

# FICHTNER

Consulting Engineers Limited



## Hillhouse IBA Processing Facility



**Fortis IBA Limited**

Site Condition Report

## Document approval

	Name	Signature	Position	Date
Prepared by:	Alice Merry		Environmental Scientist	21/08/2024
Checked by:	James Sturman		Principal Consultant	21/08/2024

## Document revision record

Revision no	Date	Details of revisions	Prepared by	Checked by
0	23/07/2024	First issue to Client	ACM	JRS
1	21/08/2024	Amended with Client review comments	ACM	JRS

© 2024 Fichtner Consulting Engineers. All rights reserved.

This document and its accompanying documents contain information which is confidential and is intended only for the use of Fortis IBA Limited. If you are not one of the intended recipients any disclosure, copying, distribution or action taken in reliance on the contents of the information is strictly prohibited.

Unless expressly agreed, any reproduction of material from this document must be requested and authorised in writing from Fichtner Consulting Engineers. Authorised reproduction of material must include all copyright and proprietary notices in the same form and manner as the original and must not be modified in any way. Acknowledgement of the source of the material must also be included in all references.

# Contents

- 1 Introduction.....4
  - 1.1 The Objective .....4
  
- 2 Site Details.....5
  - 2.1 Site Address.....5
  - 2.2 National Grid Reference.....5
  - 2.3 Site Location.....5
  
- 3 Condition of Land at Permit Issue .....6
  - 3.1 Environmental Setting.....6
    - 3.1.1 Geology.....6
    - 3.1.2 Hydrogeology.....6
    - 3.1.3 Hydrology and Surface Water .....7
    - 3.1.4 Environmental Designations.....7
  - 3.2 Pollution History.....7
    - 3.2.1 Site History.....7
    - 3.2.2 Historical incidents .....9
    - 3.2.3 Groundwater Abstractions .....9
    - 3.2.4 Surface Water Abstractions.....10
    - 3.2.5 Licensed discharges to controlled waters .....10
    - 3.2.6 Landfill Sites.....11
    - 3.2.7 Licenced Waste Facilities.....11
  
- 4 Permitted Activities .....12
  - 4.1 Activities.....12
  - 4.2 Environmental Risk Assessment .....14
  
- 5 EC Guidance: Stage 1 – 3 Assessment.....15
  
- 6 Previous Contamination and Site Investigations.....17
  
- 7 Ongoing Management.....18
  
- 8 Conclusions.....19
  
- Appendices .....20
  - A Background Information .....21

# 1 Introduction

Fortis IBA Limited (Fortis IBA) is applying to the Environment Agency (EA) under the Environmental Permitting Regulations (EPR's) for an Environmental Permit (EP) for the storage and treatment of up to 350,000 tonnes of incinerator bottom ash (IBA) at Hillhouse IBA Facility (the Facility).

## 1.1 The Objective

This Site Condition Report summarises the existing ground conditions for the land within the Installation Boundary (the Site) and describes the setting for the Facility at the time of applying for the EP. This report draws on the following sources of background information which are provided in Appendix A:

- Phase 1 Geo-environmental Assessment
- Groundsure Report

The report:

1. considers the proposed activities to be carried out at the site;
2. identifies any land contamination risk the activities pose that may be linked to previous pollution events; and
3. provides a baseline for the existing ground conditions.

The report will present details on the following:

1. geology;
2. hydrogeology;
3. hydrology and flooding;
4. historical and present land use; and
5. existing ground conditions.

Plans and drawings can be found in Appendix A of the Application Pack, including but not limited to the following:

- installation boundary;
- emissions points;
- storage areas; and
- process flow diagram.

## 2 Site Details

### 2.1 Site Address

The Site address is Hillhouse Business Park, Thornton-Cleveleys, Lancashire FY5 4GR.

### 2.2 National Grid Reference

The grid reference for the centre of the Site is SD 34962 43415.

### 2.3 Site Location

The Site will be located on approximately 8 acres of land at the Hillhouse Business Park, Thornton-Cleveleys, Lancashire, FY5 4QD, with an approximate national Grid Reference of SD 3496243415. This is approximately 2.7 km east of Cleveleys, 3.1 km southwest of Stalmine, 4.2 km south of Fleetwood and 8.1 km northeast of Blackpool. There are approximately 300 residential properties located within 1 km of the Site to the south. The closest residential receptor is Flint's Caravan Site which is located approximately 0.4 km south of the Site.

The Site is located on the former ICI Hillhouse Site. ICI was a British chemical company that manufactured general chemicals, plastics, paints, pharmaceuticals and speciality products, including food ingredients, speciality polymers, electronic materials, fragrances and flavourings.

A Site location plan and associated Installation Boundary drawing for the Facility are provided in Appendix A of the Application Pack.

## 3 Condition of Land at Permit Issue

### 3.1 Environmental Setting

#### 3.1.1 Geology

The solid geology within the Installation Boundary is summarised in Table 1.

Table 1: Site geology.

Strata	Description
Artificial and made ground	Artificial and made ground has been recorded across the Site. Information included on the published 1:10,000 scale geological mapping identifies that the Site is predominantly made up of 'Made Ground (Undivided)'. The south east section of the Site is made up of infilled ground. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.
Superficial geology	The superficial geology at the Site has been recorded as 'Tidal Flats Deposits' and comprises clay and silt on the published 1:10,000 scale geological mapping.
Bedrock geology	The bedrock geology at the north west section of the Site has been recorded as Preesall Halite Member - Mudstone And Halite-stone and at the south east section of Site has been recorded as Kirkham Mudstone Member – Mudstone on the published 1:10,000 scale geological mapping.
Geological structure	A landslip has been identified to the north on the published 1:10,000 scale geological mapping which has affected the superficial geology. A number of bedrock faults have also been identified within 1km of the Site on the published 1:10,000 scale geological mapping which has affected the superficial geology.

#### 3.1.2 Hydrogeology

The solid geology within the installation boundary is summarised in Table 2.

Table 2: Site hydrology

Lithology	Description
Superficial aquifer	The superficial aquifer underlying the site is unproductive superficial aquifer. These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.
Bedrock	The bedrock underlying the north west of the Site is an unproductive bedrock aquifer and the south east of the Site is a secondary B aquifer. Unproductive bedrock aquifers are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow whereas

Lithology	Description
	secondary B aquifers are predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.

The groundwater vulnerability of the Site has been classified as low. Furthermore, the Site does not lie within a Source Protection Zones (SPZ).

### 3.1.3 Hydrology and Surface Water

The hydrology and surface water conditions are summarised in Table 3.

Table 3: Site hydrology and surface waters

Item	Description
Water network	The Site is within the operation catchment for the Fleetwood Peninsula Tributary and the management catchment for the Wyre.
Surface water features	Hillylaid Pool is located 21 m south of the Site. The River Wyre is located 51 m north of the Site.
River and coastal flooding	Due to the flood defences, see below, the Site is at 'Very Low' risk of flooding.
Flood risk	There are no records of historical flood events within 250 m of the Site.
Flood defences	The Site is an area benefitting from flood defences.
Flood storage areas	No flood storage areas are located on Site.

Surface water run-off will be collected on-site in surface and process water storage tanks.

### 3.1.4 Environmental Designations

The following environmental designations are located within 1km of the Site and have been summarised in Table 4.

Table 4: Environmental designations

Location	Designation	Name
39 m north	Site of Specific Scientific Interest (SSSI)	Wyre Estuary
38 m north	Conserved wetland site (Ramsar sites)	Morecambe Bay
39 m north	Special Protection Area (SPA)	Morecambe Bay and Duddon Estuary
69 m north	Marine Conservation Zone	Wyre-Lune

## 3.2 Pollution History

### 3.2.1 Site History

Historical maps provided in the Groundsure report have been used to identify previous land uses. The Site history is summarised in Table 5:

Table 5: Site history

Date	Site land use	Adjacent site use
1848	The Site comprises of undeveloped farmland. Holme pool (stream later known as Royles Brook which confluences with the Hillylaid Pool) which just encroaches onto the southeastern corner of Site.	The surrounding area is primarily fields. Water bodies include the Hillylaid Pool (stream) 50 m SE to the Site, and the River Wyre 50 m along the NE site boundary.  The Village of Stanah is 500 m SE and the Village of Trunnah is 1 km SW of the Site.
1891	No significant changes.	400 m SW of the Site is Hillhouse Farm.
1910	No significant changes.	500 m NW of the Site is an ammonia soda works which increases in size with railway sidings and railway. A small gas works is also 600 m NW of the Site.
1951	No significant changes.	Chemical works plant is located SW/W of the Site, which includes several buildings, railways and sidings, tanks, reservoirs and access roads.  Hillhouse Farm is no longer shown as the chemical works now occupies the same footprint.
1960	A single-track railway is laid down from the ammonia soda works.  An elongated mound in the northwestern Site Corner extends off-site to the northwest. It likely forms part of the embankment created for the railway line.	No significant changes.
1967	There is an excavation at the other side of the railway. It is potentially a small pit or an embankment for the railway.	There are now two small unnamed buildings 5 m NE of the Site, presumed to be associated with the railway. There is also now a drain 60 m W (potentially also on site) and a refuse tip 430 m SE of the Site.
1976	At least 35 chemical storage tanks are located on Site.	A storage building/water deluge tank is now to the SW of the Site. A bicycle shed is constructed 40 m SW of the Site.
1980	The Site has now undergone extensive industrial development for the PVC 9 Plant, which produces polyvinyl chloride (PVC). The Site comprises of several chemical storage tanks and four main	No significant changes.



Date	Site land use	Adjacent site use
	buildings, plus a series of smaller, potentially ancillary buildings.	
1981	South Road built over the Hillylaid Pool where the stream flows within a small, culverted section. Still present today.	There is a caravan park 60 m SE of the Site.
Present day	The Site currently comprises infrastructure associated with the IBA Facility and still contains the belowground foundations, drainage, and other utilities from the extensive industrial development from 1980.	The surrounding area mainly comprises of industrial units.

### 3.2.2 Historical incidents

There are no records of pollution incidents to have occurred within the Installation Boundary. There are three records of pollution incidents to controlled waters within 1 km of the Installation Boundary. The information is summarised in Table 6.

Table 6: Historical incidents to controlled waters within 1 km of the Installation Boundary

Location	Details
46 m north	Date: 01/01/2005 Incident identification: 285281 Pollutant: Other Pollutant Water impact: Category 2 (Significant) Land impact: Category 4 (No Impact) Air impact: Category 4 (No Impact)
59 m north west	Date: 28/08/2018 Incident identification: 1647147 Pollutant: Inorganic Chemicals/Products Water impact: Category 3 (Minor) Land impact: Category 2 (Significant) Air impact: Category 4 (No Impact)
252 m north west	Date: 14/09/2003 Incident identification: 189693 Pollutant: Contaminated Water Water impact: Category 3 (Minor) Land impact: Category 4 (No Impact) Air impact: Category 4 (No Impact)

### 3.2.3 Groundwater Abstractions

There are no groundwater abstractions at the Site or within 2 km of the Installation Boundary.

### 3.2.4 Surface Water Abstractions

There are no surface water abstractions at the Site or within 2 km of the Installation Boundary.

### 3.2.5 Licensed discharges to controlled waters

There are no discharge licences at the Site. There are 10 discharge licences within 2 km of the Installation Boundary. The information is summarised in Table 7.

Table 7: Discharge licences within 2km of the Installation Boundary

Location	Details
31 m south	Permit number: 017290086 Receiving water: Royles Brook Status: Revoked
53 m north west	Permit number: 017290033 Receiving water: Wyre Estuary Status: Revoked
61 m south east	Permit number: 017190205 Receiving water: Trib Savick Brook Status: Revoked
101 m west	Permit number: 017290099 Receiving water: Royles Brook Status: Revoked
225 m north west	Permit number: 017290033 Receiving water: Wyre Estuary Status: Revoked
249 m north west	Permit number: 017290034 Receiving water: River Wyre Estuary Status: Revoked
313 m west	Permit number: 017290099 Receiving water: Royles Brook Status: Revoked
351 m south east	Permit number: 017290100 Receiving water: Hillylaid Pool – Old course Status: Revoked
360 m south east	Permit number: 017190217 Receiving water: River Ribble Status: Revoked
425 m west	Permit number: 017290099 Receiving water: Royles Brook Status: Revoked

### 3.2.6 Landfill Sites

There are no BGS recorded landfill sites or historic land at the Site and there are no BGS recorded landfill site within 1 km of the Installation Boundary.

There are no historic landfill sites or historic waste sites at the Site. There is one historic landfill site and one historic waste site within 1 km of the Installation Boundary. The information is summarised in Table 8.

Table 8: *Historic landfill sites within 1 km of the Installation Boundary*

Location	Type	Details
431 m south east	Historical landfill	Site address: Stanah House Farm, River Road, Thornton, Lancashire Site Reference: K1/02/019 License holder: Wyre Borough Council
247 m north west	Historical waste site	Site address: Hillhouse International Works, East Road, Thornton Cleveleys, Lancashire, FY5 Type of waste site: Advanced Thermal Treatment Facility

### 3.2.7 Licenced Waste Facilities

There are no licenced waste facilities at the Site and there are no licenced waste sites within 1 km of the Installation Boundary.

## 4 Permitted Activities

### 4.1 Activities

The permitted activities will consist of the Schedule 1 installation activities (as defined in the Environmental Permitting Regulations) and directly associated activities listed in Table 9.

Table 9: Scheduled and directly associated activities

Type of Activity	Schedule 1 Activity	Description of Activity	Limits of specified activity
Installation	S5.4 A(1) (b) (iii)	R4: Recycling/reclamation of metals and metal compounds. R5: Recycling/reclamation of other inorganic materials.	From receipt of permitted waste through to treatment and recovery of by-products (incinerator bottom ash aggregate).  Treatment of incinerator bottom ash in an enclosed building and a contained drainage system.
<b>Directly associated activities</b>			
DAA		Storage of waste	From receipt of waste to despatch off-site for recovery.  Storage of incinerator bottom ash on impermeable surface with contained drainage system prior to treatment in enclosed building.  Storage of processed incinerator bottom ash aggregate on impermeable surface with contained drainage system.  Storage of ferrous/non-ferrous metals from treatment of incinerator bottom

Type of Activity	Schedule 1 Activity	Description of Activity	Limits of specified activity
			ash.  Waste types as specified in Table 2 of the Supporting Information.
		Raw material storage	From the receipt of raw materials to despatch for use within the Facility.
		Surface water collection and storage	From the collection of uncontaminated roof and site surface water from non-operational areas to re-use within the Facility.
		Process water collection and storage	From the collection of waste water produced at the Facility to re-use within the Facility or despatch off-site for recovery or disposal.

The activities undertaken at the Facility will utilise a number of fuels and chemicals which will be stored in accordance with current guidance. The delivery and transfer details, and secondary and tertiary containment systems associated with the storage of these materials are presented in Table 10.

Table 10: Raw material containment facilities – Primary raw materials

Material	Delivery details	Transfer for storage details	Storage containment details
Fuel oil	Delivered using tanker.	Unloading from delivery vehicle tanker into storage tank using sealed pipework. Storage tanks located with a dedicated concrete sump or other bunding. Hardstanding in this area will also have links to process drainage system.	Primary: Tank Secondary: Bunding (110%) Tertiary: Hardstanding and contained drainage.

Various maintenance materials (oils, greases, insulants, antifreezes, welding and firefighting gases etc.) will be stored in an appropriate manner. Any gas bottles on-site will be kept secure in dedicated area(s).

## 4.2 Environmental Risk Assessment

An Environmental Risk Assessment has been carried out following the Environment Agency Horizontal Guidance Note H1. This is included within Appendix C of the Application Pack. The assessment considers all potential sources of air, land and water pollution that could occur due to emissions from the Facility or from accidents occurring at the Facility. The risk assessment also details any mitigation measures that will be employed to reduce the frequency or impact of accidents.

The Environmental Risk Assessment identifies that the operation of the Facility will require the storage of a limited number of chemicals, which could pose a risk to the land, groundwater and/or surface water during operations. All process areas, loading/unloading areas, materials handling areas and roadways will be covered in concrete and/or tarmac hardstanding. As such, it is regarded that there will be little risk of ground/groundwater contamination during normal operation of the Facility.

Therefore, it is concluded that the Facility will pose little risk of pollution. However, periodic soil and groundwater samples at the Site will be undertaken to fulfil the requirements of Articles 14(1)(b), 14(1)(e) and 16(2) of the Industrial Emissions Directive (IED) and the requirements of the Environmental Permit.

## 5 EC Guidance: Stage 1 – 3 Assessment

In accordance with European Commission Guidance concerning baseline reports under Article 22(2) of the IED, a Stage 1 – 3 assessment has been undertaken to identify hazardous substances used at the Facility.

Stages 1 – 3 of the assessment are described as follows:

1. Identify which hazardous substances are used, produced or released at the installation.
2. Identify which of these substances are classed as ‘relevant hazardous substances’ (defined within Article 3 of EC Regulation 1272/2008). Justify any hazardous substances which have been excluded due to their incapability to contaminate soil or groundwater.
3. For each relevant hazardous substance, identify the actual possibility for soil or groundwater contamination at the Site (including probability of release), taking into account quantities, storage and transport, risk of release.

The full stage 1 – 3 assessment of the primary raw materials and residues handled at the Facility is presented in Table 11. The substances handled at the Facility are identified in the context of their hazards and theoretical pollution risk, with justification as to whether the substance is of concern or not in the context of the Site.

Table 11: Stage 1 - 3 assessment of materials at the Facility.

Stage 1: Chemicals handled	Stage 2: Chemical characteristics and toxicity						Stage 3: Site specific characteristics			Stage 4: Site specific risk	
Substance	Concentration / State	CAS No.	EC/List No.	Hazard statements (CLP)	Hazard substance under Stage 2?	Environmental fate / behaviour	Potential Pollution Risk?	Approx. Quantity Stored	Storage Arrangements/ Containment	Delivery, Storage and use details	Comments/ Chemical of concern?
Unburnt, oversized or unsuitable materials	Solid	N/A	N/A	N/A	No	Limited solubility, potential for the presence of heavy metals	No	250 tonnes	For unacceptable wastes which cannot be re-combusted in the ERF there will be a quarantine area prior to the waste being removed to a suitably licensed facility within 7 days.	Stored in quarantine area and removed from Site in a timely manner.	Impermeable hardstanding with contained drainage.
Processed IBAA	Solid	N/A	N/A	N/A	No	Limited solubility, potential for the presence of heavy metals	No	Fines - 100,000 tonnes Coarse – 40,000 tonnes	External stockpiles in storage yard. Runoff from washdown and process areas to be collected in sealed drainage system and reused onsite in ash processing.	Processed IBA moved from process building to stockpiles for maturation storage period. IBAA leaving the Site to be removed from the Facility via enclosed/sheeted vehicles.	IBA handling will be undertaken on areas of hardstanding with contained drainage. Transfer off-site will be in enclosed/covered vehicles.
Extracted metals	Solid	N/A	N/A	N/A	No	Limited solubility, potential for the presence of heavy metals	No	2,500 tonnes	Containers in storage yard.	Removal via vehicles for recycling.	Storage in metal containers and prompt removal from Site. Site process areas fitted with hardstanding and contained drainage.



## 6 Previous Contamination and Site Investigations

As stated within Article 22 (2) of the IED:

*“Where the activity involves the use, production or release of relevant hazardous substances [RHS] and having regard to the possibility of soil and groundwater contamination at the site of the installation, the operator shall prepare and submit to the competent authority a baseline report before starting operation of an installation or before a permit for an installation is updated for the first time after 7 January 2013”.*

Furthermore, the EA guidance note ‘H5: Site Condition Report – Guidance and Templates’ states that “where a facility involves the use, production or release of RHS”, a baseline report must be submitted as part of the application.

A site investigation has been undertaken at the Site previously by Smith Grant LLP in 2024, which provides information on the baseline ground conditions.

## 7 Ongoing Management

Any additional data obtained on the ground conditions at the Site, either prior to commencement of construction, or through the construction phase, will be collated within this Site Condition Report.

During the lifetime of the Facility, the Site Condition Report will be updated to take into account the following:

- any changes to the permitted activities or the Installation Boundary;
- any measures taken to protect the underlying land and groundwater;
- any pollution incidents that may have had an impact on land and associated remediation; and
- any soil, gas and/or groundwater monitoring which is undertaken throughout the lifetime of the Facility.

At the end of the operational life of the Facility, the Site Condition Report will be updated to include for decommissioning and site closure. It will be used to demonstrate that all sources of pollution risk have been removed and whether decommissioning has had any impact on the land. Any required remedial works will be documented and incorporated into the report. A statement of site condition will be made to confirm that:

- the permitted activities have stopped;
- decommissioning is complete, and the pollution risk has been removed; and
- the land is in a satisfactory condition.

## 8 Conclusions

This report has identified the historical and current condition of land, the proposed permitted activities at the Facility, and detail on the reagents and residues to be involved with the operations undertaken at the Facility.

During the Operational phase of the Facility, any records which demonstrate how the land and groundwater have been protected will be maintained. This information will include inspection records of site infrastructure, pollution/incident reports, records of any ground investigations undertaken, and any monitoring records of soil, gas and/or water during the life of the EP. Where it is identified that pollution has occurred, records will be maintained to demonstrate any pollution incidents that may have affected the land or groundwater. These records will be retained to be used at Permit Surrender.

# Appendices

# A Background Information

**PROPOSED HILLHOUSE IBA PROCESSING  
FACILITY, HILLHOUSE ENTERPRISE ZONE,  
THORNTON-CLEVELEYS**

**PHASE 1 GEO-ENVIRONMENTAL  
ASSESSMENT**

**For: Axis P.E.D & Fortis IBA Limited**

**July 2024**

**R3217-R01-v4**

## DOCUMENT CONTROL SHEET

**Report Title:** Proposed Hillhouse Incinerator Bottom Ash Processing Facility, Hillhouse Enterprise Zone, Thornton-Cleveleys, Lancashire.

