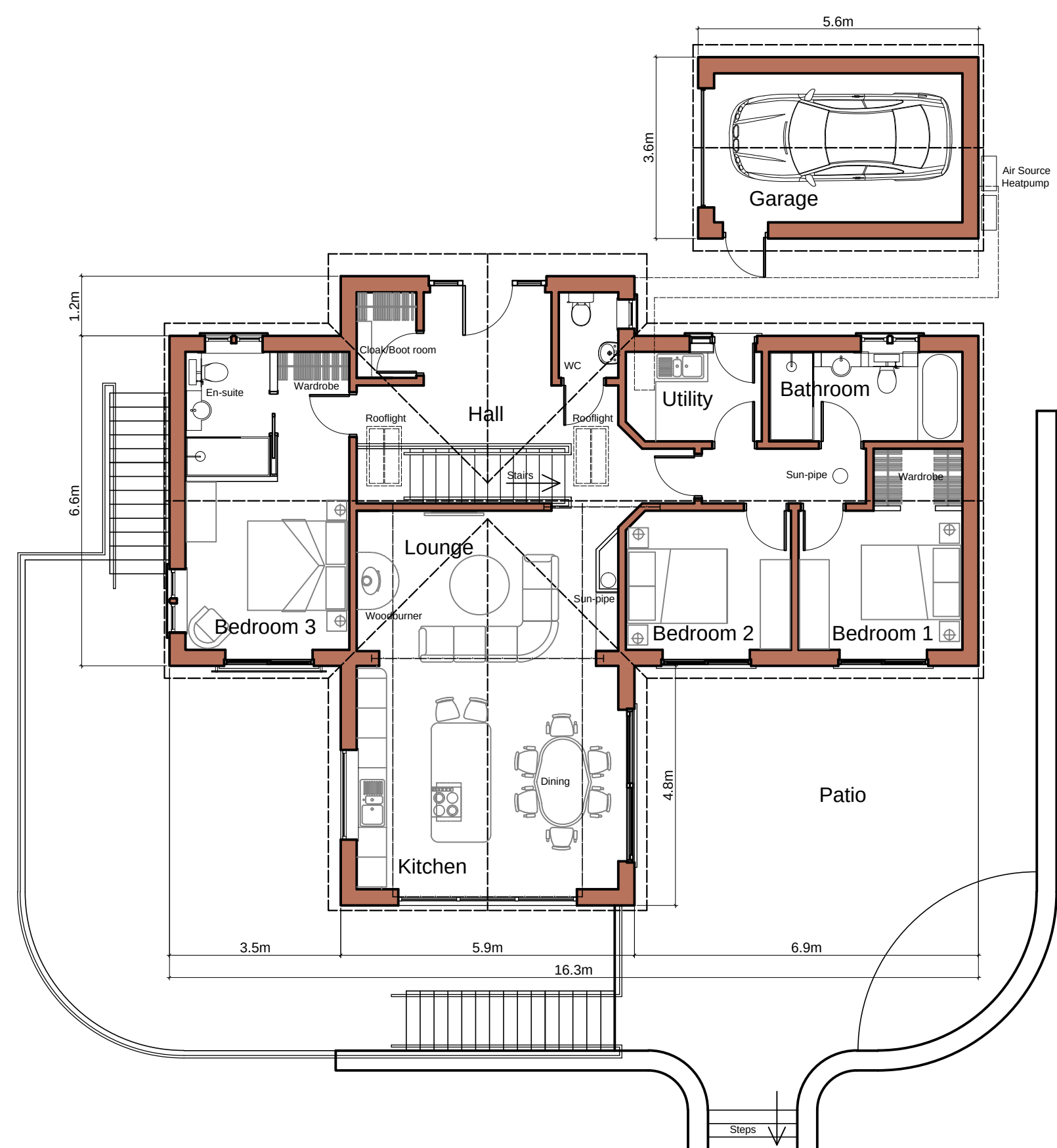
Elevation B schematic @ 1:100



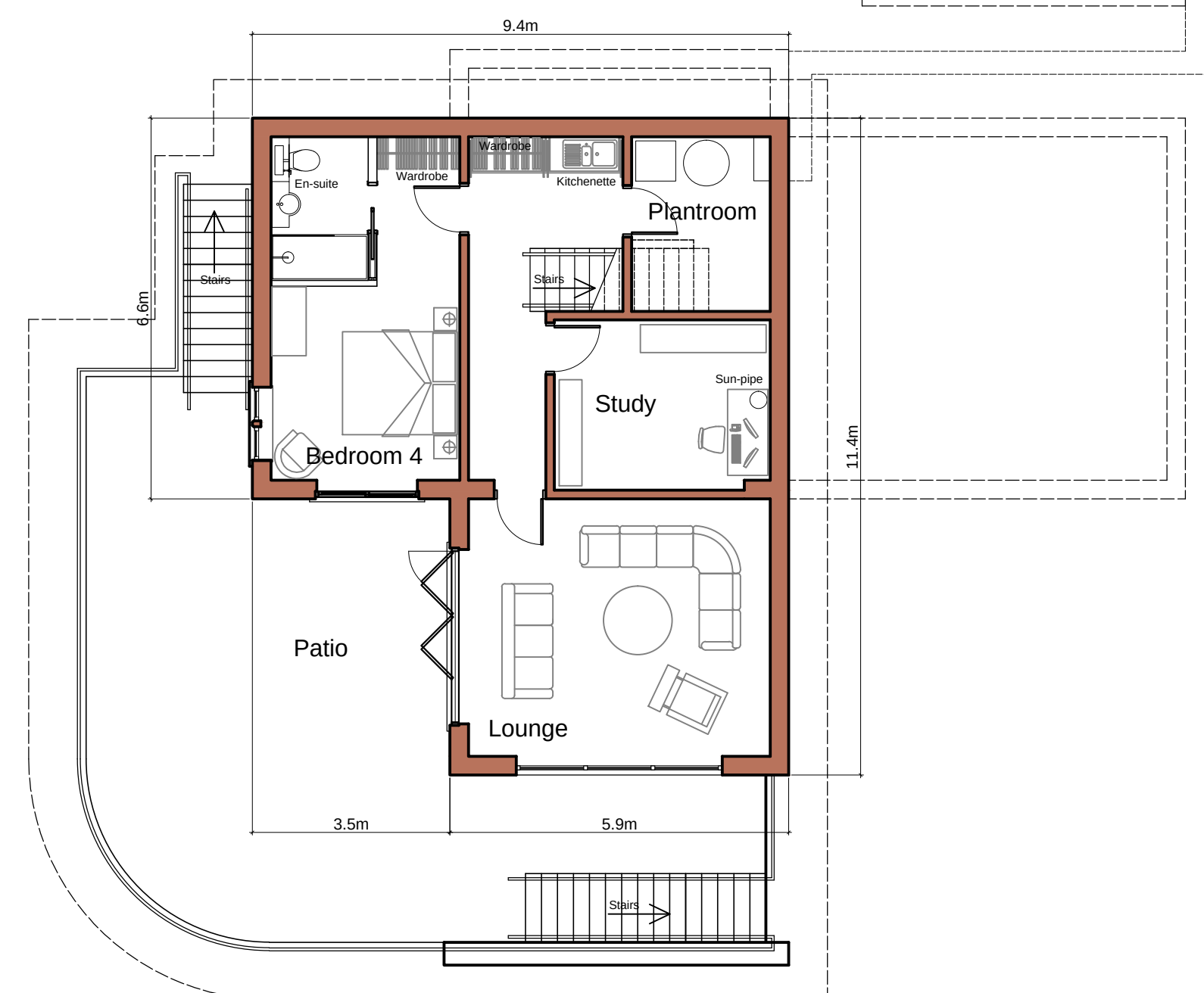
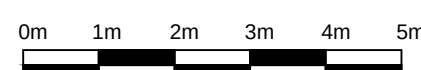
Elevation C schematic @ 1:100



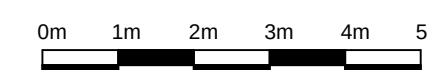
Elevation D schematic @ 1:100



## Ground Floor @ 1:100



## Lower Ground Floor @ 1:100



- This drawing is copyright. No unauthorised copying of drawing without the express permission of the architect.
- Do not scale from prints. Use figure dimensions only.
- Contractors to check all dimensions on site prior to commencement of works.
- All works to be carried out in accordance with current statutory Health and Safety Regulations.
- This drawing is to be read in conjunction with all relevant consultants' and / or specialists' drawings / documents and any discrepancies or variations are to be notified to the architect before affected work commences.

| REV.  | AMENDMENTS                                                      | DATE     |
|-------|-----------------------------------------------------------------|----------|
| Rev A | Layout & window amendments                                      | 21-04-20 |
| Rev B | Window removed from Garage, Bi-fold doors added to lower ground | 21-04-26 |

The survey has been related to the Ordnance Survey National Grid and level datum using Leica GPS Smartnet data.

Tree heights and spreads are estimated and species identification cannot be assured.

Only features that are accessible/visible at the time of survey can be detailed.

There are no guarantees offered on the drainage information supplied.