Phase 1 Geo-Environmental Assessment

**Client:** Axis P.E.D & Fortis IBA Limited

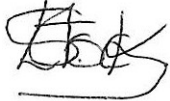

**Report Reference Number:** R3217-R01

**Issue:** Final

**Version:** V4

**Report Date:** July 2024

### Signed for Smith Grant LLP

	Name	Position	Signature	Date
Author(s)	L Stock BSc(Hons) MSc MEnvSc CSci	Associate		04.07.24
Reviewer	D. Wayland BSc MSc AssocMCIWM MCIWEM C.WEM	Partner		04.07.24

### Document Revision Record:

Version	Report Status	Date	Details of Revision
V1	Draft	21.12.23	Issue to client for comment
V2	Draft	05.02.24	Extension of Site
V3	Final	07.06.24	Final with additional area
V4	Final2	04.07.24	Final with minor Client requested Amendments

This report has been prepared by Smith Grant LLP for the sole and exclusive use of Axis P.E.D and Fortis IBA Limited. Reasonable skill, care and diligence has been exercised within the terms of the contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report may be relied upon or transferred to any other parties only with the express written authorisation of Smith Grant LLP, such consent not to be unreasonably withheld or delayed. If any Third Party comes into possession of this report, they rely on it at their own risk and the authors owe them no duty or care of skill. Smith Grant LLP reserves the right to alter any of the foregoing information in the event of new information being disclosed or provided and in the light of changes to legislation, guidelines and responses by the statutory and regulatory authorities.

# HILLHOUSE IBA PROCESSING FACILITY, HILLHOUSE ENTERPRISE ZONE, THORNTON-CLEVELEYS

## PHASE 1 GEO-ENVIRONMENTAL ASSESSMENT

### CONTENTS

1. Introduction
2. Planning and Legislative Context
3. Scope of Assessment and Information Sources
4. Site Location and Development Proposals
5. Development History and Current Status
6. Site Characterisation
7. Preliminary Conceptual Site Model
8. Conclusions & Recommendations

### DRAWINGS

Figure 1	Layout – Work in Progress (Axis, May 2024)
D01	Historical Map: 1890
D02	Historical Map: 1960
D03	Historical Map: 1967/68
D04	Historical Map: 1976
D05	Historical Map: 1979/80
D06	Historical Map: 2003
D07	Site Features Plan

### APPENDICES

- A Photographic Records
- B Groundsure Report (includes Historical Plans)
- C UXO Risk Screening Mapping



## 1. Introduction

### 1.1. General

1.1.1. Axis P.E.D (Axis) on behalf of Fortis IBA Ltd, has instructed Smith Grant LLP (SGP) to undertake a Phase 1 geo-environmental desk study for a detailed planning application for an incinerator bottom ash (IBA) processing facility on a parcel of land (the "Site") located off South Road within the Hillhouse Enterprise Zone in Thornton-Cleveleys, Lancashire, FY5 4QD.

1.1.2. The assessment has been undertaken to determine any potential constraints with regards to ground conditions and contamination that may impact the proposed future use of the Site.

### 1.2. Scope of Objectives of the Report

1.2.1. This following report describes the Phase 1 Geo-Environmental Assessment undertaken by SGP in accordance with the brief agreed with Axis. The assessment has been prepared with reference to the Planning Practice Guidance provided in relation to land affected by contamination<sup>1</sup> and land stability<sup>2</sup> under the National Planning Policy Framework (NPPF)<sup>3</sup>.

1.2.2. The assessment has comprised a review of third-party information on the environmental setting of the site and the site's previous and current uses with respect to potential risks to the environment or human health, and a site inspection. This report contains a qualitative risk assessment, and where appropriate makes recommendations for further investigation and remedial actions appropriate to the proposed future use of the Site.

1.2.3. SGP is an environmental consultancy specialising in the risk assessment and remediation of contaminated and derelict land.

---

<sup>1</sup> Planning Practice Guidance (PPG): Land Affected by Contamination, issued 12 June 2014, last updated 22 July 2019, [www.gov.uk](http://www.gov.uk)

<sup>2</sup> Planning Practice Guidance (PPG): Land Stability, issued 6 March 2014, last updated 22 July 2019, [www.gov.uk](http://www.gov.uk)

<sup>3</sup> National Planning Policy Framework (NPPF), issued 27 March 2012, last updated 19 December 2023.

## 2. Planning and Legislative Context

### 2.1. National Planning Policy and Guidance

2.1.1. The NPPF 2023 sets out the Government's planning policies for England and how these are expected to be applied. The Framework provides some general guidance to local authorities on taking land condition into account in planning policies and decisions. Paragraph 180 of the Framework states:

*'Planning policies and decisions should contribute to and enhance the natural and local environment by [...]*

*e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality; and,*

*f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

2.1.2. The Framework further states in paragraph 189 in relation to Ground Conditions and Pollution that:

*'Planning policies and decisions should ensure that:*

*a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation measures including land remediation (as well as potential impacts on the natural environment arising from that remediation);*

*b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and,*

*c) adequate site investigation information, prepared by a competent person, is available to inform these assessments.*

2.1.3. Paragraph 190 of the NPPF is also applicable

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

2.1.4. Further guidance is provided in the Planning Practice Guidance on Land Affected by Contamination<sup>1</sup> which provides guiding principles on how planning can deal with land affected by contamination. The guidance sets out when contamination may be present, the role of planning when dealing with land which may be contaminated, what a contamination risk assessment may contain and how to determine unacceptable risk. The guidance states that where there is a reason to believe contamination could be an issue, proportionate but sufficient site investigation information should be prepared by a competent person to determine the existing or otherwise of contamination.

2.1.5. Further guidance is also provided in the Planning Practice Guidance on Land Stability<sup>2</sup> which provides guiding principles on how planning can deal with land stability. The effects of land instability may result in landslides, subsidence or ground heave. Failing to deal with land instability could cause harm to human health, local property and associated infrastructure, and the wider environment. Land stability issues occur in different circumstances for different reasons and vary in their predictability and in their effect on development. The guidance sets out steps to be taken when land instability is suspected to be an issue for a planning application, what a land stability risk assessment should cover with measures to be taken to mitigate the risk of subsidence. The guidance also sets out the role of the Coal Authority in the planning system to prevent land instability.

## 2.2. Local Planning Policy and Guidance

2.2.1. Lancashire County Council is the determining authority. The Development Plan for the Site is made up of the Joint Lancashire Minerals and Waste Development Framework Core Strategy Development Plan Document, the Joint Lancashire Minerals and Waste Local Plan – Site Allocation and Development Management Policies – Part One and the Adopted Wyre Local Plan (2011-2031) (incorporating partial update of 2022).

2.2.2. Policy CS9 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy Development Plan Document<sup>4</sup> relates to Achieving Sustainable Waste Management and requires that:

*(i) Natural resources including water, air, soil and biodiversity are protected from contamination in the vicinity of waste facilities and opportunities are taken to enhance them.*

2.2.3. Development Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan (September 2013) – Site Allocation and Development Management Policies – Part One aims to ensure that environmental impacts are minimised and mitigated for.

---

<sup>4</sup> Lancashire County Council, (February 2009) ' Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD. Management our Waste and Natural Resources'.

2.2.4. Wyre Council adopted their Local Plan<sup>5</sup> on 26<sup>th</sup> January 2023. This incorporates a partial update from 2022 and sets out the Council's overall vision, strategic objectives, spatial strategy and strategic planning policies. Policy CDMP 1 Environmental Protection states:

*1. Development will be permitted where in isolation or in conjunction with other planned or committed developments it can be demonstrated that the development:*

*a) Will be compatible with adjacent existing uses or uses proposed in this plan and it would not lead to significant adverse effects on health, amenity, safety and the operation of surrounding uses and for occupants or users of the development itself, with reference to noise, vibration, odour, light, dust, other pollution or nuisance, Applications will be required to be accompanied, where appropriate by relevant impact assessments and mitigation proposals;*

*b) In the case of previously developed, other potentially contaminated or unstable land, a land remediation scheme can be secured which will ensure that the land is remediated to a standard which provides a safe environment for occupants and users and does not displace contamination;*

*c) (i) Will not give rise to a deterioration of air quality in a defined Air Quality Management Area or result in the declaration of a new AQMA. Where appropriate an air quality impact assessment will be required to support development proposals*

*(ii) Where development will result in, or contribute to, a deterioration in air quality, permission will only be granted where any such harm caused is significantly and demonstrably outweighed by other planning considerations and appropriate mitigation measures are provided to minimise any such harm.*

*2. Proposals for the development of hazardous installations/pipelines, modifications to existing sites, or development in the vicinity of hazardous installations or pipelines, will be permitted where it has been demonstrated that the amount, type and location of hazardous substances would not pose unacceptable health and/or safety risks.*

2.2.5. The Wyre Local Plan includes the Site as part of Site SA4 of the Hillhouse Technology Enterprise Zone, Thornton. The Plan states that the Site is expected to be fully developed within the plan period (which extends to 2031). Several key development considerations are specified, of which no. 6 relates to contamination:

*6. The site is previously developed and there is the potential for ground and water contamination. A desk study will be required followed, if necessary, by more detailed site investigation.*

---

<sup>5</sup> Wyre Local Plan (2011-2031) adopted 26 January 2023

### 2.3. Legislation

2.3.1. Land contamination can harm human health, groundwaters, surface waters, soils, ecosystems and property. As such it is controlled, either directly or indirectly, through a range of legislation, including, but not limited to:

- Part IIA of the Environmental Protection Act 1990: establishes a system for identifying and remediating statutorily defined 'contaminated land'; and focuses on addressing contaminated land that meets the specific legal definition and cannot be dealt with via other means, including planning;
- Water Environment Regulations 2017: replaces previous legislation and outlines duties of regulators in relation to characterisation and classification of water bodies, environmental permitting, abstraction and impoundment of water;
- Environmental Permitting Regulations 2016: impose provisions to prevent ground and water contamination from operations requiring an Environmental Permit to operate and implement controls for operations relating to the treatment or handling of contaminated soils.

2.3.2. Similarly, when dealing with land that may be unstable, the planning system works alongside several other regimes including Building Regulations and the Coal Authority's responsibility for public safety risks arising from past coal mining activities.

### 2.4. National Best Practice and Guidance

2.4.1. The Environment Agency (EA) Land Contamination: Risk Management Guidance<sup>6</sup> provides an overarching framework for the assessment and investigation of land contamination. It replaces the previous Contaminated Land Report 11: Model Procedures for the Management of Contaminated Land 2004.

2.4.2. It is designed to be used in a range of regulatory and management contexts such as voluntary remediation, planning, assessing liabilities or under the Part 2A contaminated land regime. The guidance sets out a phased approach to the assessment of land contamination and specifies requirements for reports produced as part of the process, including Preliminary Risk Assessments (PRAs) and Generic and Detailed Quantitative Risk Assessments (GQRAs and DQRAs).

2.4.3. The EA Guidance is supported by, and cross-refers to, an extensive range of additional statutory and non-statutory guidance relating to aspects such as site investigations, protection of groundwater, understanding and managing asbestos, definition of waste and the specific investigation and assessment procedures under Part IIA. Where necessary, such guidance is referred to in the following report.

### 3. Scope of Assessment and Sources of Information

#### 3.1. Scope of Assessment

3.1.1. In undertaking this assessment SGP has carried out the following activities:

- Visit to view the existing Site and its setting;
- review of comprehensive historical mapping and aerial photography information;
- review of comprehensive environmental setting information (geology, hydrology, hydrogeology, industrial land uses, mineral excavation / extraction, landfilling / waste management activities);
- review of information provided by regulatory authorities and former Site occupier;
- review of information relating to potential unexploded ordnance (UXO);
- review of development proposals;
- development of preliminary conceptual site model (CSM) with regards to ground contamination; and,
- provision of recommendations for further investigations and mitigation, where deemed necessary.

3.1.2. The information has been used to determine i) the potential for any ground contamination to be present on or near the Site due to historical and current land uses and ii) the potential for any such contamination to pose a constraint to the proposed use of the Site and / or impact the surrounding environment. The information has been used to inform the risk assessment and determine any further work and/or investigations that may be required to identify any remedial requirements to ensure the Site is suitable for the proposed development with regards to ground contamination.

3.1.3. Information has also been obtained on general expected ground conditions at the Site and stability / physical ground conditions where these may constrain the planned development are included where relevant.

3.1.4. Similarly, structural building, asbestos or ecological surveys have not been carried out, although reference is made to relevant information and SGP observations were deemed relevant and applicable.

#### 3.2. Sources of Information

3.2.1. The baseline data has been obtained through a desk top study and Site visit.

3.2.2. The principal sources of information consulted in the preparation of this report include:

---

<sup>6</sup> Land Contamination: Risk Management, issued 8<sup>th</sup> October 2020, last updated 20<sup>th</sup> July 2023, [www.gov.uk](http://www.gov.uk)

**Table 3.1: Information Sources**

Date and reference	Author and source	Purpose and information content
<b>Topography, geology, hydrogeology and hydrology</b>		
http://mapapps.bgs.ac.uk [Accessed December 2023]	British Geological Survey (BGS).	distribution of geological units at surface including drift and artificial deposits, faults and mineral outcrops, borehole logs.
https://www.ordnancesurvey.co.uk/osmaps/ [Accessed December 2023]	Ordnance Survey (OS), Explorer Map, 1: 10,000	general mapping information including structures, boundaries, ground features, water features etc.
<b>Historical data</b>		
Satellite imagery	Various	recent historical features
Groundsure Report Historical Mapping (ref:GS-B8Q-KZT-IFI-F2A); December 2023 (provided in Appendix B)	Groundsure	historical mapping at 1:2,500, 1: 10,000 and 1: 10,560 scales from 1888 onwards.
<b>Information Review</b>		
Groundsure Report Datasheet (ref:GS-A1G-516-6R9-KPQ); December 2023 (provided in Appendix B)	Groundsure	hydrological, waste, hazardous substances, geological, land uses, and natural stability hazards based on historical data and geological records.
BRE 211	Public Health England	guidance for the installation of radon protection measures.
https://magic.defra.gov.uk/MagicMap [Accessed December 2023]	Defra	web-based interactive map containing information on nature conservation areas, aquifer designations, source protection and nitrate vulnerable zones.
<a href="http://www.zeticauxo.com">www.zeticauxo.com</a> (provided in Appendix C)	Zetica	unexploded bomb risk mapping
PVC Plant – An Introduction (ref: RWG/JML8 <sup>th</sup> September 1993)	ICI Chemicals and Polymers Limited	Details operations undertaken onsite when under operation as PVC9 Plant
'Corvic 9' – Induction Course Handouts No. 3 to 7 ref: VIN9/STM/IND,1 (24 <sup>th</sup> November 1987)	Author not specified.	Details processes and location of processes completed on site
Control Mechanism to prevent potential water pollution of Royles Brook during Demolition activity on ex Vinnolit plant at Hillhouse Business Park. (Date: unknown)	Author not specified.	Details pollution prevention into Royles Brook during proposed site demolition.
Incinerator Bottom Ash (IBA) Processing Facility – Hillhouse. Surface Water Collection, Reuse and Drainage Strategy. Draft (May 2024)	Fortis IBA Limited	Details draft proposals for reuse of rainwater and drainage strategy.
Drawing; 'ALL DRAINS 08'	Addison Project Plc	Shows routes and outfalls for surface water to Royles Brook
European Vinyls Corporation (UK) Ltd. PVC9 Plant. Environmental Protection Act 1990. Variation Notice and Introductory Note. Ref:	Environment Agency	Permitted industrial operations at the Site from 1 <sup>st</sup> April 2003 until being superseded by permit below.

Date and reference	Author and source	Purpose and information content
Variation Notice Number BT9771. Authorisation Number: AP7563		
Environmental Permit: TP3833GG. Operator: Vinnolit Hillhouse Ltd. For: PVC9 Plant (2 <sup>nd</sup> September 2008)	Environment Agency	Permitted industrial operations at the Site since September 2008.

### 3.3. Site Inspection

3.3.1. An inspection of the Site and the immediate surrounding area was undertaken by an SGP consultant on 14<sup>th</sup> December 2023. A second visit was made on 26<sup>th</sup> January 2024 to inspect an additional area to be incorporated into the planning application as requested by the Client. The Consultant was accompanied around Site by the Operations/SHE Manager of Thorntons Facilities Management Limited who provides management of facilities (site services and security etc.) for the Site and surrounding chemical works.

3.3.2. A photographic record of salient features is provided in Appendix A.

### 3.4. Data from Regulatory Sources

3.4.1. The Environment Team of Wyre Borough Council were contacted on 5<sup>th</sup> December 2023 to ascertain if they held any environmental information pertaining to the Site. They responded confirming they did not have any information in addition to what we were already in possession of and referred us to the planning portal for any information regarding planning applications.



## 4. Site Location and Development Proposals

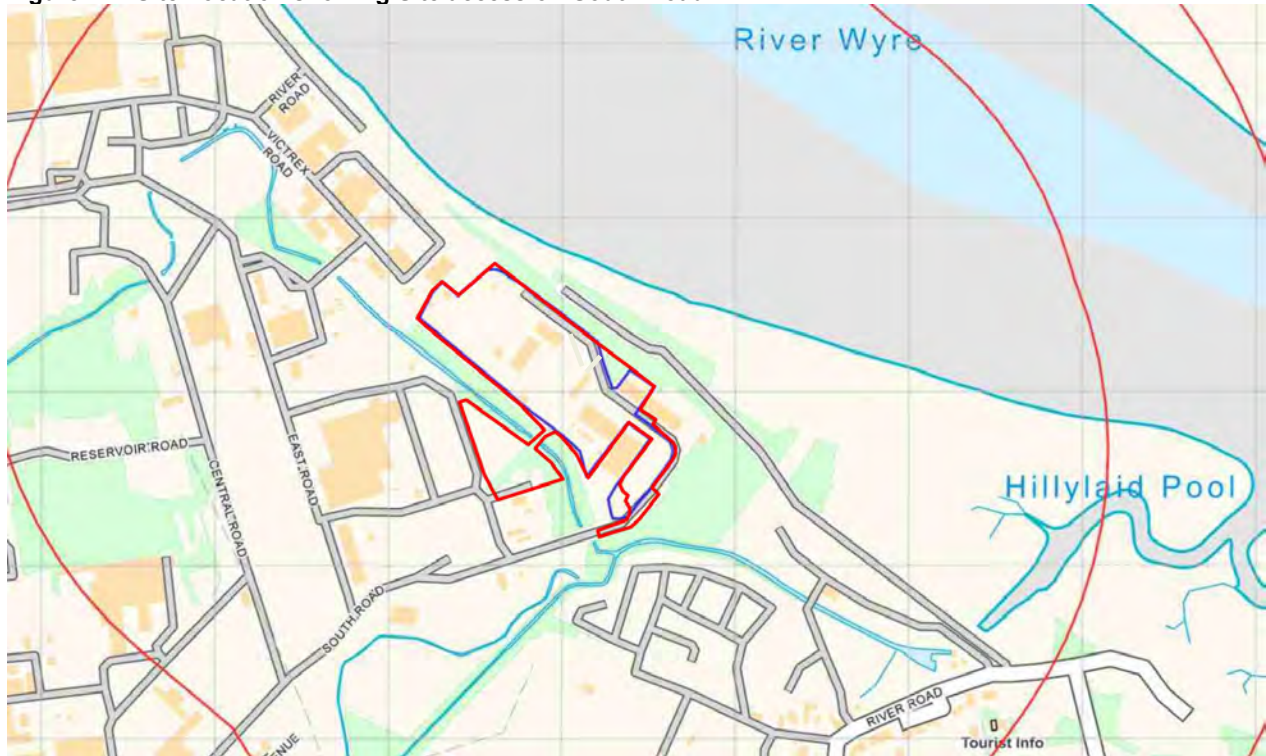
### 4.1. Site Details and Location

4.1.1. The Site is located within the Hillhouse Technology Enterprise Park (also referred to as the Hillhouse Industrial Park and Hillhouse Technology Enterprise Zone), at approximately 1.8km to the north-east of the town of Thornton-Cleveleys. The Site boundary includes the main plot area (which is devoid of buildings) together with an existing office building located in the east-northeast, across the Site access road (connecting to South Road) which is understood to have also contained small laboratories, Part of the Site extends to land located beyond the southern bank of the Royles Brook which includes the former VCM off-loading area to the southwest and some foundations for buildings and associated infrastructure which are understood to never have been built. This building is attached to workshops and an engineering facility 'Karpa Engineering' that are located off Site and currently used by the engineering firm located directly next door. Site access is shown below in Figure 4.1.

**Table 4.1: Site Details**

<b>Address</b>	Hillhouse proposed IBA Processing Facility, South Road, Hillhouse Technology Enterprise Zone, Thornton-Cleveleys, Lancashire. FY5 4QD
<b>National Grid Reference</b>	335053 443354
<b>Local Authority</b>	Wyre Council
<b>Site Areas</b>	Total: 3.79 hectares (ha) of which ~ 2.7ha is main former processing and storage area
<b>Current Use of Site</b>	Previously developed land which is currently unused other than an existing office building.  The southern boundary of the section of the Site to the southwest of Royles Brook is partially used for material storage by a crane hire business.
<b>Proposed Use</b>	Proposed Incinerator Bottom Ash Processing Facility (further details are provided in 4.2 below)

**Figure 4.1: Site Location showing Site access off South Road**



Reproduced from Groundsure report (ref: GS-B8Q-KZT-IFI-F2A) with boundary amended.

#### 4.2. Proposed Development

4.2.1. It is understood the facility will include an incinerator bottom ash (IBA) processing facility which will accept 350,000 tonnes per annum (tpa) of IBA (the majority is to be sourced from the Lostock Energy from Waste Facility near Northwich). It is envisaged that 10% of the unprocessed IBA arriving on site will be water with the remaining 315,000 tpa, following screening and maturation, would be exported off Site (10% metals as separated out from the IBA during processing on Site, 90% as IBA for use in aggregate manufacturing).

4.2.2. The proposed development for the Site as shown a layout<sup>7</sup> shown as appended within Drawings section) will comprise:

1. Officing and welfare (in southeastern area of Site);
2. Processing Plant (on area of Site to south of Royles Brook);
3. Stockyard building; and,
4. Metal storage building with adjacent aboveground fuel tank (circa 20,000 l), Adblue Tank (with capacity circa 2,000 l) and wheel wash with associated tank.