Before commencing works please check important dimensions on-site.

Should there be any discrepancies, inconsistencies, omissions or queries please contact Quickdraw Surveys Ltd as soon as possible for a resolution.

### Topographical Surveys

|         |                               |        |                           |         |                                      |
|---------|-------------------------------|--------|---------------------------|---------|--------------------------------------|
| BT      | Bluetooth Telephone Chain     | FPL    | FPL's Chat Panel          | PS      | Photo Slides                         |
| CD      | Compact Disc                  | FS     | File System               | PSX     | PlayStation 2                        |
| CD-R    | Compact Disc-Recordable       | FSF    | Free Software Foundation  | RAID    | Redundant Array of Independent Disks |
| CD-ROM  | Compact Disc-Read Only Memory | FSI    | File Sharing Interface    | RAM     | Random Access Memory                 |
| CDS     | Compact Disc Stacks           | FT     | File Transfer             | RAID0   | RAID Level 0                         |
| CDT     | Compact Disc Track            | FT2    | File Transfer 2           | RAID1   | RAID Level 1                         |
| CE      | Compact Executive             | FTD    | File Transfer Daemon      | RAID5   | RAID Level 5                         |
| CEC     | Compact Executive Class       | FTS    | File Transfer Service     | RAID6   | RAID Level 6                         |
| CEC-1   | Compact Executive Class 1     | FTS2   | File Transfer Service 2   | RAID7   | RAID Level 7                         |
| CEC-2   | Compact Executive Class 2     | FTS3   | File Transfer Service 3   | RAID8   | RAID Level 8                         |
| CEC-3   | Compact Executive Class 3     | FTS4   | File Transfer Service 4   | RAID9   | RAID Level 9                         |
| CEC-4   | Compact Executive Class 4     | FTS5   | File Transfer Service 5   | RAID10  | RAID Level 10                        |
| CEC-5   | Compact Executive Class 5     | FTS6   | File Transfer Service 6   | RAID11  | RAID Level 11                        |
| CEC-6   | Compact Executive Class 6     | FTS7   | File Transfer Service 7   | RAID12  | RAID Level 12                        |
| CEC-7   | Compact Executive Class 7     | FTS8   | File Transfer Service 8   | RAID13  | RAID Level 13                        |
| CEC-8   | Compact Executive Class 8     | FTS9   | File Transfer Service 9   | RAID14  | RAID Level 14                        |
| CEC-9   | Compact Executive Class 9     | FTS10  | File Transfer Service 10  | RAID15  | RAID Level 15                        |
| CEC-10  | Compact Executive Class 10    | FTS11  | File Transfer Service 11  | RAID16  | RAID Level 16                        |
| CEC-11  | Compact Executive Class 11    | FTS12  | File Transfer Service 12  | RAID17  | RAID Level 17                        |
| CEC-12  | Compact Executive Class 12    | FTS13  | File Transfer Service 13  | RAID18  | RAID Level 18                        |
| CEC-13  | Compact Executive Class 13    | FTS14  | File Transfer Service 14  | RAID19  | RAID Level 19                        |
| CEC-14  | Compact Executive Class 14    | FTS15  | File Transfer Service 15  | RAID20  | RAID Level 20                        |
| CEC-15  | Compact Executive Class 15    | FTS16  | File Transfer Service 16  | RAID21  | RAID Level 21                        |
| CEC-16  | Compact Executive Class 16    | FTS17  | File Transfer Service 17  | RAID22  | RAID Level 22                        |
| CEC-17  | Compact Executive Class 17    | FTS18  | File Transfer Service 18  | RAID23  | RAID Level 23                        |
| CEC-18  | Compact Executive Class 18    | FTS19  | File Transfer Service 19  | RAID24  | RAID Level 24                        |
| CEC-19  | Compact Executive Class 19    | FTS20  | File Transfer Service 20  | RAID25  | RAID Level 25                        |
| CEC-20  | Compact Executive Class 20    | FTS21  | File Transfer Service 21  | RAID26  | RAID Level 26                        |
| CEC-21  | Compact Executive Class 21    | FTS22  | File Transfer Service 22  | RAID27  | RAID Level 27                        |
| CEC-22  | Compact Executive Class 22    | FTS23  | File Transfer Service 23  | RAID28  | RAID Level 28                        |
| CEC-23  | Compact Executive Class 23    | FTS24  | File Transfer Service 24  | RAID29  | RAID Level 29                        |
| CEC-24  | Compact Executive Class 24    | FTS25  | File Transfer Service 25  | RAID30  | RAID Level 30                        |
| CEC-25  | Compact Executive Class 25    | FTS26  | File Transfer Service 26  | RAID31  | RAID Level 31                        |
| CEC-26  | Compact Executive Class 26    | FTS27  | File Transfer Service 27  | RAID32  | RAID Level 32                        |