4.2.3. To support the above, the following infrastructure will be required on Site:

- Weighbridge;
- Laboratory

- Rainwater holding tanks x 3 (*possibly more*);
- hoppers, screeners and conveyors within processing building
- Metal bays;
- Aboveground fuel tank (containing diesel of c. 20,000 l) bunded to accommodate 110% capacity of tank;
- Aboveground additive tank (containing Ad-Blue tank of c, 2,000 l), bunded to accommodate 110% capacity of tank;
- wheel wash with associated aboveground tank to collect and recirculate washings;
- Petrol interceptor (to be installed within the car parking area adjacent to the officing proposed in the southeast);
- Footpath over Royles Brook;
- Vehicle turning areas.

4.2.4. The existing 1970s single storey office building located in the northeast (which also previously housed the small laboratories of the main Site) area will be demolished.

4.2.5. Six buildings are proposed, as follows:

- Building with office and proposed welfare facilities adjacent to proposed weighbridge;
- Building at Site entrance housing welfare on ground floor with offices above;
- Building at Plant Area with laboratory to ground floor and offices and welfare on the first floor.
- Processing building;
- Stockpile Storage Shed; and,
- Metals storage shed containing bays to store metal.

4.2.6. All of the proposed buildings housing officing/welfare and/or laboratories will be constructed as modular portacabin / container cabin style which will be raised off the ground on concrete plinths.

4.2.7. Access to the Site is at the southern extent of the Site, via South Road. The existing access road within the Site, running along the northeastern boundary of the Site, would be retained. Slight modifications to the Site access are proposed.

4.2.8. Rainwater will be harvested from building rooves to be reused for damping down and washing down. Overflow runoff, and runoff from the car park/office area (i.e. the main site entrance), will be directed to Royles Brook with the flow attenuated to reduce peak storm flows. The wheel wash will recirculate water via its designated tank but will be topped up as necessary.

---

<sup>7</sup> To be updated with the Axis planning drawing site layout once available

4.2.9. Surface water runoff from the southern part of the Site external area will be pumped to an above ground storage tank. No overflow for discharge to Royles Brook is proposed as this water will be potentially contaminated. This water is to be reused with any excess water exported off site for treatment.

4.2.10. As for much of the Hillhouse Business Park, the Site is currently in ownership by Le Fylde Estates (previously known as NPL Group) which took ownership in 2003 from ICI Plc. Thorntons Facilities Management Ltd currently manages the Site. The Site would be leased by the Applicant for the purpose of the development proposal.

## 5. Development History and Current Status

### 5.1. Historical Development

5.1.1. A summary of significant features, developments and land uses shown on available historical Ordnance Survey maps is provided in Tables 5.1 and 5.2 below. The maps are available from 1848. Copies of selected maps and aerial imagery are provided in Drawings D01-D06.

5.1.2. Only key features of interest are summarised below; for full details reference should be made to the complete set of historical mapping, as provided by Groundsure Insights (provided in Appendix B). Where key features have been observed their distance to the closest part of the respective Site is made.

### 5.2. Adequacy of Historical Information

5.2.1. Whilst there are some gaps in the historical map coverage (particularly with reference to historical mapping post 1992), it is considered that the available mapping provides adequate coverage of the Site and immediate surroundings to inform the assessment of potential ground conditions and contamination status of the Site.

<b>Table 5.1: Summary of Development History (On site)</b>				
<b>Feature</b>	<b>Area</b>	<b>Date shown present on Historical Mapping (mapping scale)</b>	<b>Date no longer shown on Historical Mapping (mapping scale)</b>	<b>Details</b>
Embankment with track. Salt marshland directly beyond	On Site (along northeast boundary)	1848 (1:10,560)	1967/68 (1:10,560)	Shown within the northeastern quarter of the Site with groynes shown jutting into the river Wyre from 1891. <i>It is possible this is an error in the accuracy of the placement of the Site boundary on early OS mapping.</i> <i>(refer to drawing D01)</i>
Holme Pool (later known as the Royles Brook)	just at the southeastern corner of the Site)	1848 (1:10,560)	Still present	Stream which just encroaches into the southeastern corner of the Site which forms part of the Site access from the existing South Road and is built over this watercourse which flows under the road within a culvert.
Potential pit / embankment	On Site (within central-northern area of Site)	1967 (1:2,500)	1981 (1:2:500)	There is an excavation the other side of the railway. It is potentially a small pit but may possibly exist as an embankment for the existing railway. <i>(refer to Drawing D03)</i>
Mound/embankment	On Site (within NW area of Site)	1960 (1:1,250)	1980 (1:1,250)	An elongated mound which appears to extend off-site to the northwest encourages onto the northwestern Site corner. It is considered most likely that this forms part of the embankment created for the railway line.
Railway	On Site: Along northern and eastern boundaries	1960 (1:2,500)	1976 (1:2,500)	The single-track railway has been laid from its terminus at the ammonia soda works located 400m to north/northwest. A second railway track follows the same alignment but is located just beyond the Site boundary. Railway is developed sometime between 1951-1960. <i>(refer to drawing D02 and D03)</i>
Mound of sand and gravel	On the southwest section of the Site, along the southwest embankment of Royles Brook)	1960 (1:2,500)	1973 (1:10,000)	Mound shown in an elongated shape along the western bank of Royles Brook (potentially associated with dredging of the Royles Brook watercourse).

<p>Extensive industrial development</p>	<p>On Site</p>	<p>1980 (1:10,000)</p>	<p>Still shown on Mapping in 2023 (1:10,000)</p>	<p>Site was developed at some point between 1976 and 1980.</p> <p>The development has comprised several tanks (details within next row) and four main buildings plus a series of smaller, potentially ancillary buildings;</p> <ul style="list-style-type: none"> <li>• Two buildings of a rectangular configuration and one square building all of which are located within the central area of the Site.</li> <li>• One smaller building straddling the NW Site border;</li> <li>• One building within the southeast, straddling the border.</li> <li>• One rectangular building in the eastern site corner which appears to be linked via a walkway or similar to the building located off site and directly to the east.</li> <li>• Four small square buildings located within the southern site corner.</li> </ul> <p><i>Refer to Drawing D05 and D06</i></p> <p>There are several roads and areas of hardstanding located within the southeastern two-thirds of the Site and the access road from the southeast is shown.</p> <p>The site configuration does not appear to have changed since its initial development.</p> <p>The land to the southwest of Royles Brook comprises the VCM off-loading area where tankers delivered vinyl chloride to Site which was then pumped across the Brook via a gantry. This included multiple tanks, a control room, and a bunded portion of the road. Another small building is located to the south of the VCM off-loading area but is removed from mapping by 1994 along with the majority of the VCM off-loading area. An area of constructed foundations is present in the southeast corner but according to the site representative, it was never developed further. A circular concrete pad of unknown use is present in the southeast</p>
---	----------------	----------------------------	--	---

				<p>which is shown on mapping from 1976 and is still present as of 2024.</p> <p><i>Although not shown on mapping, all aboveground features (other than office block in the eastern corner of the Site) were demolished between 2021 and 2022. It is understood that gravel from the demolished buildings was used to backfill any excavations made. All belowground foundations, drainage and other utilities are still present.</i></p>
Tanks	On Site	1976 (1:1,250)	Still shown on Mapping of 2023 (1:10,000)	<p>One octagonal tank of approximately 15m in diameter within the north-northwest.</p> <p>Four oblong shaped tanks in north all within a bund.</p> <p>Two small circular tanks which appears to be banded, located within the northern site corner.</p> <p>A series of tanks (the total number is unclear) located straddling the northwestern site border.</p> <p>Ten tanks shown along the SW site border. Tanks of varying sizes, mainly circular.</p> <p>Three circular tanks located within the central part of the site arranged on a SW-NE alignment.</p> <p>Three small circular banded tanks and one square tank located within the NE/central area of the site.</p> <p>One square shaped tank within the south-central area of the site which appears to be located within a bund.</p> <p>Two large circular tanks and eight smaller tanks are located in the VCM off-loading area.</p> <p>According to OS mapping, the tanks do not appear to have changed configuration.</p> <p>Tanks shown on historical mapping will all be aboveground.</p>
South Road	On Site	1981 (1:2,500)	Still Present (identified during Site walkover)	<p>This has been built over the Hillylaid Pool where the stream flows within a small, culverted section.</p>

Note: Dates refer to dates provided on OS mapping; actual dates may differ (*mapping limited to 1890-2003 for the 1:2,500 scale and 18:48 to 2023 for the 1:10,560 or 10:10,000 scale*).



<b>Table 5.2: Summary of Development History (Off site)</b>				
<b>Feature</b>	<b>Area (<i>approximate distance from site</i>)</b>	<b>Date shown present on Historical Mapping (<i>mapping scale</i>)</b>	<b>Date no longer shown on Historical Mapping (<i>mapping scale</i>)</b>	<b>Comments</b>
Chemical Works (Corvic 5+6) Indicated as 'Works' from 1967/68	Immediate SW/W of the Site	1951 (1:10,560)	2001-2010 (1:10,000)	With several buildings, railways and sidings, tanks, reservoirs and access roads.  Increases in size and building/infrastructure density by 1967/68.  Several of the buildings appear to have been removed between 2001 and 2010.
Storage building / water deluge tank (now occupied by a crane hire business)	Immediate south of southwest section of the Site	1976 (1:1,250)	Present	This building first appears on mapping in 1976. The former water deluge system tank is not visible on mapping but can be seen on satellite imagery from 2000 to 2022. Satellite imagery shows the storage building being reclad with new metal sheeting in 2015.
Bicycle shed	40m S of southwest section of the Site	1976 (1:1,250)	Present	During the Site inspection, this bicycle shed was constructed of brick walls with an asbestos cement sheeting roof.
Former switch house	40m S of southwest section of the Site	1979-1980 (1:1,250)	Present	A brick building that formerly stored the switch house equipment to provide power to the site.
River Wyre with associated marshlands/mudflats	50m Along NE site boundary	1848 (1:2,500)	Present	Flowing to north/northwest. From mapping of 1891, groynes are shown jutting into the River Wyre and the Salt flats appear to have increased in size by 1967/1968.
Holme Pool (later known as Royles Brook which confluences with the	50m at closest point to site to W/SW	1848 (1:2,500)	Present	Flowing south/south-eastwards  Other than a small section which traverses the Site boundary

Hillylaid Pool (just beyond the southern corner of the Site)				(culverted under the existing South Road), the Hillylaid Pool is located off Site.
Large pool (of Holme Pool watercourse)	40m to NW	1848 (1:10,560)	1891 (1:10,560)	Shown occupying part of fields by 1891.
Hillylaid Pool (stream)	50m S & SE	1848 (1:10,560)	Present	By 1981, an additional drain has been constructed close to the southeastern bank of the stream. This is also named as the Hillylaid Pool.
Hillhouse Farm	400m SW	1891 (1:10,560)	1951 (1:10,560)	No longer shown by 1951 when the chemical works is shown as built occupying the same (& more extensive) footprint.
Ammonia Soda Works	500m to NW	1910 (1:10,560)	1967/68 (1:10,560)	Increases in size by 1910 with railway sidings and railway (one of which crosses the Site)
Gas Works	600m to WNW	1910 (1:10,560)	1930/31 (1:10,560)	Small in size. Site features are not evident.
Two small unnamed buildings	NE Within 5m of boundary	1967/68 (1:10,560)	1981 (1:10,000)	Presumed to be associated with the railway.
Drain	W 60m (potentially also on Site)	1967/68 (1:10,560)	1981 (1:2,500)	Assumed to flow SE.
Refuse tip	SE 430m	1967/68 (1:10,560)	1981 (1:10,000)	Shown as a park on mapping of 1981
Caravan park	60m SE	1981 (1:10,000)	Present	Site is no longer named on mapping of 2023 but shows the same configuration
Village of Stanah (originally named 'Steyna')	SE 500m	1848 (1:10,560)	Present	The village becomes further developed by 1930/31.
Village of Trunnah (named as Thornton by 1910)	1km to SW	1848 (1:10,560)	Present	Expands in size by 1967/68

### 5.3. Historical Site Operations

5.3.1. The Site was known as PVC 9 Plant (originally known as CORVIC 9) and processes involved the mixing and polymerisation of liquid vinyl chloride monomer (VCM) to produce polyvinyl chloride (PVC). The VCM was delivered by tanker via the VCM off-loading area located in the

southwest of the Site and then pumped across the Brook in aboveground pipes and gantries to the main Site.

5.3.2. It is understood that industrial operations on Site commenced in the late 1970s and continued until 2020. The Site was initially operated by ICI Chemicals Limited and then in 1995 this transferred to European Vinyls (UK) Limited. Ineos Vinyls UK Ltd took over operations in around 2007 with Vinnoil Hillhouse Limited taking over in around 2008.

5.3.3. Granular PVC powder was produced and milled with four main types of PVC being produced on Site (referred to as: P72/578, MP7151, MP7154 and MP7155). PVC pastes were also produced which were stored off Site although for a short time during operations, it is understood that they were used as feedstock.

5.3.4. A basic summary of the processes previously undertaken on Site included:

- **Pre-Seed – and seed** stages involving the introduction of various additives to the VCM stock feed.
- **Mixing:** Depending upon the type of PVC produced, there was then a stage involving a mixing vessel.
- **Autoclave Cycle:** The polymerisation of the VCM was then undertaken within an autoclave using immense heat and pressure in a series of thirty distinct stages.
- **Stripping:** The latex product was then sprayed under steam within the stripping vessel using a centrifuge to remove VCM as part of the 'stripping process'. The VCM gas is then sent to the VCM gas holder.
- **Drying:** The product was then dried.
- **Cleaning:** Routine cleaning of the autoclaves and other tanks was undertaken to prevent buildup of residues.
- **Recirculation of biproducts:** Unreacted VCM in addition to residual PVC was used in future processing, and VC gas was liquified and reused within processing thereafter.
- **Aqueous Discharge:** Process water was sent to the effluent treatment tank for treatment and further stripping processes before it was discharged to a settling lagoon and then to the adjacent discharge point to the Royles Brook and River Wyre. The settling lagoon was no longer used from around 2003 and was located off Site.
- **Solid Wastes:** Were collected, temporarily stored and then sent off Site to landfill.

#### 5.4. Historical Site Buildings and Other Infrastructure

5.4.1. Buildings and Infrastructure associated with the heavy industrial operations performed on Site included:

- Additive Building (four storeys high) and adjacent additive Stock Tank Farm;
- Six autoclave vessels (plant equivalent of five storeys in height);

- Vinyl Chloride Reception and Recovery Plant;
- Mixing vessel and homogeniser;
- Stripper vessel;
- 17MW gas turbine and 12MW burner to be used on standby (for electricity and hot air-drying operations);
- Two 12 MW steam boilers for generation of steam and for heating autoclaves;
- Three cooling towers for discharge of water vapour;
- Demineralisation water plant (for polymerisation process);
- Dryer, mills and packing building (of five storeys in height);
- Effluent treatment plant and adjacent below ground pits (comprising solids removal and pH control of final effluent discharges to River Wyre) - there is no fuel interceptor on Site;
- Vents treatment – of emissions to air;
- Storage: raw materials, finished product, waste;
- Electrical transformers;
- Single storey control room;
- Single storey building containing workshops, offices and laboratories; and,
- VCM off-loading area in the north which included a small control room, spillage drains, two large VCM storage tanks, and eight smaller tanks.

5.4.2. The section of the Site located to the southwest of Royles Brook comprised of a small building, a set of four aboveground tanks, a circular concrete pad of unknown use, and an area of unused foundations. The tanks and building were removed by 1994 but the foundations remained. According to the Site representative during the walkover, the foundations were constructed in the 1970s in preparation for further development but were not utilised and have remained in-situ to present day.

5.4.3. The buildings were generally of a steel frame and steel cladding construction and infrastructure was connected via a series of overhead pipe bridges;

5.4.4. The operations extended outside the Site boundary whereby the oil and fuel store, gas pump house, workshops and engineering building, polymer paste store fire water tank, and Romney Hut were all located off site. There was also an aboveground pipeline which carried liquid PVC monomer (VCM) to the Site from the VC4 Plant.

#### 5.5. Chemicals and polymers used, generated and stored during the former processing on Site

- Additive Building and Additive Stock Tank Farm:
- Ammonium persulphate (initiator);
- Aqueous Ammonia (initiator);

- Ammonium myristate (initiator);
- Ascorbic acid (activator within autoclave);
- Sodium sulphite (activator);
- Emulsifiers (e.g. Nansa 1395 or Empicol);
- De-foamers (e.g. Bevaloid 66241 and Nalfloc 66160);
- Heat stabilisers (e.g. sodium Bicarbonate, sodium thiosulphate, sodium carbonate);
- Synperonic NP5 (viscosity depressant).
- Three 200m<sup>3</sup> aboveground latex hold tanks.
- Two aboveground bunded tanks containing Empimin OT (contains ethanol).
- Aboveground tank containing Lauroyl Peroxide (highly flammable).
- Vinyl Chloride Reception and Recovery Plant: contains 2 x 80m<sup>3</sup> bunded aboveground tanks holding VCM and recovered VCM containing Topanol (an inhibitor).
- Autoclave vessels using heat and steam, plus K methyl styrene used as a reaction stopper.
- Mixing vessel and homogeniser: using VCM and flaked solid lauroyl peroxide with an emulsifier alongside demineralised water.
- During the autoclave cycle, demineralised water, copper sulphate nitrogen gas, ammonia and ammonium per sulphate are added with ascorbic acid and/or sodium sulphate used as an activator. VCM gas is produced as a waste and the radioactive source is checked continually. Antifoam is added if the level is too high. Solid VC 'pebbles' generated within the autoclave processing are removed and cooling water is sent to the cooling towers.
- During the autoclave tank cleaning process, a build-up suppressant solution (anticipated as the Synperonic NPS or Empimin O.T.) is added.
- The stripper vessel sprays latex using steam to remove the VCM. The VCM gas is then sent to the VCM gas holder.
- The electrical transformers will have used hydraulic oils although in light of the ban of use of polychlorinated biphenyls (PCBs) in the UK in 1980, it is unlikely that the electrical transformers will have contained PCBs when they were commissioned.
- Oils and small volumes of chemicals (e.g. glycols and transformer fluids etc.) will have been used during the maintenance of plant and machinery although the oil stores were located off Site.
- It is understood that mercury was not used as a catalyst within the processing on the Site but this occurred on other areas of the Hillhouse Site up until 1993.

5.5.1. The location of the former processes and storage areas is shown on the Site features Plan (See Drawing D07).

5.5.2. It appears that there was little change to the plant following its original construction although it is noted on the planning portal that planning was granted for the construction a wash structure and

container filling building on 6<sup>th</sup> April 1983 the construction of two chemical storage tanks along southern boundary in 1990 (90/01527) and for a 46m high chimney gas turbine exhaust stack and external plant equipment in 1997<sup>8</sup>.

5.5.3. Additionally, in January 2003, planning was granted to European Vinyls (UK) Ltd for the construction of a single storey dewatering building within the northern corner of the Site. Conditions were provided in association with the requirement for investigation and assessment of contamination within this area following a phased approach. This included the provision of a desk study, followed by an intrusive investigation, and remediation with validation as required. The planning permission was granted. However, the associated documentation is not available on the planning portal.

#### 5.6. Generated Wastes

5.6.1. The process generated a total of 454.2 tonnes (t) of aqueous discharges within 430,000 tonnes (m<sup>3</sup>) of water per year. Aqueous discharge included 2.5t free ammonia, 0.22t chromates, 0.25t lauroyl peroxide, 0.2t sodium hydroxide, 1t lubricating oils, 0.93t methyl styrene 6.8t active matter surfactant plus 431.1t VC and 6.8t VCM to plant drains. An effluent treatment and dewatering plant was located in the northeast of the Site which had an associated underground chambered pit. The infrastructure associated with this treatment plant has been decommissioned in 2020 alongside the infilling of the underground chambered pit. It is understood that this decommissioning operation was not validated for establishing the presence of residual contamination.

5.6.2. Various atmospheric emissions included: VCM gas, PVC, methane, carbon dioxide, nitrogen, nitrous oxides (NOx), sulphur dioxide (SOx), carbon monoxide, chlorine gas, ammonia gas, water vapour and active matter surfactant.

5.6.3. Annual wastes to landfill from the process included PVC and VCM process wastes, active matter surfactant together with packaging and general wastes.

#### 5.7. Permitted Site Activities

5.7.1. According to available information the first authorised permit for the Site operations was recorded as AP7563. This was authorised for European Vinyls (UK) Limited in February 1995 under the Environmental Protection Act 1990. The permit was subsequently varied three times thereafter (in 1998, 1999 and 2003), the latest variation was reference: BT9771.

5.7.2. Ineos Vinyls UK Ltd had a Part A(1) industrial installation permit ref: EPR/BU5534IQ) which was issued on 22/01/2007 to produce polymers and plastic materials on Site. This permit was later recorded as superseded where permit ref: EPR/TP3833GG initially authorised under the

---

<sup>8</sup> Planning reference: 97/00731

Pollution Prevention and Control (England and Wales) Regulations 2000 was issued for the same industrial processes to Vinnolit Hillhouse Ltd (Vinnolit) on 2nd September 2008. Under Environmental Permitting (England and Wales) Regulations 2010, the permit for Vinnolit was issued on 04/11/21 and recorded as effective on 08/11/23 but specified as having been surrendered.

5.7.3. The permit was granted to Vinnolit on the premise that monitoring of emissions as required by the Environment Agency was undertaken. The monitoring requirements are detailed within Schedule 4 and those for discharge to water are summarised as follows:

**Table 5.3: Monitoring of Point Source Emissions to Water (other than to sewer)**

Receiving water	Contaminant	Discharge Limit	Reference Period	Monitoring Frequency
River Wyre	VCM <sup>9</sup> (from effluent plant and storm water)	100mg/l (1mg/l annually)	Spot sample	Weekly
	Chemical Oxygen Demand	250mg/l annually	Flow weighted composite sample	Monthly & quarterly (using differing methods of analysis)
	Suspended solids	No limit set (30mg/l annually)	Flow weighted composite sample	Quarterly
	Mercury	0.05mg/l (0.1kg annually)	Compliance based on mass balance calculation	Annually
	Temperature	40 degrees Celsius (maximum)	Maximum 10minute (rolling average)	Continuous
	pH	Min: 5 Max 10	24hr flow proportional sample	Weekly (continuous within process effluent)
	Flow	No limit set	Monthly average	Continuous
Royles Brook	Uncontaminated storm water from main plant areas No parameters set	No limit set	N/A	N/A

5.7.4. It is noted that discharge limits to the River Wyre were previously higher for certain chemical parameters under the previous environmental permit. It was also previously a requirement that dichloroethane was monitored with an associated limits of: MAC<sup>10</sup> 5 mg/l and 2mg/l as AA<sup>11</sup>. Maximum concentrations of parameters within water were specified in association with release from the settling lagoon. This settling lagoon was located off Site. The results of monitoring undertaken have not been provided for review.

5.7.5. In addition to the above, compliance with the permit also included monitoring of emissions of PCM and particulates to air.

<sup>9</sup> chloroethylene

<sup>10</sup> Maximum admissible concentration

<sup>11</sup> Annual average

5.7.6. In January 2005, planning permission was granted<sup>12</sup> for the use and storage of hazardous substances at the Site which related to the storage and processing of VCM.

5.7.7. The Groundsure reports the Site as being a permitted under The Control of Major Accidents and Hazards (COMAH) Regulations as a lower tier operator. The licence holder is reported as Victrex Manufacturing Limited and hence it is considered this may reflect operations that are occurring by the operator located directly to the west/northwest.

## 5.8. Pollution Prevention

5.8.1. From available information, the following pollution prevention plan has been adopted whilst the Site was in operation under the agreement of the EA.

- Placement of a penstock valve at the end of Royles Brook (150m downstream of Site discharge point) prior to its confluence with the Hillylaid Pool which can stop water flow if necessary.
- Monitoring of pH at the penstock with an alarm if the pH falls below pH 5 or over pH 10.
- Checking the pH system together with the clarity of water every morning and recording findings.

## 5.9. Site Demolition

5.9.1. It is understood that Vinnolit undertook Site decommissioning, which occurred between 2019 and 2020 where all plant equipment was decontaminated and left in-situ. The clean surface water was then diverted to the Royles Brook (under EA agreement). No effluent was released following decontamination operations.

5.9.2. Removal of the aboveground infrastructure and demolition of the Site buildings to slab level occurred thereafter between 1<sup>st</sup> October 2020 and 8<sup>th</sup> July 2021. Under approval of planning permission 20/00945/DEM made by Vinnolit. The demolition area extended to an area of industrial plant to the southwest and west, located outside of the current Site boundary and the demolition methodology (Planning Methodology V2, dated 9<sup>th</sup> February 2021 included the following aspects:

- Services isolation;
- Effluent pit protection (*commissioning prior to demolition and reinstatement following demolition completion*);
- Protection of Royles Brook (as per section 5.9.4) (*commissioning prior to demolition and reinstatement following demolition completion*);
- Removal of minor containment walls;

---

<sup>12</sup> Planning reference: 04/01410/HAZ



- Demolition asbestos survey;
- Removal of pipe bridges and gantries;
- Demolition of:
  - Cooling towers, VC storage, stripping vessel, gas holder, additives building, control room, dryer building, Romney Hut, workshops/offices and labs. PPS warehouse, East Stores and fire water provision; and,
- Final report confirming demolition undertaken (*this has not been made available for review but it is understood that there are individual records kept by Thornton Facilities Management Ltd for each building and plant regarding the decontamination and demolition undertaken.*)
  
- It is understood that the investigation, assessment and remediation (with associated validation) of soils and shallow groundwater was not undertaken as part of the decommissioning and demolition works.

5.9.3. The EA commented upon the planning application (dated 29<sup>th</sup> October 2020) to demolish the Site where they recommended the following was adhered to:

***Land contamination: risk management and good practice***

*We recommend that developers should:*

- 1. Follow the risk management framework provided in 'Land contamination: risk management' when dealing with land affected by contamination*
  
- 2. Refer to our Guiding principles for land contamination for the type of information that we require in order to assess risks to controlled waters from the site – the local authority can advise on risk to other receptors, such as human health;*
  
- 3. Consider using the National Quality Mark Scheme for Land Contamination Management which involves the use of competent persons to ensure that land contamination risks are appropriately managed*
  
- 4. Refer to the contaminated land pages on gov.uk for more information.*

5.9.4. Natural England was consulted on the proposed demolition of the Site whereby in addition to the recommendation of a Habitats Regulation Assessment, they requested that a consideration of the water quality impacts were undertaken in addition to an assessment of dust, debris and water run-off impacts on the ecologically designated Sites.

5.9.5. The Environmental Permit held by Vinnolit (ref: EPR/TP3833GG) includes requirements for the closure and decommissioning whereby a Site Closure Plan is required in order to minimise any pollution risk on closure and decommissioning.

5.9.6. A brief document detailing the pollution control measures to be undertaken during decommissioning on Site has been provided for review which in summary includes:

- Closure of the discharge point from Site to the Royles Brook to be closed;
- Testing of water build-up for pH (with pH 6-8 being of normal range) and undertaking a visual check for any white residue and/or oil prior to allowing the surface water to discharge to the Royles Brook;
- Dealing with any exceedances during sampling within the controlled area of the demolition plot.
- Erecting fencing along the westerly Site boundary to capture any windblown debris during demolition.

#### 5.10. Historical Development Summary

5.10.1. The Site is undeveloped agricultural (or possible marshland associated with the adjacent salt/mud flats). A railway connected to the offsite Ammonia soda works is shown upon an embankment from 1960 and which is no longer shown by 1976. By 1981, the Site is developed by industrial buildings and associated infrastructure (tanks, access roads etc.) which appear to be connected with industrial land directly to the northwest and southeast. The VCM off-loading area was removed in the early 1990s and there were several small additions to the main plant during its operation until the decommissioning of aboveground infrastructure in 2019-20.

5.10.2. The wider surrounding area was once agricultural and marshland on the banks of the river Wyre but becomes gradually industrialised by various chemical works and associated infrastructure from mid 1900s to 1980s.

#### 5.11. Present Land Condition

5.11.1. A summary of existing significant features, recent activities and land uses shown on contemporaneous aerial photography, Site inspections and anecdotal evidence is provided in Table 5.4 below.

**Table 5.4: Present Land Condition**

<p><b>Site Description</b></p>	<p>The Site is a recently demolished PVC powder production facility leaving only former below ground building foundations, an infilled effluent pit, drainage and a small number of other services (water main and electricity) plus a one-storey office building (which previously also used to contain laboratories) built in the 1970s in the east of the Site which will be demolished. Outside of the concrete building slabs, hardcore is present across the Site surface, the origin of which, is uncertain but may be from crushing of former buildings and other brick built or concrete structures.</p> <p>The area to the southwest of Royles Brook comprised of the former VCM off-loading area and open land. It contained a small control building (no longer in use), concrete pads, and relict drainage in the north. Along the southern boundary, an area of unused foundations was present. These were set 1m below ground level, with four small concrete towers rising 2m from the floor.</p> <p>A circular concrete pad was present in the southeast corner, raised approximately 1m above ground level. The rest of the area was overgrown with brambles.</p>
<p><b>Topography of Site &amp; Immediate Site surroundings</b></p>	<p>The Site lies flat and is approximately 3m below the level of an embankment that a bridleway and the Wyre Way long distance walking route runs along to the immediate northeast. The Wyre River and associated estuary and saltmarshes are located directly beyond the embankment and associated bridleway/footpath.</p> <p>The Royles Brook to which flows between the main site and the area of the site in the south is at approximately 2m below the Site level and both banks are overgrown with thick scrub and brambles.</p> <p>The access road to the Site lies to the southeast with an oil store and fence backing onto vegetated land. A strip of open land overlying a live water main and electric service (approximately 1m bgl) backing onto Royles Bank lies to the southwest of the Site. An 11kv switch house and fence line back onto the Victrex operating plant located offsite to the northwest.</p> <p>Three remaining businesses exist to the east/southeast/south. Karpa Engineering Solutions (industrial machinery manufacturer) lies to the immediate east and the Site surrounds Express Trade Frames (window frame manufacturer) in the southeast. Daly Cranes lies to the immediate south of the southwest section of the site. This is a crane hire business which has been present since 2021. Several mobile cranes were present along with some materials such as old fences were stored along the southern boundary of the southwest section of the Site.</p> <p>The former Vinnolit 11kV switch house lies 50m to the south of the southwest section of the Site along with a bike shed constructed in the 1950s with an asbestos roof.</p> <p>Victrex Manufacturing Limited operates the Site located immediately to the northwest. This is recorded to manufacture organic materials and plastic materials (Polyaryletherketone polymers) and is permitted under: EPR/ EPR/BU5640IA and associated permit number: QP3338DB. According to the Groundsure report, this Site has been permitted since 2006 although it is possible that the Site was active under a former permit prior to this.</p>
<p><b>Access</b></p>	<p>Access to the Site from the southeast via South Road.</p>

<b>Boundaries</b>	The Site is bounded to the northeast by a 7m embankment covered with vegetation of shrubbery and brambles. To the southeast the Site is bounded by two existing businesses and the access road. The site is divided in two by Royles Brook. The southwest section of the site is bounded to the west by a road onto open land and by Daly Cranes to the south.
<b>Services / Wayleaves</b>	<p>A network of surface water drains underly the Site which take surface water and discharge it to the Royles Brook at two locations; one south and one to the southeast.</p> <p>There is one live water main running along the southwest boundary and through the southeast of the Site, linking to a still live fire hydrant in the centre of the Site. This water main then carries on across the access track over Royles Brook and crosses the southwest section of the Site from the east to the southwest corner to another live fire hydrant and continues westwards.</p> <p>Live electric cables runs along the southwest boundary, cutting into the Site in the southeast, providing power to the existing businesses off-site.</p> <p>A small substation and 11kv switch house are located 15m and 50m to the south of the southwest section of the Site.</p> <p>A septic tank is located adjacent to the office building which acts as a cess pit for capture of foul discharge before it is uplifted and tankered off site.</p> <p>A live belowground ethylbenzene pipe of 100mm in diameter padded with nitrogen gas runs from the southeast along the road before cutting northeast past the office building. It is understood that this is associated with the adjacent industry and runs from Saltwick at around 17km away.</p> <p>A 27-bar high pressure gas main is located to the east of the Site with the pipeline running beneath the bridleway and footpath to the northeast. There are two live water mains which serve the Site. Redundant lampposts remain on Site (which are not live).</p>
<b>Rights of Way</b>	The Site is accessed from South Road and the proposed development will provide slight amendments to the road to ensure the priority for access between this Site and the adjacent site is clear to drivers. No other rights of way cross the Site. A public bridleway/footpath bounds the Site to the northeast which runs along the top of the low cliffs adjacent to the saltmarshes of the Wyre Estuary.
<b>Structures</b>	<p>There are two buildings currently on Site, both of which are understood to have been constructed in 1970s. This includes a one storey corrugated metal clad building known as the VCM off-loading control room (a small metal clad building) present in the southwest of the Site and a one storey office building in the northeast. The office has an adjacent septic tank which was installed in 2015.</p> <p>There are no other aboveground structures present. It is expected that there are belowground relict foundations, pits (associated with the effluent treatment plant and the spillage collection point of the VCM off-loading area), drainage pipelines and service lines underlying the hardstanding on Site. The office building is to be demolished as part of ground preparation works.</p>

<b>Drainage</b>	<p>The Site is covered in a mix of hardstanding and crushed aggregate (understood to have been derived from the demolition of former buildings) and the drainage is directed through a below ground surface water drainage system and infiltration through any soft ground. A plan of the drains has been provided although which shows that surface water is directed towards the Royles Brook at two locations located upstream of a penstock where water flow can be controlled.</p> <p>There are several former licensed water discharges to Controlled Waters registered on the Site, all of which have now been revoked. This comprised discharge of treated sewage, cooling water and process effluent plus 'emergency discharges' to the Wyre Estuary. The effluent was treated on Site within the treatment plant and pits located in the northern corner of the Site. The effluent plant has been decommissioned and demolished to ground slab and the below ground pits have since been infilled.</p> <p>The Site is also recorded as having List 1 Dangerous Substances discharge (relating to mercury) with the receiving watercourse as Wyre Estuary and registered to Ineos Vinyls (UK) Limited. However, mercury was not used on the Corvic 9 Site within processes.</p>
<b>Surfaces / Vegetation</b>	<p>The Site was surfaced with a mix of hardstanding and gravel (likely demolition rubble). Vegetation was present on the northeast, southwest, and southeast boundaries. It was also present in the south of the southwest section of the Site. Thick brambles were present along both embankments of Royles Brook.</p>

**Figure 5.1. Satellite Imagery of Site**



Source: Groundsure, 2023 ref: GS-A1G-516-6R9-KPQ. Red line shows approximate boundary for proposed development. Capture 08/2022.

## 6. Site Characterisation

6.1. The physical setting of the Site has been derived from the review of information detailed in Section 2. Key details are summarised below; for full details reference should be made to the supporting information provided in Appendix B.

**Table 6.1: Environmental Setting**

<p><b>Setting and Topography</b></p>	<p>The Site lies within the eastern/southeastern corner of the Hillhouse Enterprise Zone and is accessed from the terminus of South Road. To the north and west the Site is tree lined alongside the banks of the Royles Brook with a mixed industrial usage followed by a residential suburb of Thornton Cleveleys beyond. The southwest section of the Site is bounded by open land to the west and a crane hire business to the south. Beyond the eastern tip of the Site is an office block and a series of smaller industrial buildings. The remainder of the eastern Site boundary is lined with a 50m wide band of established trees that the Wyre Way (footpath and bridleway) cuts through. The River Wyre and mudflats/salt marshes of the tidal Wyre Estuary are located directly beyond. There is a large warehouse building directly to the southeast and beyond South Road is an open grassed area with the Royles Brook flowing through. A holiday caravan park is located thereafter with the Wyre Estuary Country Park beyond. The village of Stanah and the outskirts of Thornton-Cleveleys merging into one large predominantly residential area to the south.</p> <p>The Site is currently located at an elevation of between 5m and 10m Above Ordnance Datum (AOD) as shown on contemporary OS mapping. The mudflats of the Wyre Estuary are around 5m AOD.</p>
<p><b>Geology / Ground Conditions</b></p>	<p>BGS, historical OS mapping and Site observations indicate the potential ground conditions to be:</p> <p><u>Made ground</u>: BGS mapping reports the presence of made ground (artificial deposit) across all but the southern quarter of the Site. However, in light of the previous industrial use and presence of hardstanding site-wide, made ground is anticipated across the whole Site. The thickness of made ground is not currently known.</p> <p><u>Superficial Deposits</u>: BGS mapping shows the entire Site to be underlain by Tidal Flat Deposits – Clay and silt. The thickness of superficial deposits is not known.</p> <p><u>Bedrock</u>: BGS mapping shows the northwestern two-thirds of the Site to be underlain by the Presall Halite Member comprising Mudstone and Halite stone with the southeastern area comprising bedrock of Kirkham Mudstone Member.</p> <p><u>Faults</u>: - No faults are mapped crossing the Site. The closest fault is located at 466m to the southeast. There is an axial plane (geo-syncline) located at 95m to the northwest.</p> <p><u>BGS Records</u> There are several BGS boreholes records shown within the immediate vicinity of the Site to</p>

	<p>the northwest, north, northeast and southeast. All of which are confidential and hence unavailable to view.</p> <p>The closest available BGS borehole records are at 250m to the southwest. Record SD34SW193 reports made ground to 0.2m underlain by silty clay and clayey silt to 4.1m and boulder clay to base at 14.5m bgl. An adjacent borehole (SD34SW194) drilled to 25m bgl reports 4.0m of soft mottled brown-grey clay and clayey silt with organic matter followed by soft becoming firm red brown sandy boulder clay with gravel to 14.4m which is followed by hard red and green clay containing gypsum crystals below 17.3m bgl. Groundwater was encountered at 2.3m bgl within the underlying Tidal Flat Deposits.</p>
<p><b>Natural Ground Stability</b></p>	<p>The Site is in an area where ground dissolution of soluble rocks is high (where the Preesall Halite Member is recorded) and negligible where the Kirkham Mudstone is present. The recorded risk of shrink swell clays and landslides is low. Risks from compressible ground and running sands are very low across most of the Site but recorded as 'moderate' both within the southern third and northern tip.</p>
<p><b>Hydrology and Flooding</b></p>	<p>The Royles Brook separates the Site into two areas with an access track joining the two sections. The Royles Brook also crossed the southeastern part of the Site which forms part of the existing South Road. The brook flows under this road within a small section of culvert. The brook flows south-eastwards where it confluences with the Hillyliad Pool which flows north to discharge into the River Wyre. The Wyre Estuary is located at 50m beyond the full length of the northeastern Site boundary.</p> <p>The Site benefits from flood defences constructed along the bank of the River Wyre and as such, the Groundsure report states that the Site is at low risk from river and coastal flooding It is understood that the flow of the Royles Brook and Hillyliad Pool is controlled when necessary, via a pumping station at Stanah. The Site is located within Flood Zone 3. The Site is mainly at risk of surface water flooding of between 0.3 and 1.0m on a 1:1,000-year flood return period. There is a small area within the north/central area which is classed as at 1 in 30 yr flood return period of being affected by flooding of between 0.3 and 1.0m depth.</p>
<p><b>Hydrogeology / Groundwater</b></p>	<p>The aquifer designations of the underlying geological units are:</p> <p><u>Superficial Deposits:</u> Tidal Flat Deposits- Clay and Silt: Unproductive aquifer of mixed intergranular flow and very low to low permeability.</p> <p><u>Bedrock:</u> Preesall Halite Member – Unproductive aquifer Kirkham Mudstone Member – Secondary B aquifer</p> <p>The permeability on Site is recorded as predominantly via fracture flow and low. Groundwater vulnerability is recorded as low.</p> <p>The Site is not located in any Source Protection Zones.</p>
<p><b>Excavation /</b></p>	<p>Surface ground workings are recorded on Site in the form of a former pit which is identified</p>

<b>Mining</b>	<p>on historical mapping of 1968. It is unclear whether this has been infilled (and was not observed during the walkover). No further details are available. The Site is not located within an area of historical coal mining.</p> <p>A mound has been identified along the edge of Royles Brook in 1967. However, it is removed from mapping in the 1970s. It is considered this is associated to be silts, sands and gravel related to dredging of the watercourse.</p>
<b>Landfill / Waste Disposal</b>	<p>The Groundsure report shows that there are no landfills on Site. Two historical landfills are located within 500m of the Site. This includes:</p> <ul style="list-style-type: none"> <li>• Historical waste Site: 250m to northwest (beyond Royles Brook); and,</li> <li>• Former household waste landfill, licensed December 1960 to December 1970 located 430m to southeast (now forming part of the Wyre Country Park). Recorded to Stanah House Farm. No further details have been made available.</li> </ul> <p>A screening request for a thermal treatment facility has been lodged in March 2023 for a Site located 240m northwest, the outcome of which is currently unknown.</p>
<b>Pollution Incidents</b>	<p>The Groundsure reports that there are no recorded pollution incidents on Site.</p> <p>Two incidents have occurred within 250m of the Site as follows:</p> <ul style="list-style-type: none"> <li>• 46m N: Significant (Category 2) impact to water reported 01/01/2005. Pollution description was 'other pollutant'. Incident reference: 285281. No further details are available.</li> <li>• 59m NW: Significant impact to land and minor (Category 3) impact to water reported on 28/8/2018 which involved release of acids and alkalis. Incident reference: 1647147. No further details are available.</li> </ul> <p>It is possible that the two above incidents may be associated with release of pollution from the effluent discharge chambers which discharge to the river Wyre. It is understood that the Site used to discharge treated effluent from this location in addition to a number of other chemicals works within the immediate vicinity. The Polluter in this instance is unknown although it is not anticipated that this pollution incident will have significantly impacted the Site.</p>
<b>Neighbouring Land use / Nearby Contaminative Activities</b>	<p>The Site itself is located within a large industrial area specialising in the manufacture of various chemicals and polymers. Some industrial areas are no longer operational. Karpa Engineering works is located directly east, a PVC window frame manufacturer is located directly to the southeast, and a crane hire business is located to the south of the southwest section of the Site</p>
<b>Radon</b>	<p>The Site lies within an area where between &lt;1% of homes are estimated to be at or above the Radon Action Level and therefore the installation of radon protection measures will not be necessary within new buildings.</p>
<b>UXO Risk</b>	<p>The UXO risk map identifies the Site as located within an area of Low Risk. A copy of the UXO risk map is provided in Appendix C.</p>



<b>Nature Conservation</b>	<p>At around 50m the north/northeast of the Site lies the River Wyre and Wyre Estuary which is designated as a SSSI<sup>13</sup>, RAMSAR<sup>14</sup>, and SPA<sup>15</sup>.</p> <p>The Site is also within part of land designated as Priority Habitat Network<sup>16</sup> (Zone 1 and Zone 2), a SSSI impact risk zone and Marine Conservation Zone.</p> <p>No invasive weeds, such as Japanese Knotweed or Himalayan Balsam were observed during the Site visit, although a formal survey has not been undertaken by SGP and not all parts of the Site were inspected.</p>
--------------------------------	--

---

<sup>13</sup> Site of Special Scientific Interest

<sup>14</sup> Ramsar site for the conservation of wetland and peat bogs

<sup>15</sup> Special Protection Area

<sup>16</sup> Relates to the potential for expansion of existing habitat.

## 7. Preliminary Conceptual Site Model

### 7.1. Methodology

7.1.1. Information from the desk study has been used to identify the likely source-pathway-target relationships that may exist at the Site during and following the proposed development. Principal factors that may determine potential sources of contaminants at the Site, receptor vulnerability and potential pathways have been identified and each assessed in turn to derive a Conceptual Site Model (CSM).

### 7.2. On-Site Contamination Sources

#### *Previous Industrial Operations*

7.2.1. There is the potential for leaks and spillages of substances to have occurred to ground and shallow groundwater during the 40yrs operation of the Site as a plastics powder manufacturer. Such contaminants could include:

- dissolved and solid PVC, PCM and latex;
- Volatile organic compounds (VOCs) in both liquid and vapour form;
- Chlorinated solvents (liquid and vapour form);
- Acids and alkalis;
- Ammonia and ammonium;
- Sulphates;
- Sodium, fluoride, chloride;
- Chlorine (gas);
- Petroleum hydrocarbons and oils,
- Heavy metals including copper, cadmium, mercury;

7.2.2. In addition to the above, there could be physicochemical changes to ground and groundwater including change in parameters such as pH, chemical oxygen demand (COD), electrical conductivity, redox potential and temperature.