| CEC-27  | Compact Executive Class 27    | FTS28  | File Transfer Service 28  | RAID33  | RAID Level 33                        |
| CEC-28  | Compact Executive Class 28    | FTS29  | File Transfer Service 29  | RAID34  | RAID Level 34                        |
| CEC-29  | Compact Executive Class 29    | FTS30  | File Transfer Service 30  | RAID35  | RAID Level 35                        |
| CEC-30  | Compact Executive Class 30    | FTS31  | File Transfer Service 31  | RAID36  | RAID Level 36                        |
| CEC-31  | Compact Executive Class 31    | FTS32  | File Transfer Service 32  | RAID37  | RAID Level 37                        |
| CEC-32  | Compact Executive Class 32    | FTS33  | File Transfer Service 33  | RAID38  | RAID Level 38                        |
| CEC-33  | Compact Executive Class 33    | FTS34  | File Transfer Service 34  | RAID39  | RAID Level 39                        |
| CEC-34  | Compact Executive Class 34    | FTS35  | File Transfer Service 35  | RAID40  | RAID Level 40                        |
| CEC-35  | Compact Executive Class 35    | FTS36  | File Transfer Service 36  | RAID41  | RAID Level 41                        |
| CEC-36  | Compact Executive Class 36    | FTS37  | File Transfer Service 37  | RAID42  | RAID Level 42                        |
| CEC-37  | Compact Executive Class 37    | FTS38  | File Transfer Service 38  | RAID43  | RAID Level 43                        |
| CEC-38  | Compact Executive Class 38    | FTS39  | File Transfer Service 39  | RAID44  | RAID Level 44                        |
| CEC-39  | Compact Executive Class 39    | FTS40  | File Transfer Service 40  | RAID45  | RAID Level 45                        |
| CEC-40  | Compact Executive Class 40    | FTS41  | File Transfer Service 41  | RAID46  | RAID Level 46                        |
| CEC-41  | Compact Executive Class 41    | FTS42  | File Transfer Service 42  | RAID47  | RAID Level 47                        |
| CEC-42  | Compact Executive Class 42    | FTS43  | File Transfer Service 43  | RAID48  | RAID Level 48                        |
| CEC-43  | Compact Executive Class 43    | FTS44  | File Transfer Service 44  | RAID49  | RAID Level 49                        |
| CEC-44  | Compact Executive Class 44    | FTS45  | File Transfer Service 45  | RAID50  | RAID Level 50                        |
| CEC-45  | Compact Executive Class 45    | FTS46  | File Transfer Service 46  | RAID51  | RAID Level 51                        |
| CEC-46  | Compact Executive Class 46    | FTS47  | File Transfer Service 47  | RAID52  | RAID Level 52                        |
| CEC-47  | Compact Executive Class 47    | FTS48  | File Transfer Service 48  | RAID53  | RAID Level 53                        |
| CEC-48  | Compact Executive Class 48    | FTS49  | File Transfer Service 49  | RAID54  | RAID Level 54                        |
| CEC-49  | Compact Executive Class 49    | FTS50  | File Transfer Service 50  | RAID55  | RAID Level 55                        |
| CEC-50  | Compact Executive Class 50    | FTS51  | File Transfer Service 51  | RAID56  | RAID Level 56                        |
| CEC-51  | Compact Executive Class 51    | FTS52  | File Transfer Service 52  | RAID57  | RAID Level 57                        |
| CEC-52  | Compact Executive Class 52    | FTS53  | File Transfer Service 53  | RAID58  | RAID Level 58                        |
| CEC-53  | Compact Executive Class 53    | FTS54  | File Transfer Service 54  | RAID59  | RAID Level 59                        |
| CEC-54  | Compact Executive Class 54    | FTS55  | File Transfer Service 55  | RAID60  | RAID Level 60                        |
| CEC-55  | Compact Executive Class 55    | FTS56  | File Transfer Service 56  | RAID61  | RAID Level 61                        |
| CEC-56  | Compact Executive Class 56    | FTS57  | File Transfer Service 57  | RAID62  | RAID Level 62                        |
| CEC-57  | Compact Executive Class 57    | FTS58  | File Transfer Service 58  | RAID63  | RAID Level 63                        |
| CEC-58  | Compact Executive Class 58    | FTS59  | File Transfer Service 59  | RAID64  | RAID Level 64                        |
| CEC-59  | Compact Executive Class 59    | FTS60  | File Transfer Service 60  | RAID65  | RAID Level 65                        |
| CEC-60  | Compact Executive Class 60    | FTS61  | File Transfer Service 61  | RAID66  | RAID Level 66                        |
| CEC-61  | Compact Executive Class 61    | FTS62  | File Transfer Service 62  | RAID67  | RAID Level 67                        |
| CEC-62  | Compact Executive Class 62    | FTS63  | File Transfer Service 63  | RAID68  | RAID Level 68                        |
| CEC-63  | Compact Executive Class 63    | FTS64  | File Transfer Service 64  | RAID69  | RAID Level 69                        |
| CEC-64  | Compact Executive Class 64    | FTS65  | File Transfer Service 65  | RAID70  | RAID Level 70                        |
| CEC-65  | Compact Executive Class 65    | FTS66  | File Transfer Service 66  | RAID71  | RAID Level 71                        |
| CEC-66  | Compact Executive Class 66    | FTS67  | File Transfer Service 67  | RAID72  | RAID Level 72                        |
| CEC-67  | Compact Executive Class 67    | FTS68  | File Transfer Service 68  | RAID73  | RAID Level 73                        |
| CEC-68  | Compact Executive Class 68    | FTS69  | File Transfer Service 69  | RAID74  | RAID Level 74                        |
| CEC-69  | Compact Executive Class 69    | FTS70  | File Transfer Service 70  | RAID75  | RAID Level 75                        |
| CEC-70  | Compact Executive Class 70    | FTS71  | File Transfer Service 71  | RAID76  | RAID Level 76                        |
| CEC-71  | Compact Executive Class 71    | FTS72  | File Transfer Service 72  | RAID77  | RAID Level 77                        |
| CEC-72  | Compact Executive Class 72    | FTS73  | File Transfer Service 73  | RAID78  | RAID Level 78                        |
| CEC-73  | Compact Executive Class 73    | FTS74  | File Transfer Service 74  | RAID79  | RAID Level 79                        |
| CEC-74  | Compact Executive Class 74    | FTS75  | File Transfer Service 75  | RAID80  | RAID Level 80                        |
| CEC-75  | Compact Executive Class 75    | FTS76  | File Transfer Service 76  | RAID81  | RAID Level 81                        |
| CEC-76  | Compact Executive Class 76    | FTS77  | File Transfer Service 77  | RAID82  | RAID Level 82                        |
| CEC-77  | Compact Executive Class 77    | FTS78  | File Transfer Service 78  | RAID83  | RAID Level 83                        |
| CEC-78  | Compact Executive Class 78    | FTS79  | File Transfer Service 79  | RAID84  | RAID Level 84                        |
| CEC-79  | Compact Executive Class 79    | FTS80  | File Transfer Service 80  | RAID85  | RAID Level 85                        |
| CEC-80  | Compact Executive Class 80    | FTS81  | File Transfer Service 81  | RAID86  | RAID Level 86                        |
| CEC-81  | Compact Executive Class 81    | FTS82  | File Transfer Service 82  | RAID87  | RAID Level 87                        |
| CEC-82  | Compact Executive Class 82    | FTS83  | File Transfer Service 83  | RAID88  | RAID Level 88                        |
| CEC-83  | Compact Executive Class 83    | FTS84  | File Transfer Service 84  | RAID89  | RAID Level 89                        |
| CEC-84  | Compact Executive Class 84    | FTS85  | File Transfer Service 85  | RAID90  | RAID Level 90                        |
| CEC-85  | Compact Executive Class 85    | FTS86  | File Transfer Service 86  | RAID91  | RAID Level 91                        |
| CEC-86  | Compact Executive Class 86    | FTS87  | File Transfer Service 87  | RAID92  | RAID Level 92                        |
| CEC-87  | Compact Executive Class 87    | FTS88  | File Transfer Service 88  | RAID93  | RAID Level 93                        |
| CEC-88  | Compact Executive Class 88    | FTS89  | File Transfer Service 89  | RAID94  | RAID Level 94                        |
| CEC-89  | Compact Executive Class 89    | FTS90  | File Transfer Service 90  | RAID95  | RAID Level 95                        |
| CEC-90  | Compact Executive Class 90    | FTS91  | File Transfer Service 91  | RAID96  | RAID Level 96                        |
| CEC-91  | Compact Executive Class 91    | FTS92  | File Transfer Service 92  | RAID97  | RAID Level 97                        |
| CEC-92  | Compact Executive Class 92    | FTS93  | File Transfer Service 93  | RAID98  | RAID Level 98                        |
| CEC-93  | Compact Executive Class 93    | FTS94  | File Transfer Service 94  | RAID99  | RAID Level 99                        |
| CEC-94  | Compact Executive Class 94    | FTS95  | File Transfer Service 95  | RAID100 | RAID Level 100                       |
| CEC-95  | Compact Executive Class 95    | FTS96  | File Transfer Service 96  | RAID101 | RAID Level 101                       |
| CEC-96  | Compact Executive Class 96    | FTS97  | File Transfer Service 97  | RAID102 | RAID Level 102                       |
| CEC-97  | Compact Executive Class 97    | FTS98  | File Transfer Service 98  | RAID103 | RAID Level 103                       |
| CEC-98  | Compact Executive Class 98    | FTS99  | File Transfer Service 99  | RAID104 | RAID Level 104                       |
| CEC-99  | Compact Executive Class 99    | FTS100 | File Transfer Service 100 | RAID105 | RAID Level 105                       |
| CEC-100 | Compact Executive Class 100   | FTS101 | File Transfer Service 101 | RAID106 | RAID Level 106                       |
| CEC-101 | Compact Executive Class 101   | FTS102 | File Transfer Service 102 | RAID107 | RAID Level 107                       |
| CEC-102 | Compact Executive Class 102   | FTS103 | File Transfer Service 103 | RAID108 | RAID Level 108                       |