7.2.3. There is the potential for point sources to be located around the Site specifically within the former processing, raw materials and processed materials storage areas plus the former effluent treatment plant and VCM off-loading area. The condition of the drains underlying the Site is unknown and if pipes are damaged, this could give rise to release of contaminants to the surrounding ground and shallow groundwater. It is, however, understood that the pipework in-situ between the former effluent treatment plant on Site to the outfall to the River Wyre was renewed shortly before the whole Site was decommissioned.

7.2.4. According to the Groundsure report, there have been no pollution incidents reported on or to have affected the Site.

#### *Made Ground*

7.2.5. Artificial and made ground are mapped by the BGS in the northeast / north of the Site but it is anticipated to be to present at relatively shallow depth across Site. The earth bund along the western and northwestern Site boundary and the southern boundary of the southwest section of the Site is anticipated to contain made ground and/or reworked natural material. Site surface water drainage is in-situ alongside a small number of live services. Below ground infrastructure is still present underlying the ground slabs of former buildings. The source and form of made ground will give rise to the presence and nature of contaminants within. Within an urban environment, made ground can typically contain varying concentrations of metals and metalloids, asbestos, polyaromatic hydrocarbons (PAHs), possible petroleum hydrocarbons and, if significantly thick deposits are present, potentially ground gases (principally of carbon dioxide and methane).

7.2.6. A mound of material was identified on Site along the southwest bank of Royles Brook in 1967 but is removed from mapping by the 1970s. It is assumed to be related to dredging of the watercourse but cannot be confirmed.

#### *Former Railway Line & Associated Embankments*

7.2.7. Former railway sidings and a railway line were previously located upon an embankment across the northern and southeastern boundaries before crossing Royles Brook into the southwest of the Site. Contaminants typical of such facilities include heavy metals, metalloids, PAHs, asbestos, phenols, heavy end hydrocarbons. It is possible that when the railway was dismantled, the embankment may have remained to be used as a Site flood defence or may have been spread across the Site.

7.2.8. There is consideration that a small unspecified pit is located within the north of the Site as shown on 1968 OS mapping. However, upon closer inspection, it is considered that this appears to show a pit based on the presence of surrounding railway embankments. Nevertheless, this may have been 'infilled' with surrounding material when the embankments were dismantled although this assumption cannot currently be confirmed.

7.2.9. Similarly, there is indication of a material mound encroaching onto the northwestern Site area from 1960 until 1980 which extends offsite to the northwest. It is considered this is likely to be associated with the embankment for the Railway and later the Site bund which was observed during the Site inspection.

### *Natural Sources of Ground Gas*

7.2.10. Salt marshes and tidal flat deposits underlying the Site could contain peat and organic content which could generate natural ground gases. Regardless of the tidal nature of groundwater coupled with a high-water table, they are only likely to generate relatively low gas volumes<sup>17</sup>. The mobilisation of ground gas is expected to be impeded by the groundwater saturation and the presence of a predominant low permeability matrix of silt and clay. The generation potential would increase if the tidal flat deposits and organic materials contained within were to be dewatered as part of development proposals. Although it cannot currently be discounted, significant thicknesses of natural peat deposits are considered unlikely in association with the tidal flat deposits on Site. Of the two available logs at 250m from the Site, one contained organic matter within the clay and silt to a depth of 4.0m bgl and the other did not.

7.2.11. The whole Site lies within an area where <1% of homes are estimated to be at or above the Radon Action Level hence there is no need for the provision of radon protection within new buildings.

### 7.3. Off-Site Sources

#### *Heavy Industry*

7.3.1. Extensive industrial works have occurred to the northwest, west and southwest and east of the Site with the development of an ammonia soda works and gas works around 1910 and the ICI Chemicals plant in the 1950s. This increased industrial land usage has led to the development of infrastructure including road links and historical railway sidings. Much of the Site is still operating as heavy industry. It is, however noted that the Royles Brook cuts across between the centre of the two proposed development areas which could impede the migration of some of the contaminant pathways which rely in the migration of perched and shallow groundwater plus direct run-off.

#### *Historical Landfills*

7.3.2. The Groundsure report states there is a historical domestic landfill present at around 430m southeast of the Site which accepted wastes between approximately 1960 and 1970. This has now been developed as part of a country park. There are no waste exemptions recorded within 250m of the Site.

7.3.3. Settling lagoons were formerly located within the wider Site area all of which, have since been infilled with what is understood to be inert materials sourced from demolition of former buildings and infrastructure. The closest was located at 400m to the northwest on land which is now operated by Victrex.

#### 7.4. Potential Receptors

7.4.1. The proposed development for the Site is an incinerator Bottom Ash Processing facility which, through provision of draft design details will comprise a processing building with hoppers, screeners and conveyors, a stockpile shed, three buildings housing office, welfare with one also forming a laboratory. Ancillary infrastructure including a weighbridge, rainwater holding tanks, fuel tanks, wheel wash and tank, and various areas of hardstanding. The existing Site access and road will also be retained.

7.4.2. No foundation or service designs have been provided but is assumed the building and large infrastructure will have foundations which will be piled or excavated into the ground and there is likely to be new below ground service connections and potentially pits.

7.4.3. It is assumed that the operational areas of the Site will likely be surfaced with compacted aggregate and / or hardstanding. It is not anticipated that there will be any soft landscaping developed on Site although final design details have yet to be confirmed.

7.4.4. The proposed industrial use of the Site is considered as low sensitivity with respect to human health.

7.4.5. The principal vulnerable receptors with respect to potential exposure to any soil contamination that may be present for the proposed use will be:

- Construction workers who may be exposed to contaminants during preparatory and construction / and maintenance worker who may be involved in future refurbishment works;
- Future Site users and Site visitors;
- Adjacent Site neighbours;
- Proposed buildings / structures;
- Controlled waters: Surface waters including Royles Brook, Hillylaid Pool and Wyre Estuary/River Wyre); groundwater within underlying aquifers (Tidal Flat Deposits as an unproductive and impermeable aquifer with the underlying Preesall Halite Member and Kirkham Mudstone Member as unproductive and Secondary B aquifers, respectively; and,
- Vegetation and Ecological receptors including the nearby designated SSSI/Ramsar, SPA and marine conservation zone of the Wyre estuary and associated saltmarshes.

---

<sup>17</sup> Ground gas handbook (2009)

7.5. Preliminary Conceptual Site Model (CSM)

7.5.1. The preliminary CSM has been derived for the Site using the information described above, describing the potential contamination sources, pathways and receptors and is summarised below in Table 7.1.

**Table 7.1: Preliminary Conceptual Site Model**

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
1. <b>humans – construction workers</b>	Possible contaminants (various – as detailed within the sections above) associated with: Previous industrial operation of the Site, Made Ground on Site, and former railway infrastructure	Dermal contact / ingestion / inhalation – short term exposure	<b>Low to Moderate</b> - There is potential for contaminants to be present from leaks and spills to ground from the previous heavy industrial operations on Site which spanned over 40 yrs. Significant deposits of made ground may be present where it has been mapped (north and northeast plus within the earth bund along the western Site boundary and southern boundary of the southwest section of the Site, together with infilling of an area in the north which is listed as an unspecified pit. Shallow made ground is anticipated across the remainder of the Site. The chemical nature and matrix of the made ground is unknown but it is anticipated that it may include materials from the former railway embankments.	Site investigation and contamination assessment is required comprising both targeted and non-targeted elements within soil shallow groundwater (plus VOCs and ground gases) where building and infrastructure is to be developed and the ground is to be otherwise disturbed.
	Potential volatile vapours associated with previous industrial operations using VOCs and made ground	Build up within enclosed and confined spaces	<b>Low to Moderate</b> - The previous industrial Site operations used VOCs within their processes. This could be present within soils and shallow groundwater under former processing, waste, and storage areas.	Site investigation is required to investigate the nature of the ground, made ground and shallow groundwater across the Site and appropriately characterise any made and/or potentially contaminated ground should it be encountered

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
	<p>Ground gases (principally carbon dioxide and methane) associated with underlying made ground and natural tidal flat deposits. Deposits of peat /other highly organic material may be present within the tidal flat deposits. The nature of the made ground across the Site is unknown.</p>	<p>(including trenches and other excavations, and during piling works etc.)</p>	<p>The Site infrastructure has been decommissioned and the aboveground structures removed although contamination investigation and removal of belowground infrastructure was not undertaken. The compounds used, however, were generally highly volatile and are not expected to persist within soils or groundwater for long periods of time.</p> <p>The presence of largely cohesive silts and clays together with a high-water table will retard significant ground gas migration.</p>	<p>during the groundworks phase.</p> <p>Site investigation to be carried out in advance of where piling and excavations are to be completed including ground gas and VOC monitoring as required. Piling risk assessment to be undertaken with implementation of recommended mitigation.</p> <p>Depending upon the outcome of the site investigation and contamination assessment, vapour and gas monitors with alarms and RPE are to be used by ground /construction and maintenance workers as a precaution prior to entering any below ground structures / enclosed/confined spaces. Gas alarms to be used during piling.</p>
Smith Grant LLP				R3217-R01-v4



Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
<p><b>2. humans – future Site visitors / workers</b></p> <p>Future users of enclosed spaces including: Confined spaces.</p> <p>Office/welfare buildings to be modular build on concrete plinths. Processing building, stockpile shed and metal shed.</p> <p>Future Site users of Plant within both internal and external areas of the Site.</p>	<p>Possible contaminants (various – as detailed within the sections above) associated with: Previous industrial operation of the Site, Made Ground on Site, and former Railway infrastructure.</p>	<p>dermal contact / ingestion / inhalation</p>	<p><b>Low</b> - The proposed development will likely include permanent areas of hardstanding cover or compacted aggregate within the operational areas of the Site. This is considered sufficient to break the pollutant-receptor linkage for direct contact pathways to non-volatile contaminants within the ground.</p> <p>One small area of verge along side a proposed footpath is proposed. The bunds bounding the Site comprise soil which are vegetated will not be disturbed during groundworks..</p>	<p>Where soils and backfill materials are to be reused on Site, they should be chemically analysed to ensure they are suitable for reuse.</p> <p>The gravel spread across the site (derived from the demolition of former site buildings) may need testing if not completed previously.</p> <p>Subject to confirmation from Site investigation and contamination assessment, the areas of soft landscaping at the site entrance should comprise a minimum thickness of 350mm of clean and validated soils to break the pollutant pathway if significant contamination is identified during the Site Investigation.</p> <p>Site investigation to be carried out in advance of where piling excavations and belowground confined spaces are to be completed including ground gas and VOC monitoring as required. Piling risk assessment to be undertaken with implementation of recommended mitigation.</p>

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
	ground gas (asphyxiant gases: carbon dioxide)	accumulation within voids, confined spaces and service runs to toxic concentrations	<p><b>Low</b> – The nearest historical landfill lies 430m to the east which accepted domestic waste between the 1960s and 1970s. The presence of largely cohesive tidal flat deposits will, however, retard significant ground gas migration and deposits are anticipated to be over 50yrs old where active gassing is expected to have declined.</p> <p>Although it is not confirmed on Site, there is the potential for deposits of peat in conjunction with the tidal flat deposits which could give rise to low volume ground gas generation.</p> <p>The proposed buildings to provide officing, welfare facilities and a laboratory will be constructed as a containerised portacabin style building located on concrete plinths aboveground.</p> <p>The large processing building and stockpile sheds will have large doors and is understood will not include any smaller rooms within them. The potential for build-up of ground gases and VOCs within proposed buildings is therefore very low.</p>	No further action required unless the proposed building design changes.

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
	VOC vapours from soil / groundwater sources		<p><b>Low</b> – It is possible that leaks and spills of products containing VOCs may have occurred within soils and groundwater from the bulk chemical storage and previous heavy industrial operations occurring on Site. The volatile compounds used, however, were highly volatile and are not expected to persist within soils or groundwater. Moreover, the proposed officing, welfare and laboratory will be constructed as modular units and the main processing building and sheds will be large and tall, with large roller doors and without smaller rooms within hence will automatically provide good ventilation thus limiting the potential for vapour and gas build up.</p>	

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
<p><b>3. humans – adjacent Site users</b> Workers at adjacent industrial works are Present. Residential receptors are located within 200m of the Site and there is a caravan park at 60m to the southeast. There is a public bridleway and long distance walking route directly to the northeastern Site boundary</p>	<p>Possible contaminants (various – as detailed within the sections above) associated with: Previous industrial operation of the Site, Made Ground on Site, and former Railway infrastructure</p>	<p>windblown / dermal contact / ingestion / inhalation</p>	<p><b>Low to Moderate</b> – residential sites are located down prevailing wind of the Site</p>	<p><u>During groundworks and construction:</u> Dust suppression techniques to be used during construction works to limit dust generation. Good housekeeping to be employed. CEMP to be produced.</p>

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
4. property / services	Flammable ground gas (methane) & VOCs	accumulation within voids, confined spaces and service runs to flammable concentrations	<p><b>Low</b> – Although it is not confirmed on Site, there is the potential for deposits of peat in conjunction with the tidal flat deposits which could give rise to low volume ground gas generation.</p> <p>The nature of made ground and potential for its gassing across the Site is not known.</p> <p>The nearest historical landfill lies at 430m from the Site which was filled by household wastes during 1960 to 1970. The presence of largely cohesive tidal flat deposits will, however, retard significant ground gas migration and deposits are anticipated to be over 50yrs old where active gassing is expected to have declined.</p>	Site investigation to be carried out in advance of where piling is to be completed including ground gas and VOC monitoring as required. Piling risk assessment to be undertaken with implementation of recommended mitigation.
	pH, sulphate, chloride	chemical attack of buried concrete and plastic materials	<p><b>Moderate to High</b> – Soils containing elevated sulphate are anticipated based on the previous usage of the Site, the shallow depth to brackish groundwater anticipated and also due to Preesall Halite member where gypsum crystals have been reported within wider historical Site investigation.</p>	<p>Inclusion of pH, sulphate and chloride testing of foundation bearing strata, both underlying buildings and where other belowground concrete is to be laid.</p> <p>Where piling is proposed, a piling risk assessment is required where piles are anticipated to breach the tidal flat deposits and be founded into Preesall Halite Member (Unproductive aquifer) or Kirkham Mudstone Member (Secondary B aquifer)</p>
	Hydrocarbons/VOCs/SVOCs/phenol. amines	Attack on plastic pipes	<p><b>Moderate</b> - Nature of contaminants within the ground from previous industry and nature of made ground is unknown but the usage of and persistence of hydrocarbons which could potentially degrade polymers is expected to be moderate.</p>	Further works will be SI to confirm ground conditions / presence of contaminants. A water pipeline risk assessment may be required, the requirement of which, would be dependent upon the need for water supply pipes and the contaminants identified during the SI.

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
<b>5. vegetation / landscaping</b>	leachable metals / metalloids may be present within made ground / natural soils	plant uptake	<b>Low</b> – One small area of verge proposed alongside a footpath The bunds bounding the Site comprise soil which are vegetated and will not be disturbed during groundworks.	The strips of soft landscaping proposed at the Site entrance should comprise a minimum thickness of 350mm of clean and validated soils to ensure the soils are uncontaminated and suitable as a growing medium for the vegetation planting proposed.
<b>6. ecosystems / protected species &amp; habitats</b>  Wyre Estuary SSSI, SPA and Ramsar to the immediate north – Site is located within SSSI impact risk zone and forms part of priority habitat	Silty and otherwise contaminated run off generated during construction.  Windblown Dust  Potential effluent and other contaminants generated from proposed Site operation.	windblown / dermal contact / ingestion / inhalation	<b>Moderate</b> – The nature of made ground and residual contamination from the previous industrial usage on the Site is currently unknown. The potential for mobilisation into surface water during ground disturbance works and which could enter the ecosystems is also unknown.	Completion of a site investigation to ascertain the presence of contamination to establish whether there was contamination which could be remobilised during groundworks. Preparation of remediation strategy as required.  <u>During groundworks and construction:</u> CEMP to be prepared, approved and implemented on Site to include plans for emergency pollution response.  An ecology assessment has been completed to inform the planning application A shadow Habitat Risk Assessment (HRA) is being produced. Approval from Natural England and the Environment Agency for the proposed development will be required.  <u>During operation &amp; construction:</u> An EA Environmental permit application will be made alongside the planning application to facilitate Site operation.

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
<p><b>7. surface waters</b> Royles Brook which passes through the centre of the Site in between the processing and stockpile areas. Hillylaid Pool and River Wyre/Wyre Estuary are within 25m of the Site.</p>	<p>leachable contaminants (as detailed within the sections above) associated with: Previous industrial operation of the Site, Made Ground on Site, and former railway infrastructure</p>	<p>migration via shallow groundwater / surface water run-off.</p>	<p><b>Moderate</b> – The nature, leachability and mobilisation potential of soils and shallow groundwater on Site has yet to be determined.</p>	<p><u>During groundworks and construction:</u> Investigate the nature of the ground, made ground and shallow groundwater across the Site and appropriately characterise any made and/or potentially contaminated ground should it be encountered during the groundworks phase.  Ensure any silty and/or otherwise contaminated runoff generated during construction phase is properly managed and does not impact on nearby surface watercourses nor groundwater.  Monitoring and sampling of surface water during construction and groundworks may be required.  CEMP to be prepared, approved, and implemented on Site.  <u>During operation:</u> Ensure surface water and foul water is managed appropriately, the drainage design is approved by regulators and relevant environmental and discharge permits are in place.</p>

Receptor	Source / Contaminant	Pathway / Exposure	Potential Significance of Identified Pollutant Linkage (in absence of mitigation)	Further Works
<p><b>8. groundwater</b> – Tidal Flat Deposits – Non-productive Aquifer  Bedrock: Preesall Halite Member – Unproductive aquifer Kirkham Mudstone Member – Secondary B aquifer</p>	<p>leachable contaminants (as detailed within the sections above) associated with:  Previous industrial operation of the Site,  Made Ground on Site, and former railway infrastructure</p>	<p>migration via saturated zone</p>	<p><b>Low</b> -The nature and leachability of soils and shallow groundwater on Site has yet to be determined.</p> <p>The underlying superficial aquifer is classed as non-productive as is the majority of the bedrock underlying the Site. The presence of cohesive tidal flat deposits is likely to significantly limit any vertical migration of any mobile/leachable contaminants into the underlying aquifers</p> <p>There are no groundwater, surface water or potable water abstractions registered within 2km of the Site.</p>	<p>Investigate the nature of the ground, made ground and shallow groundwater across the Site and appropriately characterise any made and/or potentially contaminated ground should it be encountered during the groundworks phase.</p> <p>Piling risk assessment to be undertaken to ensure contaminant pathways to aquifers are not created.</p> <p>A more intensive and detailed contamination assessment of the Site may be required should a contaminant baseline of the full Site be necessary (e.g. to support environmental permitting or for due diligence purposes).</p>



## 7.6. Human Health Risk Assessment

### *Construction Workers*

- 7.6.1. The potential for significant contamination to be present that may pose an acute risk to construction workers during the development is considered low to moderate.
- 7.6.2. An intrusive investigation is required where piling for building and infrastructure is to be developed and ground is to be otherwise disturbed to inform the risk to groundworkers and to determine whether soils and backfill materials are suitable for reuse on Site or to determine possible routes for off-site disposal. Piling risk assessment to be undertaken with implementation of associated proposed mitigation.
- 7.6.3. It is anticipated that personal protective equipment (PPE), respiratory protective equipment (RPE) will be required for Site users to wear as a matter of course and gas alarms should be used if entering any enclosed or confined spaces. A construction environmental management plan (CEMP) will ensure that the Site is appropriately managed during the groundworks and construction phases with good housekeeping and the potential for pollution incidents is minimised. The ground investigation and associated contamination risk assessment should confirm suitable precautions during the groundworks and construction phases to suitably protect personnel from the presence of significant contaminant concentrations.
- 7.6.4. The soil bunds surrounding the Site will not be disturbed during groundworks and hence it is not considered that these present a significant risk to construction workers and Site neighbours.

### *Future Site Users*

- 7.6.5. The long-term risks to future Site users are considered as low based on the likely contaminants present and the development proposals.
- 7.6.6. There is potential that small leaks and spills to ground may have occurred during the previous heavy industrial operations on Site which spanned a period of over 40 yrs. Contaminants may also be contained within deposits of made ground across the Site. Building foundations and various below ground infrastructure are still present.
- 7.6.7. The proposed buildings, hardstanding and hardcore within the operational areas of the Site are anticipated to provide suitable protection to future Site users from direct contact pathways with non-volatile contaminated soils and shallow groundwater across most of the Site. The source of the hardcore is anticipated to be from crushing of demolition materials derived from former buildings that had been stripped of asbestos prior to demolition and it is expected that materials management will have been employed to determine its suitability for reuse. However, if the material has not been previously chemically analysed then it would be pertinent to test this material (particularly for the presence of asbestos).

7.6.8. There is soft landscaping proposed at the Site entrance. Soils being used to create this area must be chemically analysed to ensure they are uncontaminated and do not present a risk to future Site users. They should also be a minimum of 350mm in thickness to break the potential pathway between the soils and perched groundwater below.

7.6.9. The risk from vapours (VOCs and SVOCs) and ground gases should be investigated where piling is recommended and deep excavations are warranted. This is for the purposes of establishing potential risks to construction workers, and maintenance workers entering confined spaces during the operational phase of the development). As officing will be designed as modular build/portacabins elevated aboveground and the processing and stockyard buildings will be large with no smaller enclosed rooms, the requirement for ground and vapour monitoring and ground gas risk assessment for future Site users occupying the buildings is not considered to be warranted. A piling risk assessment may recommend that ground gas and/or VOC monitoring is undertaken either in advance or during piling works.

7.6.10. An intrusive investigation is required within shallow soils where building and infrastructure is to be developed and ground is to be otherwise disturbed to inform the risk to future Site users.

#### 7.7. Adjacent Site Users and Ecological Receptors

7.7.1. The Site surroundings comprise both residential and industrial land uses and there is a public bridleway and the Wyre Way long distance walking route directly along the northeastern Site boundary. The Wyre Estuary and its associated salt/mudflats is designated of national ecological importance. It is therefore imperative that the site groundworks and construction phases are managed appropriately by means of an approved CEMP. It is expected that Site measures will include dust and litter suppression measures, good housekeeping, and management of runoff to prevent generation of silty and otherwise contaminated water.