| CEC-103 | Compact Executive Class 103   | FTS104 | File Transfer Service 104 | RAID109 | RAID Level 109                       |
| CEC-104 | Compact Executive Class 104   | FTS105 | File Transfer Service 105 | RAID110 | RAID Level 110                       |
| CEC-105 | Compact Executive Class 105   | FTS106 | File Transfer Service 106 | RAID111 | RAID Level 111                       |
| CEC-106 | Compact Executive Class 106   | FTS107 | File Transfer Service 107 | RAID112 | RAID Level 112                       |
| CEC-107 | Compact Executive Class 107   | FTS108 | File Transfer Service 108 | RAID113 | RAID Level 113                       |
| CEC-108 | Compact Executive Class 108   | FTS109 | File Transfer Service 109 | RAID114 | RAID Level 114                       |
| CEC-109 | Compact Executive Class 109   | FTS110 | File Transfer Service 110 | RAID115 | RAID Level 115                       |
| CEC-110 | Compact Executive Class 110   | FTS111 | File Transfer Service 111 | RAID116 | RAID Level 116                       |
| CEC-111 | Compact Executive Class 111   | FTS112 | File Transfer Service 112 | RAID117 | RAID Level 117                       |
| CEC-112 | Compact Executive Class 112   | FTS113 | File Transfer Service 113 | RAID118 | RAID Level 118                       |
| CEC-113 | Compact Executive Class 113   | FTS114 | File Transfer Service 114 | RAID119 | RAID Level 119                       |
| CEC-114 | Compact Executive Class 114   | FTS115 | File Transfer Service 115 | RAID120 | RAID Level 120                       |
| CEC-115 | Compact Executive Class 115   | FTS116 | File Transfer Service 116 | RAID121 | RAID Level 121                       |
| CEC-116 | Compact Executive Class 116   | FTS117 | File Transfer Service 117 | RAID122 | RAID Level 122                       |
| CEC-117 | Compact Executive Class 117   | FTS118 | File Transfer Service 118 | RAID123 | RAID Level 123                       |
| CEC-118 | Compact Executive Class 118   | FTS119 | File Transfer Service 119 | RAID124 | RAID Level 124                       |
| CEC-119 | Compact Executive Class 119   | FTS120 | File Transfer Service 120 | RAID125 | RAID Level 125                       |
| CEC-120 | Compact Executive Class 120   | FTS121 | File Transfer Service 121 | RAID126 | RAID Level 126                       |
| CEC-121 | Compact Executive Class 121   | FTS122 | File Transfer Service 122 | RAID127 | RAID Level 127                       |
| CEC-122 | Compact Executive Class 122   | FTS123 | File Transfer Service 123 | RAID128 | RAID Level 128                       |
| CEC-123 | Compact Executive Class 123   | FTS124 | File Transfer Service 124 | RAID129 | RAID Level 129                       |
| CEC-124 | Compact Executive Class 124   | FTS125 | File Transfer Service 125 | RAID130 | RAID Level 130                       |
| CEC-125 | Compact Executive Class 125   | FTS126 | File Transfer Service 126 | RAID131 | RAID Level 131                       |
| CEC-126 | Compact Executive Class 126   | FTS127 | File Transfer Service 127 | RAID132 | RAID Level 132                       |
| CEC-127 | Compact Executive Class 127   | FTS128 | File Transfer Service 128 | RAID133 | RAID Level 133                       |
| CEC-128 | Compact Executive Class 128   | FTS129 | File Transfer Service 129 | RAID134 | RAID Level 134                       |
| CEC-129 | Compact Executive Class 129   | FTS130 | File Transfer Service 130 | RAID135 | RAID Level 135                       |
| CEC-130 | Compact Executive Class 130   | FTS131 | File Transfer Service 131 | RAID136 | RAID Level 136                       |
| CEC-131 | Compact Executive Class 131   | FTS132 | File Transfer Service 132 | RAID137 | RAID Level 137                       |
| CEC-132 | Compact Executive Class 132   | FTS133 | File Transfer Service 133 | RAID138 | RAID Level 138                       |
| CEC-133 | Compact Executive Class 133   | FTS134 | File Transfer Service 134 | RAID139 | RAID Level 139                       |
| CEC-134 | Compact Executive Class 134   | FTS135 | File Transfer Service 135 | RAID140 | RAID Level 140                       |
| CEC-135 | Compact Executive Class 135   | FTS136 | File Transfer Service 136 | RAID141 | RAID Level 141                       |
| CEC-136 | Compact Executive Class 136   | FTS137 | File Transfer Service 137 | RAID142 | RAID Level 142                       |
| CEC-137 | Compact Executive Class 137   | FTS138 | File Transfer Service 138 | RAID143 | RAID Level 143                       |
| CEC-138 | Compact Executive Class 138   | FTS139 | File Transfer Service 139 | RAID144 | RAID Level 144                       |
| CEC-139 | Compact Executive Class 139   | FTS140 | File Transfer Service 140 | RAID145 | RAID Level 145                       |
| CEC-140 | Compact Executive Class 140   | FTS141 | File Transfer Service 141 | RAID146 | RAID Level 146                       |
| CEC-141 | Compact Executive Class 141   | FTS142 | File Transfer Service 142 | RAID147 | RAID Level 147                       |
| CEC-142 | Compact Executive Class 142   | FTS143 | File Transfer Service 143 | RAID148 | RAID Level 148                       |
| CEC-143 | Compact Executive Class 143   | FTS144 | File Transfer Service 144 | RAID149 | RAID Level 149                       |
| CEC-144 | Compact Executive Class 144   | FTS145 | File Transfer Service 145 | RAID150 | RAID Level 150                       |
| CEC-145 | Compact Executive Class 145   | FTS146 | File Transfer Service 146 | RAID151 | RAID Level 151                       |
| CEC-146 | Compact Executive Class 146   | FTS147 | File Transfer Service 147 | RAID152 | RAID Level 152                       |
| CEC-147 | Compact Executive Class 147   | FTS148 | File Transfer Service 148 | RAID153 | RAID Level 153                       |
| CEC-148 | Compact Executive Class 148   | FTS149 | File Transfer Service 149 | RAID154 | RAID Level 154                       |
| CEC-149 | Compact Executive Class 149   | FTS150 | File Transfer Service 150 | RAID155 | RAID Level 155                       |
| CEC-150 | Compact Executive Class 150   | FTS151 | File Transfer Service 151 | RAID156 | RAID Level 156                       |
| CEC-151 | Compact Executive Class 151   | FTS152 | File Transfer Service 152 | RAID157 | RAID Level 157                       |
| CEC-152 | Compact Executive Class 152   | FTS153 | File Transfer Service 153 | RAID158 | RAID Level 158                       |
| CEC-153 | Compact Executive Class 153   | FTS154 | File Transfer Service 154 | RAID159 | RAID Level 159                       |
| CEC-154 | Compact Executive Class 154   | FTS155 | File Transfer Service 155 | RAID160 | RAID Level 160                       |
| CEC-155 | Compact Executive Class 155   | FTS156 | File Transfer Service 156 | RAID161 | RAID Level 161                       |
| CEC-156 | Compact Executive Class 156   | FTS157 | File Transfer Service 157 | RAID162 | RAID Level 162                       |
| CEC-157 | Compact Executive Class 157   | FTS158 | File Transfer Service 158 | RAID163 | RAID Level 163                       |
| CEC-158 | Compact Executive Class 158   | FTS159 | File Transfer Service 159 | RAID164 | RAID Level 164                       |
| CEC-159 | Compact Executive Class 159   | FTS160 | File Transfer Service 160 | RAID165 | RAID Level 165                       |
| CEC-160 | Compact Executive Class 160   | FTS161 | File Transfer Service 161 | RAID166 | RAID Level 166                       |
| CEC-161 | Compact Executive Class 161   | FTS162 | File Transfer Service 162 | RAID167 | RAID Level 167                       |
| CEC-162 | Compact Executive Class 162   | FTS163 | File Transfer Service 163 | RAID168 | RAID Level 168                       |
| CEC-163 | Compact Executive Class 163   | FTS164 | File Transfer Service 164 | RAID169 | RAID Level 169                       |
| CEC-164 | Compact Executive Class 164   | FTS165 | File Transfer Service 165 | RAID170 | RAID Level 170                       |
| CEC-165 | Compact Executive Class 165   | FTS166 | File Transfer Service 166 | RAID171 | RAID Level 171                       |
| CEC-166 | Compact Executive Class 166   | FTS167 | File Transfer Service 167 | RAID172 | RAID Level 172                       |
| CEC-167 | Compact Executive Class 167   | FTS168 | File Transfer Service 168 | RAID173 | RAID Level 173                       |
| CEC-168 | Compact Executive Class 168   | FTS169 | File Transfer Service 169 | RAID174 | RAID Level 174                       |
| CEC-169 | Compact Executive Class 169   | FTS170 | File Transfer Service 170 | RAID175 | RAID Level 175                       |
| CEC-170 | Compact Executive Class 170   | FTS171 | File Transfer Service 171 | RAID176 | RAID Level 176                       |
| CEC-171 | Compact Executive Class 171   | FTS172 | File Transfer Service 172 | RAID177 | RAID Level 177                       |
| CEC-172 | Compact Executive Class 172   | FTS173 | File Transfer Service 173 | RAID178 | RAID Level 178                       |
| CEC-173 | Compact Executive Class 173   | FTS174 | File Transfer Service 174 | RAID179 | RAID Level 179                       |
| CEC-174 | Compact Executive Class 174   | FTS175 | File Transfer Service 175 | RAID180 | RAID Level 180                       |
| CEC-175 | Compact Executive Class 175   | FTS176 | File Transfer Service 176 | RAID181 | RAID Level 181                       |
| CEC-176 | Compact Executive Class 176   | FTS177 | File Transfer Service 177 | RAID182 | RAID Level 182                       |
| CEC-177 | Compact Executive Class 177   | FTS178 | File Transfer Service 178 | RAID183 | RAID Level 183                       |
| CEC-178 | Compact Executive Class 178   | FTS1   |                           |         |                                      |