#### 7.8. Property Risk Assessment

7.8.1. A belowground water main is present on Site which is understood to have previously served the industrial works. However, should the development require installation of additional (and belowground) water supply pipes then the potential for chemical attack on construction materials (polymers) is possible given the potential for hydrocarbon, volatile and polymerising contaminants within the ground which could in turn degrade and permeate through water supply pipes. This should therefore be investigated at invert depth and along the proposed pipe alignment.

7.8.2. Soils and shallow groundwater containing high levels of sulphate, chloride plus an alkaline pH could present the potential for aggressive conditions to certain classes of concrete. Ground conditions should be confirmed in tandem with a geotechnically based intrusive assessment.

7.8.3. A piling risk assessment will be undertaken where piling is proposed to ensure the environment is suitably protected during and following piling operations.

#### 7.9. Controlled Waters Risk Assessment

7.9.1. The Royles Brook transects the two processing areas of the Site and is in close proximity to the Hillylaid Pool and Wyre Estuary hence will need protection and mitigation implemented during both construction and operation.

7.9.2. Depth to groundwater is anticipated to be shallow (it was encountered at 2.3m bgl within a borehole located within the vicinity where made ground is absent) and may be in direct continuity with the overlying perched made ground. The superficial Tidal Flat Deposits are a nonproductive aquifer owing to very low permeability and brackish water is likely to predominate). The groundwater within these superficial deposits is expected to be tidal. Leaching rates of made ground soils and the potential for remobilisation of contaminants are anticipated. Some protection to groundwater will be afforded by placement of further hardstanding and the overlying largely cohesive superficial deposits.

#### 7.10. Other Considerations

##### *Materials Management*

7.10.1. Where material is to be disturbed and reused on Site or sent for offsite treatment or disposal, then representative sampling of and chemical analysis of the material will need to be undertaken by a suitably competent specialist. Suitable materials management (such as materials management plan using DoWCoP<sup>18</sup> or registration of waste exemptions will need to be implemented to ensure reuse of materials on Site and imported to Site are suitable for use. This will apply to made ground, potentially impacted ground, dredging silts anticipated present mounded bankside of the Royles Book, back fill materials and also naturally derived strata.

##### *Ground Stability – Natural Hazards*

7.10.2. The Site is in an area where risks from compressible ground and running sands are moderate, risks from landslides, shrinking and swelling clays, and collapsible ground, are very low to negligible; and risks associated with ground dissolution is recorded as high over the northern two thirds of the Site (where the Preesall Halite Member is located) and negligible over the remainder of the area. There is the potential of peat and/or other compressible highly organic material within the Tidal Flat Deposits which also should be considered as a potential ground stability risk during construction.

---

<sup>18</sup> Definition of Waste Code of Practice

*Overhead Powerlines and Other Site Services.*

7.10.3. No dig exclusion zones in conjunction with a site investigation and development construction may be imposed in conjunction with services that cross or are near to the Site, including, for example, the belowground ethylbenzene pipeline, water main, electricity cable and high-pressure gas main which runs under the bridleway/footpath along the northern boundary.

*Site Due Diligence*

7.10.4. It is recommended that Site investigation is undertaken where buildings are proposed, and other ground disturbance is going to be required which could have the potential to create further migratory contaminant pathways.

7.10.5. The new Site operator (Fortis IBA Ltd) will be leasing the Site. An environmental permitting application will be twin tracked alongside planning application.

*UXO*

7.10.6. The UXO risk map identifies the Site as being located within an area of low risk for consideration of potential unexploded ordnance. The associated assessment and mapping is provided in Appendix C.

## 8. Conclusions and Recommendations

### 8.1. Conclusions

#### *Historical Site Operations*

- 8.1.1. The Site is part of the Hillhouse Business Park and was developed in 1980 as a plant that processes organic chemicals and manufactures and mills plastic powder products.
- 8.1.2. The Site was initially the Corvic 9 or PVC9 plant which was owned and operated by ICI Plc which became Industrial operations on Site commenced in 1980 and continued until 2020. The Site was initially operated by ICI Chemicals Limited and then by European Vinyls (UK) Limited. This then became Ineos Vinyls UK Ltd and latterly, Vinnoilit Hillhouse Limited.
- 8.1.3. Parts of the Site surroundings were developed much earlier, some from around 1910. The area has therefore a long history of chemical manufacturing and associated processes. Similar polymer production and processes currently occur on the chemicals plant located directly to the north.
- 8.1.4. When operations ceased in 2020, the aboveground Site infrastructure associated with materials processing, storage and waste was decontaminated and removed. It is understood that the fabric of some of the buildings (that was not entirely made of steel) was crushed and some of the resultant aggregate was spread across this Site.

#### *Contaminants of Potential Significance*

- 8.1.5. Made ground has been mapped within the north and northwest Site area and is anticipated across the Site underlying remaining ground slabs. The nature of the made ground is unknown although could contain material from the former railway sidings and embankments in addition to other sources. Crushed aggregate spread across the Site is understood to have been sourced from the former buildings although it is not known whether any chemical analysis of it was undertaken. As large-scale chemical storage (bulk feedstock) and chemical processes took place on Site, there is a moderate (low to moderate) potential that contamination associated with the site's former use to be present.
- 8.1.6. Ground workers are anticipated to be at potential risk of contamination within soils and perched groundwater, plus from the potential for build-up of volatiles and ground gas within confined spaces (deep excavations etc.) and during piling works.
- 8.1.7. It is considered that future Site users will be afforded some protection from non-volatile contaminants within soils owing to the presence of proposed hardstanding and site crush. The nature of the crush is not currently known which may need sampling and analysis as will the nature of the underlying Soils (particularly for volatile and semi-volatile contaminants).

8.1.8. The risks to future site users from build-up of gases and volatiles within proposed buildings is considered as low owing to the current design of the buildings with welfare and offices being a modular build on stuts aboveground and the large buildings with large doors proposed for processing and stockpiling activities. There is, however, the potential that future site maintenance workers could enter confined spaces belowground.

8.1.9. The Site is directly adjacent to the Wyre Estuary which is designated as an important ecological area (being a SSSI, SPA, Ramsar and marine wetland conservation zone). It will be important to ensure that this is protected during the groundworks, construction and Site operation.

## 8.2. Recommendations

8.2.1. An intrusive investigation is recommended targeting the area around the proposed buildings and infrastructure as well as any proposed below ground (service connections routes) plus where any other ground disturbance is going to be required which could have the potential to create further migratory contaminant pathways.

8.2.2. The investigation should also include the installation of monitoring wells and a short vapour and ground and gas monitoring programme to assess the risks from ground gas from underlying peat, organic deposits and vapours where piling and deep excavations are to be undertaken to assess the risks to construction workers and future maintenance workers entering confined spaces set belowground.

8.2.3. This should be followed by the sampling of soils and shallow groundwater with assessment against suitable threshold criteria for the proposed development. This in turn may lead to the requirement of detailed quantitative risk assessment and remediation being required if corresponding threshold contaminant criteria are exceeded. The existing soil bunds will only need sampling and chemically analysing if they are to be disturbed during groundworks, which is understood to not be the case.

8.2.4. It is understood that the Site investigation is currently underway and is being completed with a geotechnical investigation to inform the structural design / bearing capacity of the soils. This will be reported separately.

8.2.5. During the groundworks and construction phases, a Construction Environmental Management Plan (CEMP) should be prepared, approved and implemented to manage the potential risks to the environment from the construction phase.

8.2.6. A Piling risk assessment is required where piling is proposed to assess whether any mitigation is required to prevent the mobilisation of contaminants.

8.2.7. A water pipeline risk assessment is proposed where new belowground water supply pipes are to be laid as part of the development.

8.2.8. Materials management on Site may be required where materials are proposed for reuse or there is the requirement to import soils and other fill materials to the Site. This should involve chemical validation to ensure the soils and backfill materials are suitable.

### 8.3. Concluding Statement

8.3.1. With appropriate intrusive Site investigation and assessment plus the development, implementation and verification of mitigation measures, it is considered that significant adverse effects will not be caused on the health of Site users or users of neighbouring areas, controlled waters or the surrounding habitats of ecological importance.

8.3.2. Regarding the requirements of planning policy, it would appear that there is nothing to preclude the Site being brought forward for the proposals and it being placed into operation.

### 8.4. Limitations

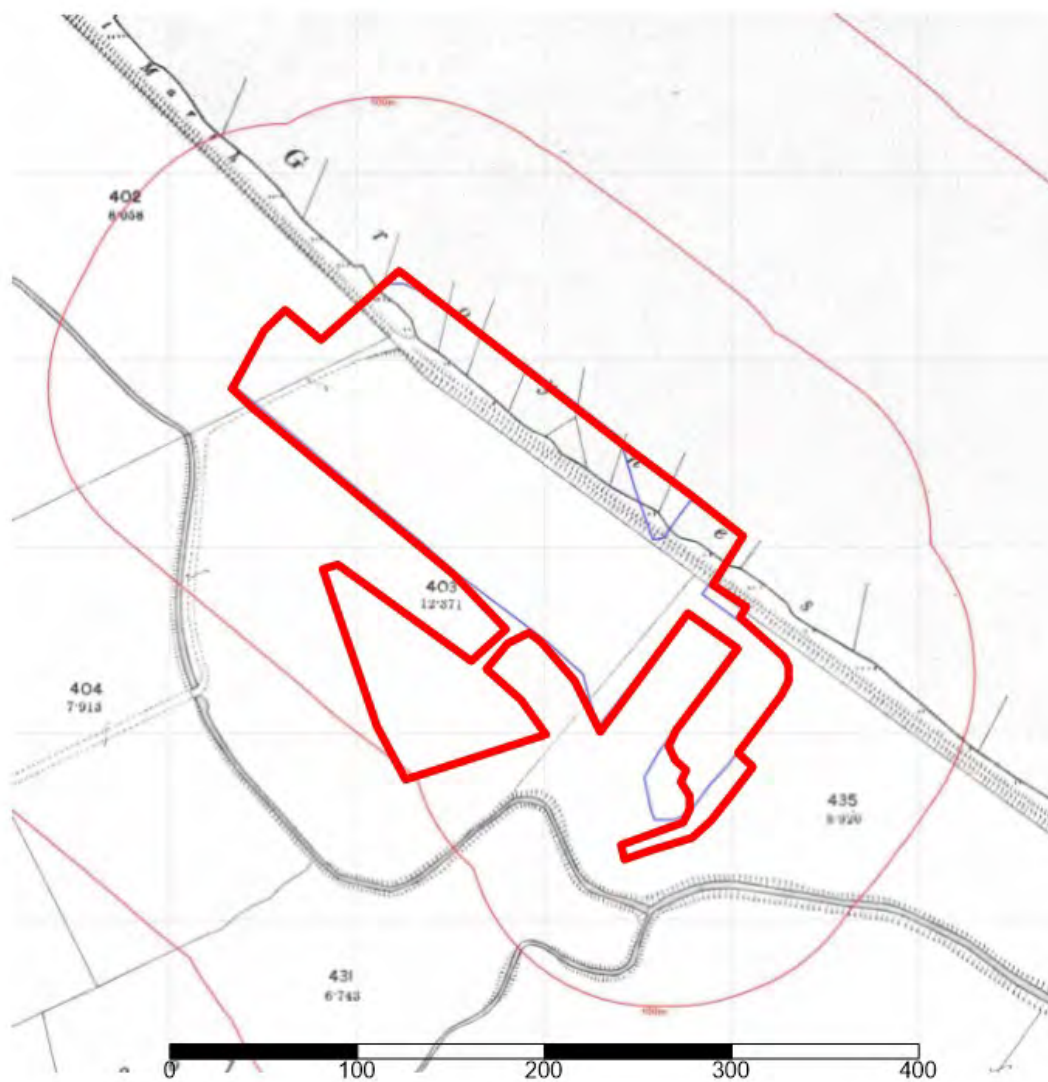
8.4.1. This report has been prepared by SGP for the sole and exclusive use of Axis P.E.D Ltd and Fortis IBA Ltd. Reasonable skill, care and diligence has been exercised, and in accordance with the technical requirements of the brief. Notwithstanding the efforts made by the professional team in undertaking the assessment and preparing this report, it is possible that other ground conditions and contamination as yet undetected may exist. Reliance on the findings of this report must therefore be limited accordingly. Such reliance must be based on the whole report and not on extracts which may lead to incomplete or incorrect conclusions when taken out of context.

8.4.2. SGP reserves the right to alter any of the foregoing information in the event of new information being disclosed or provided and in the light of changes to legislation, guidelines and responses by the statutory and regulatory authorities.

## **DRAWINGS**



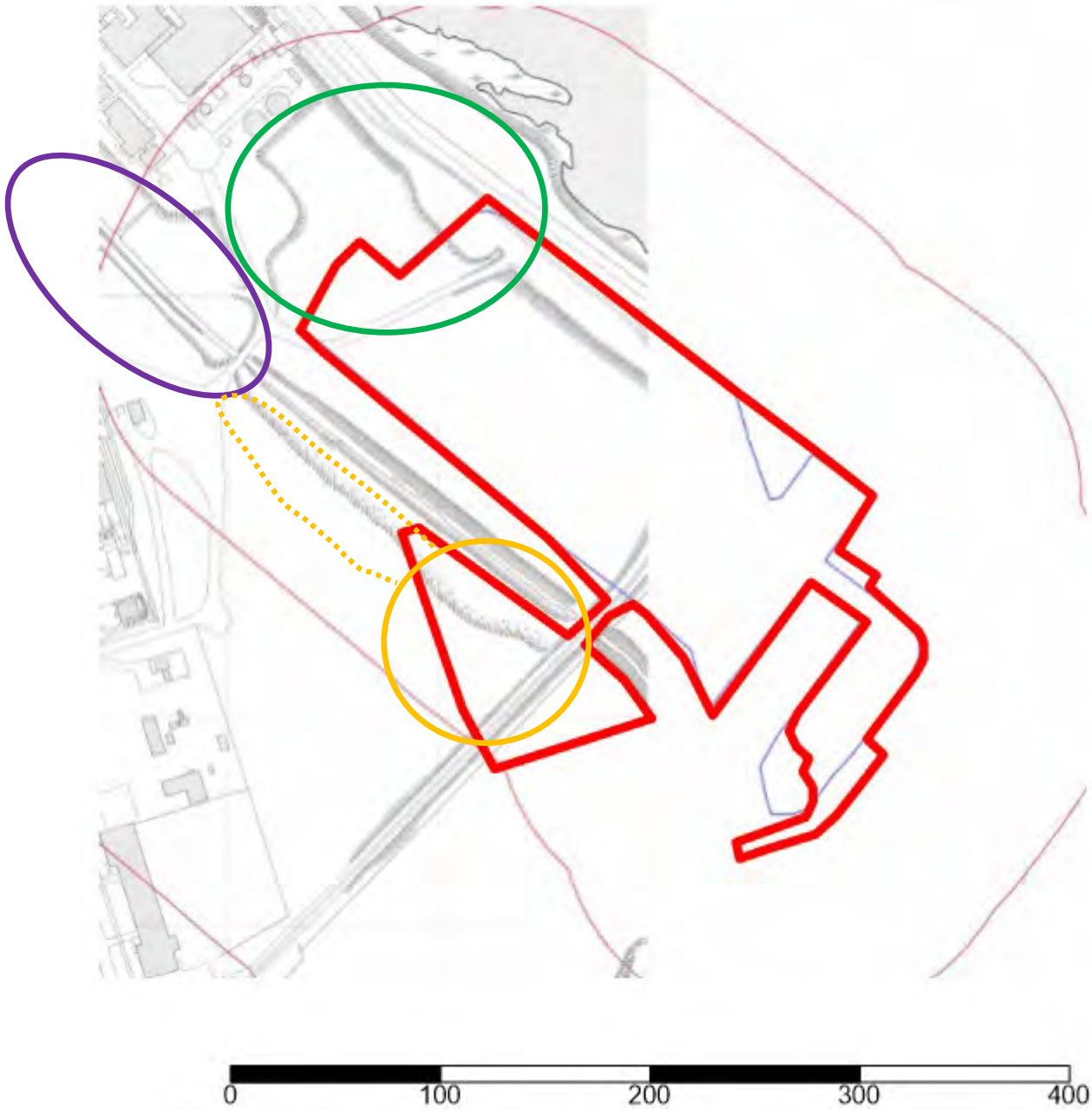
Ordnance Survey: © Crown copyright. All rights reserved. License number 100005799



**D01: Historical Map – 1890 (1:2,500 scale)**

*Showing Site boundary suspected to be slightly incorrect as crosses Wyre Estuary to NE. Embankment (suspected as flood defenses) shown to NE.*

Ordnance Survey: © Crown copyright. All rights reserved. License number 100005799



**D02: Historical Map – 1960 (1:1,250 scale)**

*Showing railway tracks crossing Site (located upon embankment) leading from the Ammonia Soda Works to the Northwest. Royles Brook shown within a cutting to west and southwest with sand and gravel material (suspected as dredging from the stream) located on the opposite bank (circled in orange) which extends off Site to the northwest along the southern bank of the Royles Brook (shown as dashed orange line). Sand and gravel deposits on Site circled in green which extend off site to the northwest. Pit/cutting circled in purple located close to the western Site boundary.*

Ordnance Survey: © Crown copyright. All rights reserved. License number 100005799



**D03: Historical Map – 1967-68 (1:10,560 scale)**

*Showing outline of Site boundary in red, the location of a potential unspecified pit/convergence of railway embankments along northeastern Site boundary as circled in orange, drain – potentially from Site circled in green, sand & gravel material (suspected dredging s from Royles Brook in pink, and increase in saltmarsh and mudflats in Wyre Estuary circled in purple.*

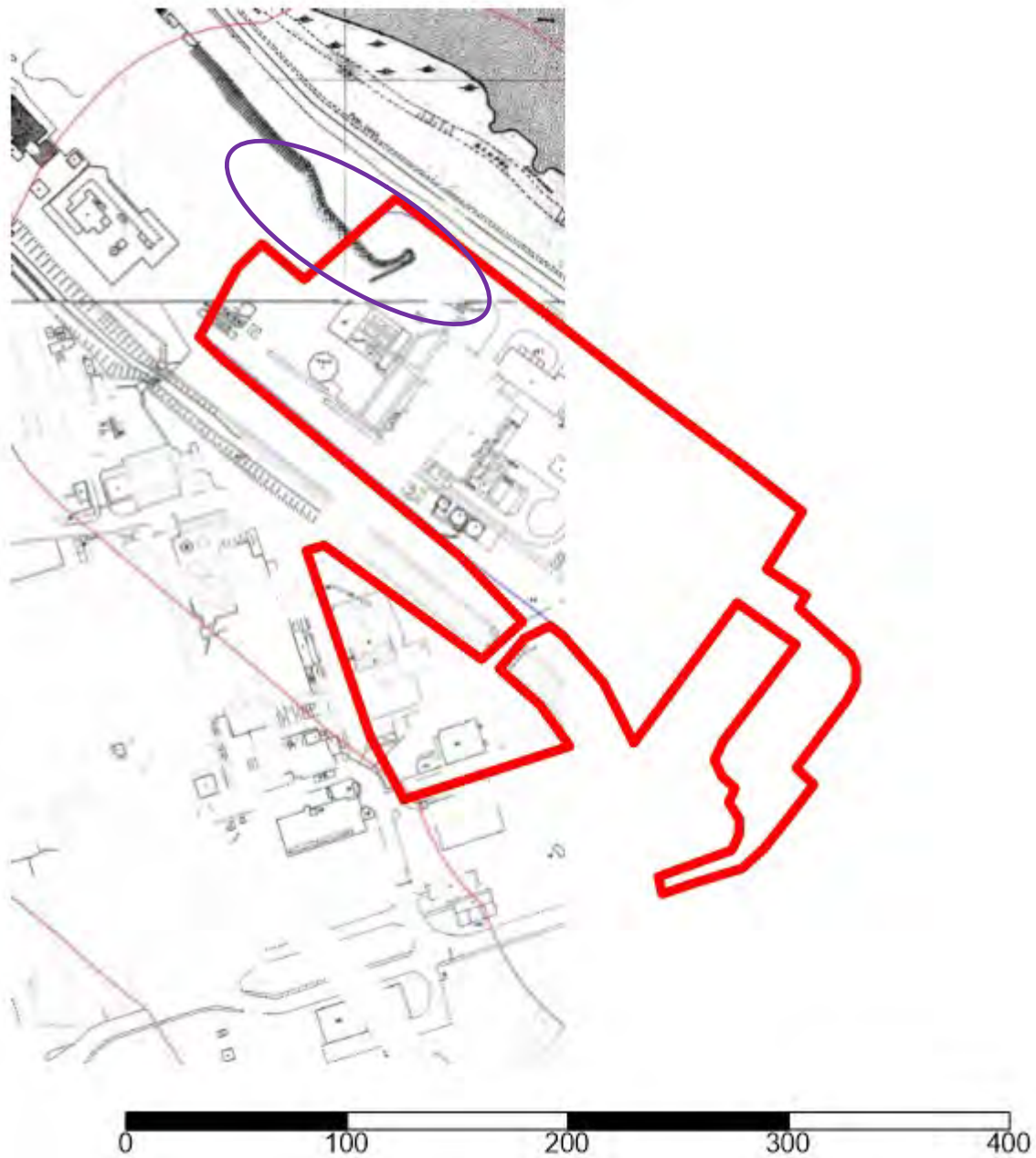
Ordnance Survey: © Crown copyright. All rights reserved. License number 100005799



**D04: Historical Map – 1976 (1:10,560 scale)**

*Showing outline of Site boundary in red. Southern portion of site to south of Royles Brook has become developed.*