Number  
1

|   |              |    |
|---|--------------|----|
| 2 | Sycanone     | 7  |
| 3 | Sycanone     | 9  |
| 4 | Copper Beech | 10 |
| 5 | Cherry       | 6  |
| 6 | Apple        | 5  |
| 7 | Apple        | 6  |
| 8 | Cherry       | 13 |

Station  
STN1 S

|       |            |            |         |
|-------|------------|------------|---------|
| STN2  | 377504.269 | 413897.006 | 133.699 |
| STN2A | 377538.422 | 413901.724 | 135.353 |
| STN2B | 377541.964 | 413911.112 | 135.019 |
| STN3  | 377419.836 | 412993.680 | 134.414 |
| STN4  | 377515.992 | 412998.936 | 125.618 |
| STN4A | 377528.257 | 412991.775 | 125.540 |
| STN5  | 377541.115 | 412917.779 | 136.222 |
| STN6  | 377532.653 | 412911.114 | 136.084 |
| STN7  | 377558.878 | 413205.899 | 137.678 |
| STN8  | 377562.323 | 413277.669 | 136.085 |
| STN8A | 377599.923 | 413910.667 | 139.699 |

|           |                                                                       |
|-----------|-----------------------------------------------------------------------|
| Project   | PROPERTY DEVELOPMENT: 216-218 HOLCOMBE ROAD, GREENMOUNT, BURY BL8 4BQ |
| Drawing   | PROPOSED BLOCK PLAN & BUILDING PLANS                                  |
| Client    | MR N. MORDIN                                                          |
| Dwn. By   | NP                                                                    |
| Scale     | 1:200 & 1:100 @ A1                                                    |
| Drg. No.  | 20-06-27-B                                                            |
| Drg. Size | A1                                                                    |
| Date      | APRIL 2021                                                            |



DO NOT SCALE DRAWING

|                        |                   |
|------------------------|-------------------|
| Total Gross Floor Area |                   |
| House                  | 143m <sup>2</sup> |
| Garage                 | 20m <sup>2</sup>  |
| Total                  | 163m <sup>2</sup> |

|                    |                   |
|--------------------|-------------------|
| Volume             |                   |
| Ground level       | 481m <sup>3</sup> |
| Lower Ground Level | 217m <sup>3</sup> |
| Garage             | 56m <sup>3</sup>  |
| Total Volume       | 754m <sup>3</sup> |