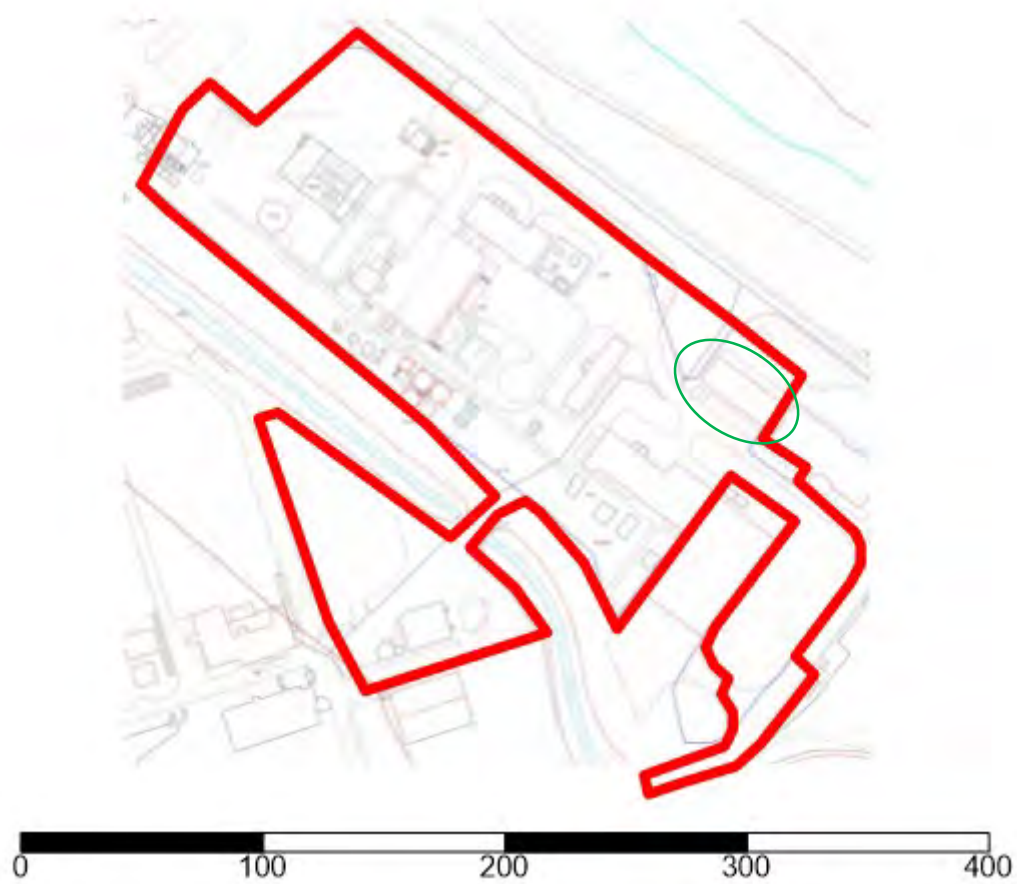
Ordnance Survey: © Crown copyright. All rights reserved. Licence number 100005799



**Drawing D05 – Historical Mapping dated 1979/1980  
(1:1,250 scale)**

*Area to NW is undeveloped (surveyed 1979) and main central area (surveyed 1980) is shown as developed. The main Site boundary is outlined in red, an area of material deposition (potentially a bund) which is in the North and extends beyond the Site is circled in purple.*

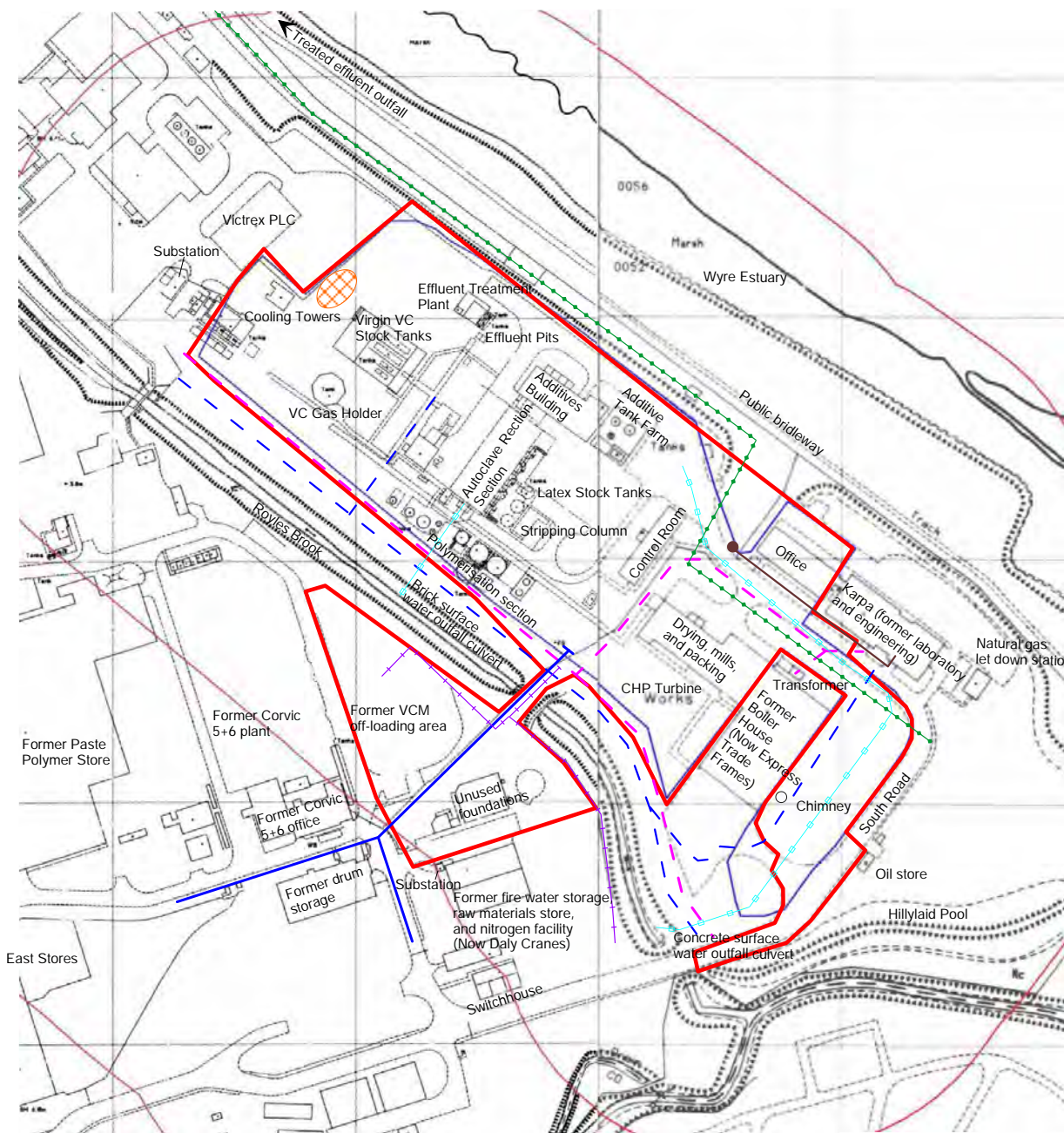
Ordnance Survey: © Crown copyright. All rights reserved. Licence number 100005799



**Drawing D06 – Historical Mapping dated 2003  
(1:1,250 scale)**

*Showing Site as fully developed. Building circled in green is to be retained within proposed development.*

0 100 200 300 400



**Key**

- Surface water drainage culverts
- Live water main (300mm)
- Live electric (11kv)
- Live Ethylene pipeline (100mm)
- Septic tank+connection
- Live water main (150mm)
- Relict water deluge system
- Site boundary
- Soil bund



Smith Grant LLP

Suite 16, Bryn Estyn Business Centre  
 Bryn Estyn Road, Wrexham, LL13 9TY  
 Tel: 01978 822367

www.smithgrant.co.uk  
 email: consult@smithgrant.co.uk

Project:  
 Hillhouse IBA

Drawing:  
 Site Features Plan

Drawn by:  
 MJ

Checked:  
 LS

Date:  
 03.07.24

Report No:  
 R01

Job No:  
 R3217

Drg No:  
 D07-v7

## **APPENDIX A**

### **Photographic Log**



R3217-Hillhouse IBA 14.12.23

1.



14.12.23 – View westwards

2.



14.12.23 – View towards northeast boundary

3.



14.12.23 – View southwards

4.



14.12.23 – Gravel site surface

5.



14.12.23 – Concrete pad for near autoclave area

6.



14.12.23 – Concrete pad near control room

7.



14.12.23 – View southwards across hardstanding in centre of site

8.



14.12.23 – Relict hardstanding with iron baseplates

9.



14.12.23 – Concrete pad near stripping column

10.



14.12.23 – Surface water drain access point near area of former mineralised water tanks

11.



14.12.23 – Concrete pad in northwest of site

12.



14.12.23 – Location of former vinyl chloride gas holder

13.



14.12.23 – Hardstanding pathway along southwest boundary

14.



14.12.23 – View south towards Royles Brook

15.



14.12.23 – Concrete pad for former cooling towers just off northwest boundary

16.



14.12.23 – 11kv switch house off northwest boundary

17.



14.12.23 – Live water main crossing Royles Brook

18.



14.12.23 – Northwest view of Royles Brook

19.



14.12.23 – Southeast view of Royles Brook

20.



14.12.23 – Bunded material to prevent spillages from vinyl chloride tanks

21.



14.12.23 – Former location of virgin vinyl chloride tanks

22.



14.12.23 – Former location of effluent treatment plant

23.



14.12.23 – View southeast from effluent treatment plant

23.



14.12.23 – Former location of effluent stirring tanks

24.



14.12.23 – Live fire hydrant located in the centre of site

25.



14.12.23 – View of treated water outfall pipes (off-site)

26.



14.12.23 – Location of former mineralised water tank

27.



14.12.23 – Location of former latex tanks / autoclaves

28.



14.12.23 – Location of septic tank

29.



14.12.23 – Historical water / gas pipes

30.



14.12.23 – Ethylbenzene nitrogen gauge

31.



14.12.23 – Office building to remain

32.



14.12.23 – Parking area/road to the rear of office building (off-Site)

33.



14.12.23 – Former high pressure gas main connection point (off-site)

34.



14.12.23 – View of existing business - Express Trade Frames (former boiler house)

35.



14.12.23 – View of access road and land to the southeast of Express Trade Frames (On-Site)

36.



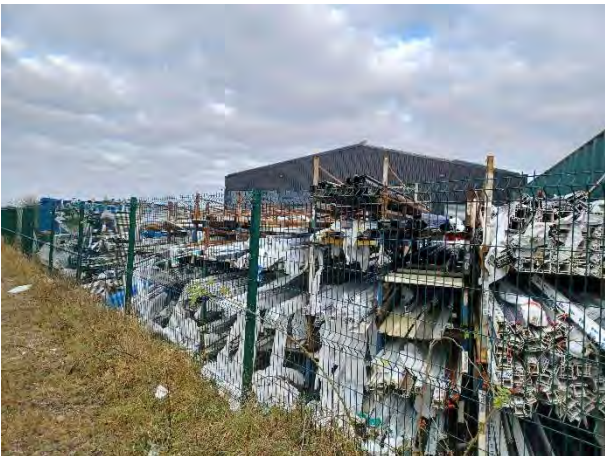
14.12.23 – Access road and off-site oil store

37.



14.12.23 – Location of former chimney stack

38.



14.12.23 – View of material storage for express trade frames

39.



14.12.23 – Relict powerline pole located close to northern bank of Royles Brook.

40.



14.12.23 – Location of former control room

41.



14.12.23 – Ethylbenzene pipeline marker post

42.



14.12.23 – Overgrown area leading to Royles Brook (photo looking south)

43.



14.12.23 – Sluice gate on the southeast end of Royles Brook (off-site)

45.



14.12.23 – Live water main off south boundary

46.



14.12.23 – Crossing point over Royles Brook for larger vehicles

47.



14.12.23 – View across overgrown area around Royles Brook

48.



14.12.23 – Oil storage hut (off-site)



49.



14.12.23 – Cabin at vinyl chloride drop off point

50.



14.12.23 – Vinyl chloride drop off point (off-site)

51.



14.12.23 – Wyre River to the northeast (off-site)

52.



14.12.23 – Outfall drainage point (off-site)

53.



14.12.23 – Former Vinnolit discharge point (off-site)

54.



14.12.23 – Bridleway to the northeast of site (off-site)

55.



14.12.23 – View onto Wyre River to the northeast (off-site)

56.



14.12.23 – View of access road and off-site parking area

57.



14.12.23 – View north along South Road (looking north). Area to northwest of road is on-Site

58.



14.12.23 – View of access road/South Road (partly on-Site)

59.



14.12.23 – View of access road leading to Express Trade Frames (off-Site)

60.



14.12.23 – View south of ethylbenzene pipes across habitat area in the north of the Site

**R3217-Additional Visit (south of Royles Brook)**

1.



26.01.24 – VCM off-loading control room (west side)

2.



26.01.24 - VCM off-loading control room (south side)

3.



26.01.24 – View north towards Royles Brook

4.



26.01.24 - VCM off-loading control room (east side)

5.



26.01.24 -

6.



26.01.24 – View of tanker off-loading area

7.



26.01.24 – Former spill drainage area (now used for surface water drainage)

8.



26.01.24 – View of former pipework path towards main Site

9.



26.01.24 – View of bunded portion of road where tankers would off-load VCM

10.



26.01.24 – Former spillage drainage pathway (now surface water drainage)

11.



26.01.24 – Former VCM storage tank concrete pad

12.



26.01.24 – Concrete pad in the south (unknown use)

13.



26.01.24 – Former path in south of additional area 1

14.



26.01.24 – Concrete pads in southeast

15.



26.01.24 – View along access track towards main Site.

16.



26.01.24 - View across former access across Royles Brook towards main Site

17.



26.01.24 – Services access point in road

18.



26.01.24 – Fire hydrant point connected to live water main

19.



26.01.24 – View south across VCM off-loading area

20.



26.01.24 – View east across VCM off-loading area

21.



26.01.24 – View south from northern boundary

22.



26.01.24 – View of unused foundation area on southern boundary

23.



26.01.24 - View of unused foundation area on southern boundary

24.



26.01.24 - View of unused foundation area on southern boundary

25.



26.01.24 – Old fences stored on southern boundary (off-site)

26.



26.01.24 - View of unused foundation area on southern boundary

27.



26.04.24 – View of southern boundary

28.



26.01.24 – Daley Cranes repair shop to the south (off-site)

29.



26.01.24 – Daley Cranes (off-site)

30.



26.01.24 – Small substation powering Daley Cranes (off-site)

31.



26.01.24 – old bike shed located to the south (off-site)

32.



26.01.24 – West side of switch house to the south (off-site)

33.



26.01.24 – View of circular concrete pad in west

34.



26.01.24 – View of debris and soil bund on southern boundary of additional area 2

35.



26.01.24 – View east across concrete pad

36.



26.01.24 - View north across concrete pad



37.



26.01.24 – View south across concrete pad

38.



26.01.24 – View south from material bund on southern boundary

39.



26.01.24 – View northwest from concrete pad

40.



26.01.24 – View towards Royle Brook from just off-site to the south

## **APPENDIX B**

### **Groundsure Report (Including Historical Maps)**

**Site Details:**

334982.9920421878,443421.54  
84771532

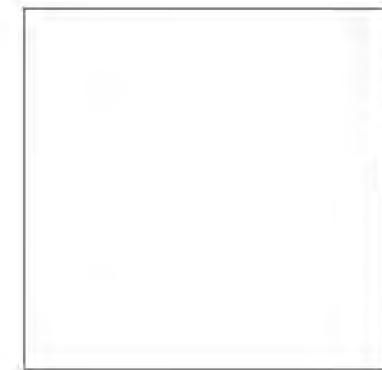
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1848

**Scale:** 1:10,560

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



Surveyed 1844  
Revised N/A  
Edition 1848  
Copyright N/A  
Levelled N/A

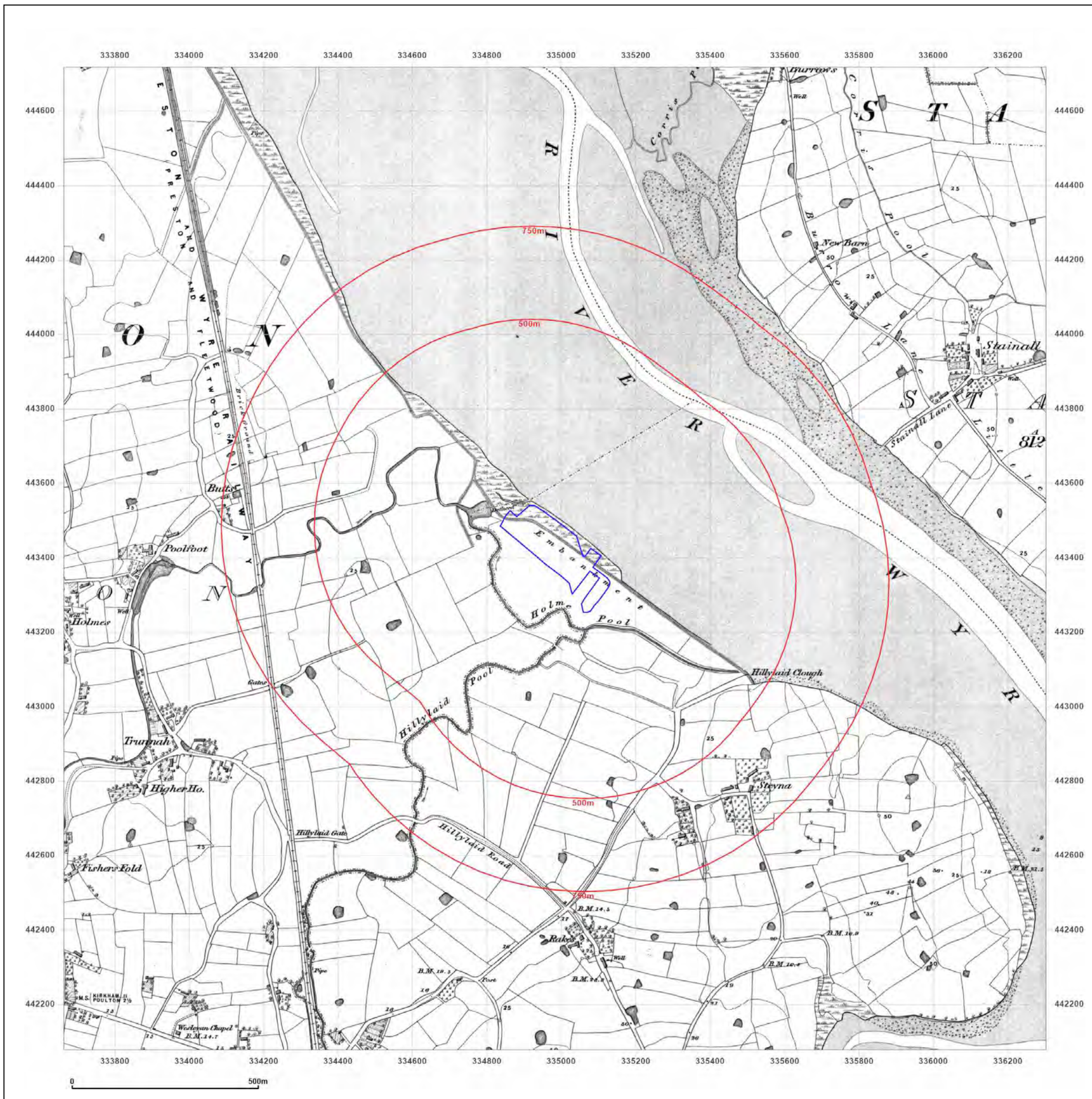


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

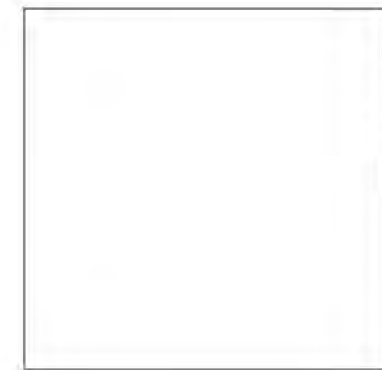
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1891

**Scale:** 1:10,560

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



Surveyed 1844  
Revised 1891  
Edition N/A  
Copyright N/A  
Levelled N/A

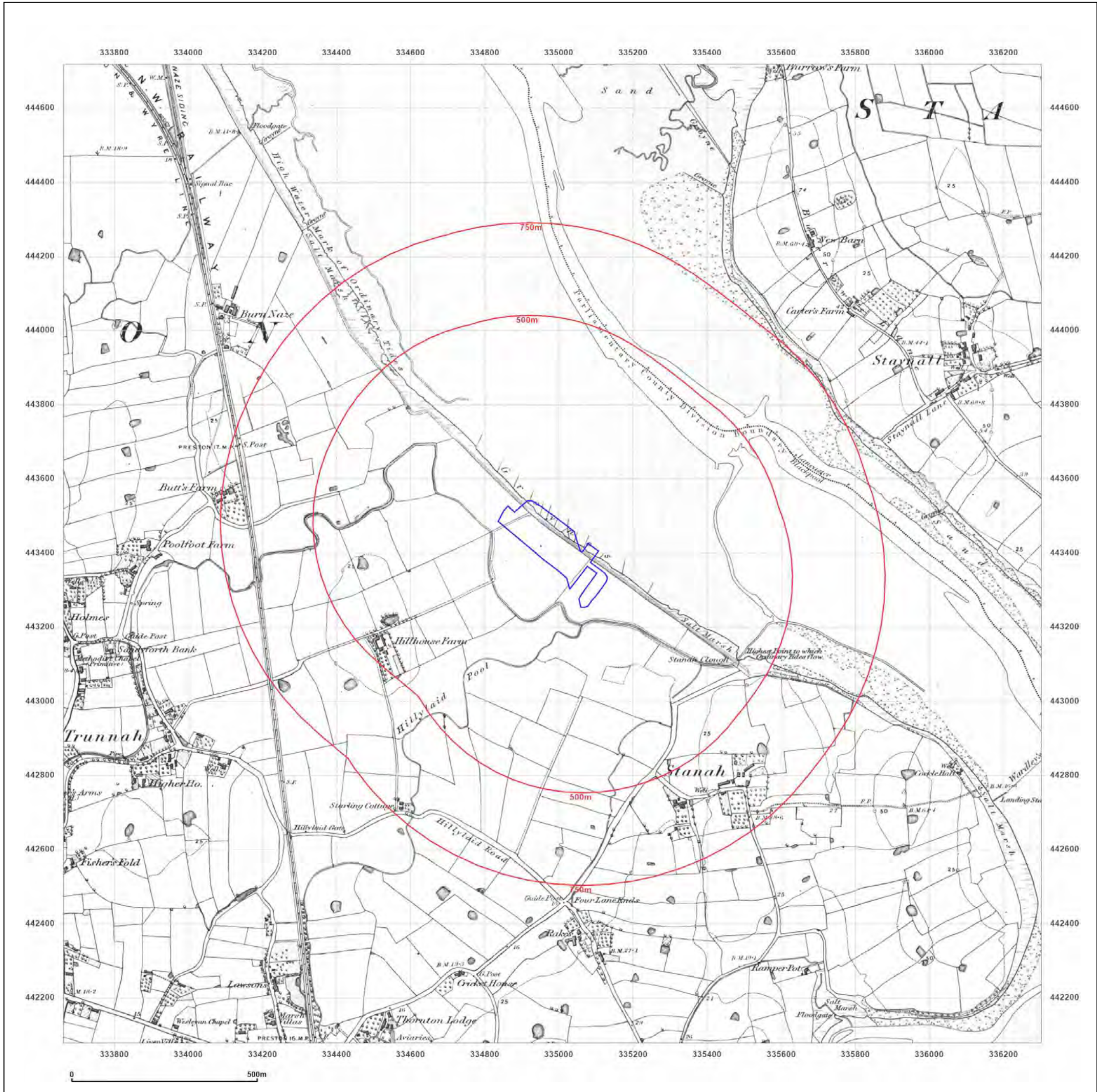


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

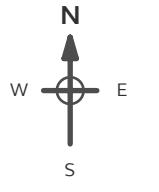
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1910

**Scale:** 1:10,560

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



Surveyed 1845  
Revised 1910  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1844  
Revised 1910  
Edition N/A  
Copyright N/A  
Levelled N/A

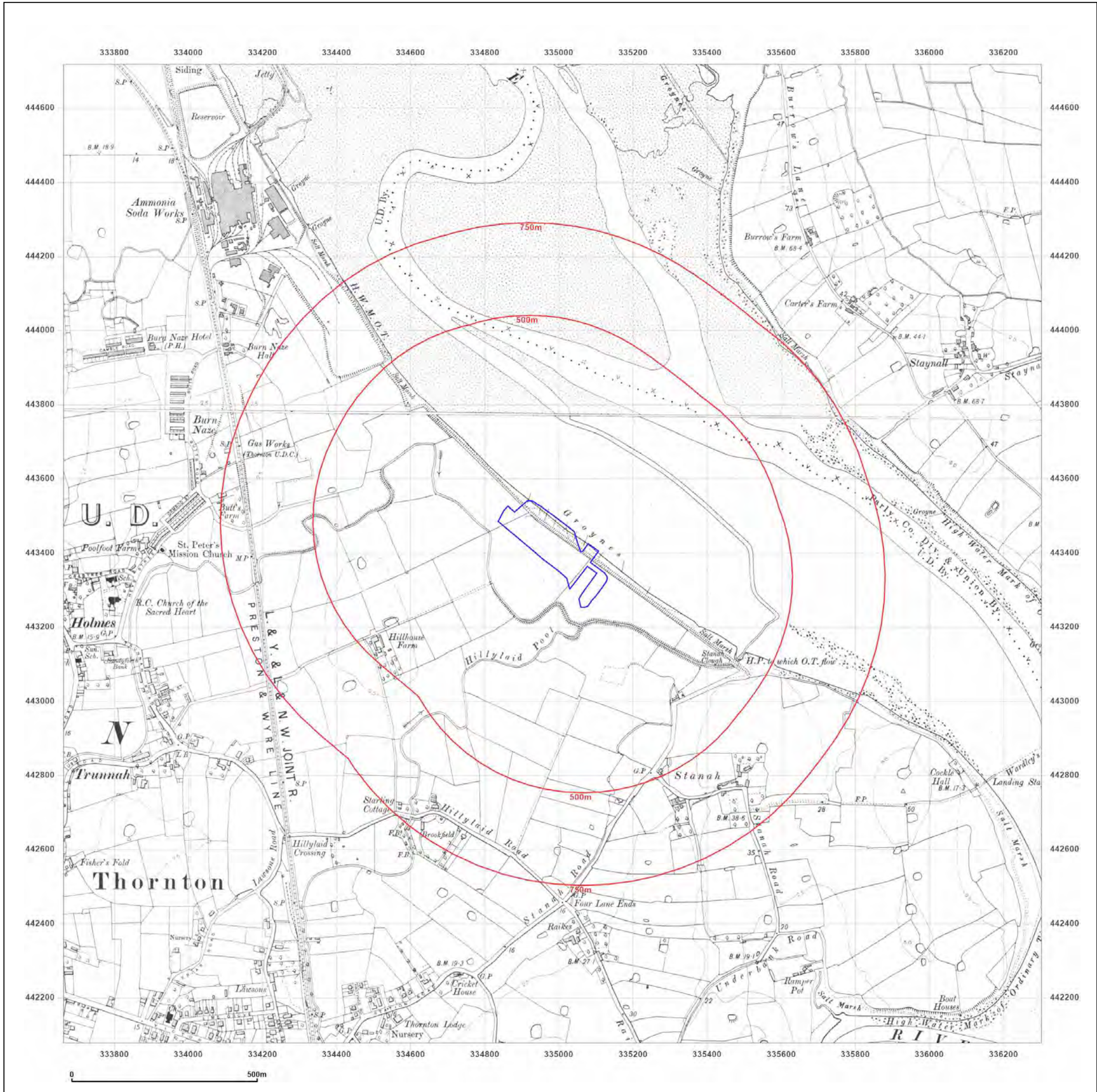


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1930-1931

**Scale:** 1:10,560

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



Surveyed 1845  
Revised 1930  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1844  
Revised 1931  
Edition N/A  
Copyright N/A  
Levelled N/A

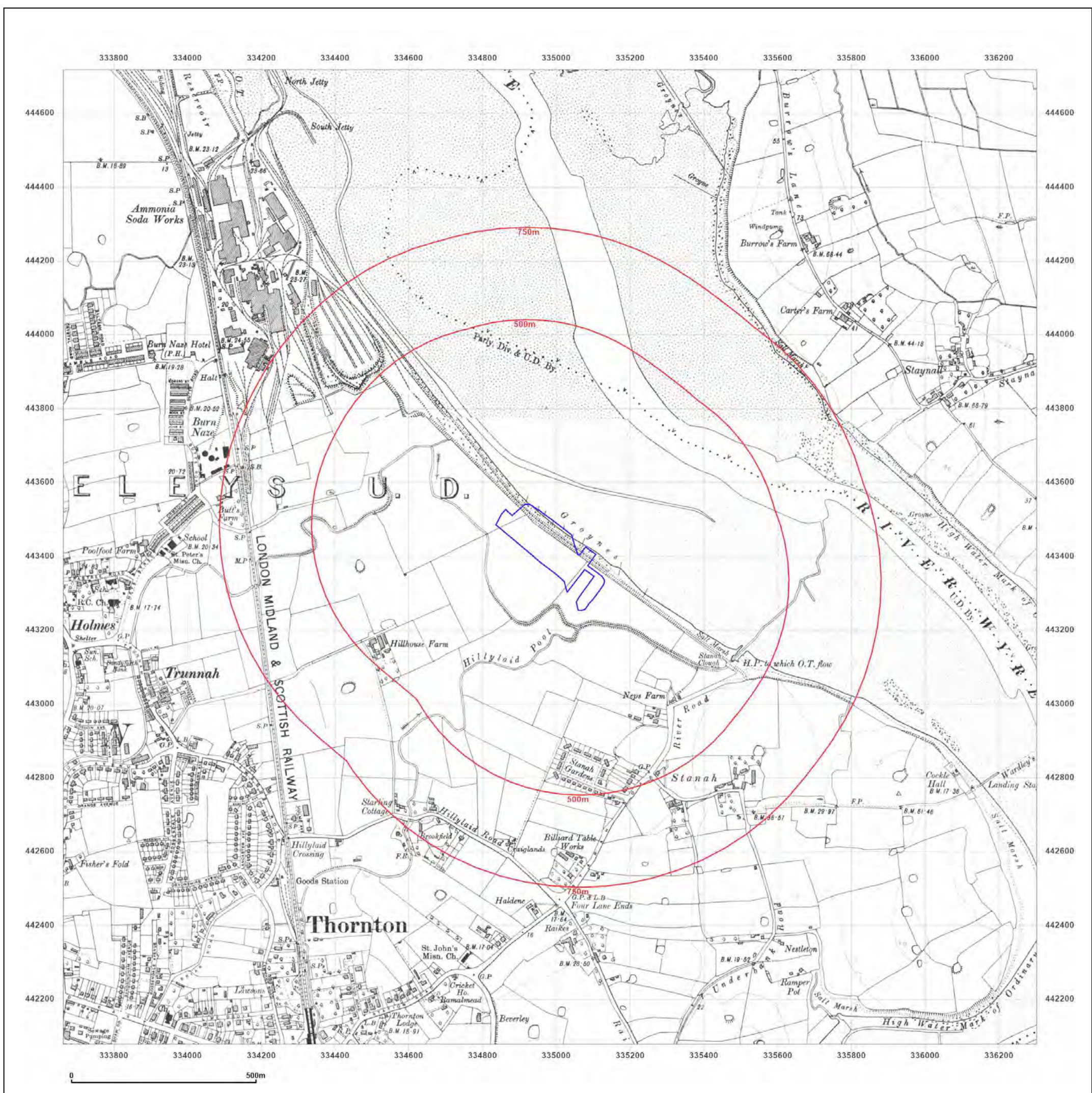


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

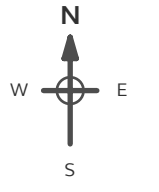
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1938

**Scale:** 1:10,560

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



Surveyed 1845  
Revised 1938  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1844  
Revised 1938  
Edition N/A  
Copyright N/A  
Levelled N/A

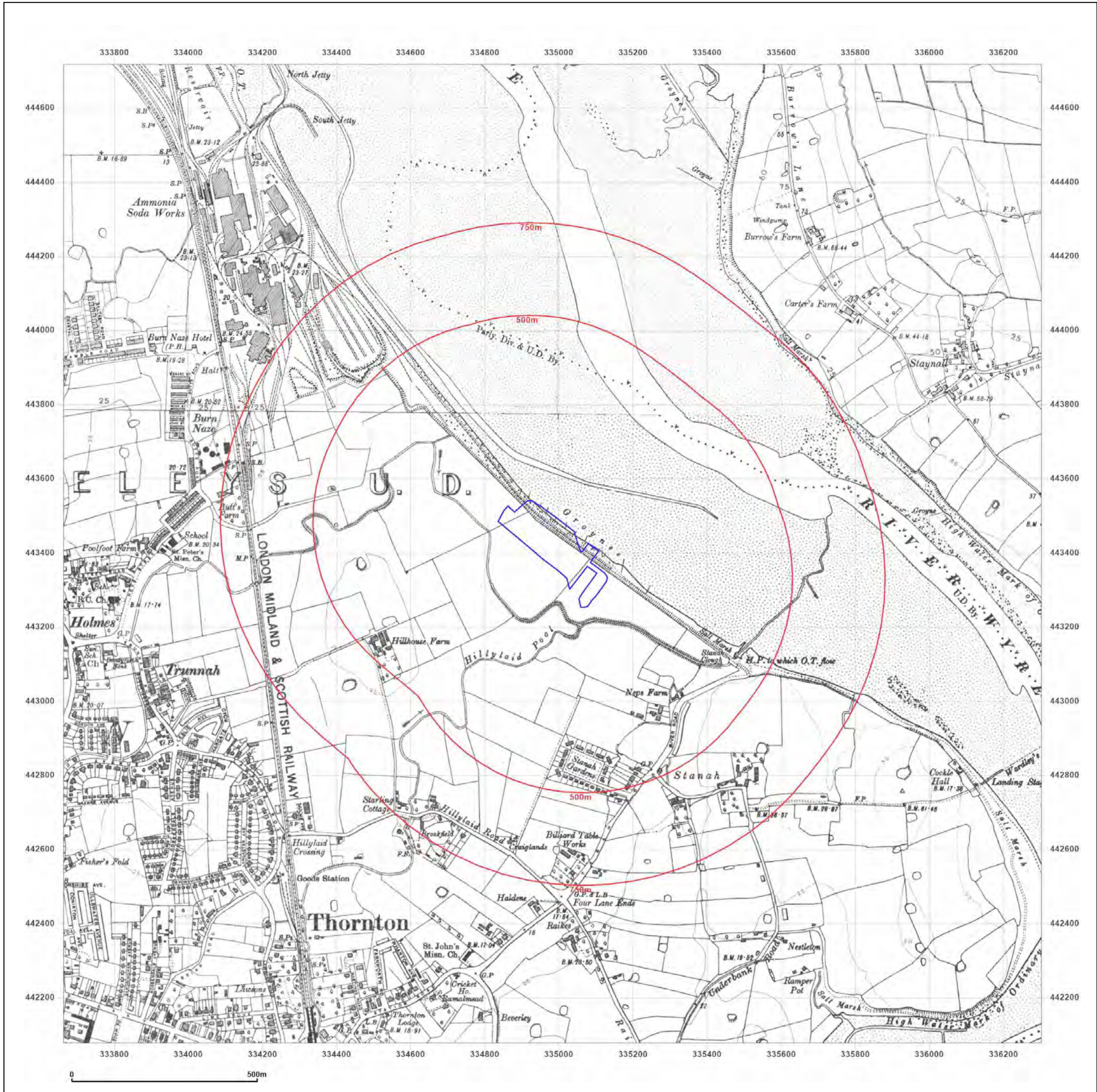


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

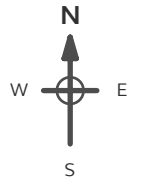
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 334982.9920421878,443421.54  
 84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** Provisional  
**Map date:** 1951  
**Scale:** 1:10,560  
**Printed at:** 1:10,560



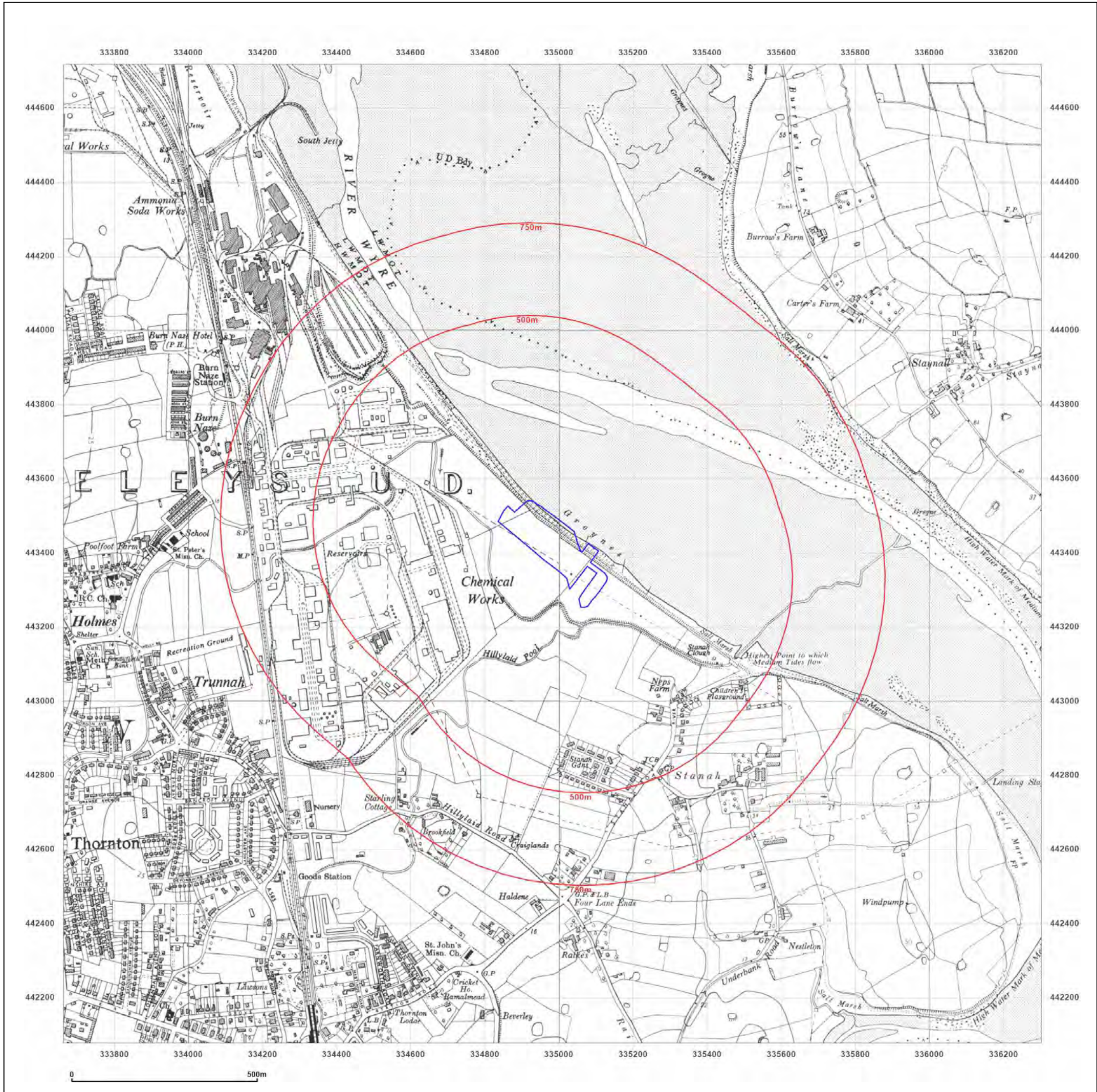
<p>Surveyed 1951          Revised 1951          Edition N/A          Copyright N/A          Levelled N/A</p>	<p>Surveyed 1951          Revised 1951          Edition N/A          Copyright N/A          Levelled N/A</p>
--	--

**Powered by**  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** Provisional

**Map date:** 1967-1968

**Scale:** 1:10,560

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



Surveyed 1967  
Revised 1967  
Edition N/A  
Copyright N/A  
Levelled N/A

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

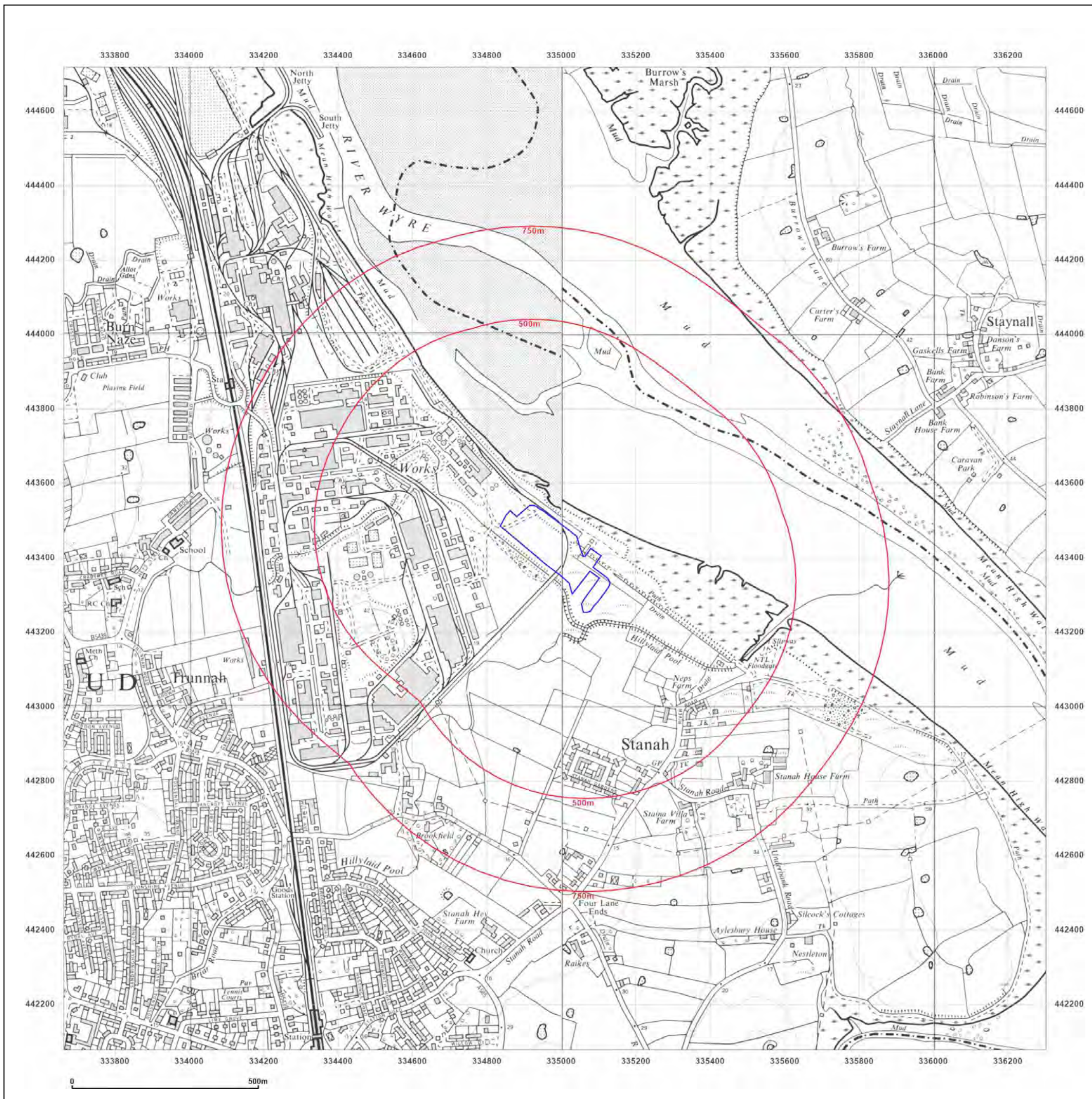


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1973

**Scale:** 1:10,000

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



Surveyed 1973  
Revised 1973  
Edition N/A  
Copyright N/A  
Levelled N/A



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1981-1985

**Scale:** 1:10,000

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



Surveyed 1981  
Revised 1981  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1983  
Revised 1985  
Edition N/A  
Copyright N/A  
Levelled N/A

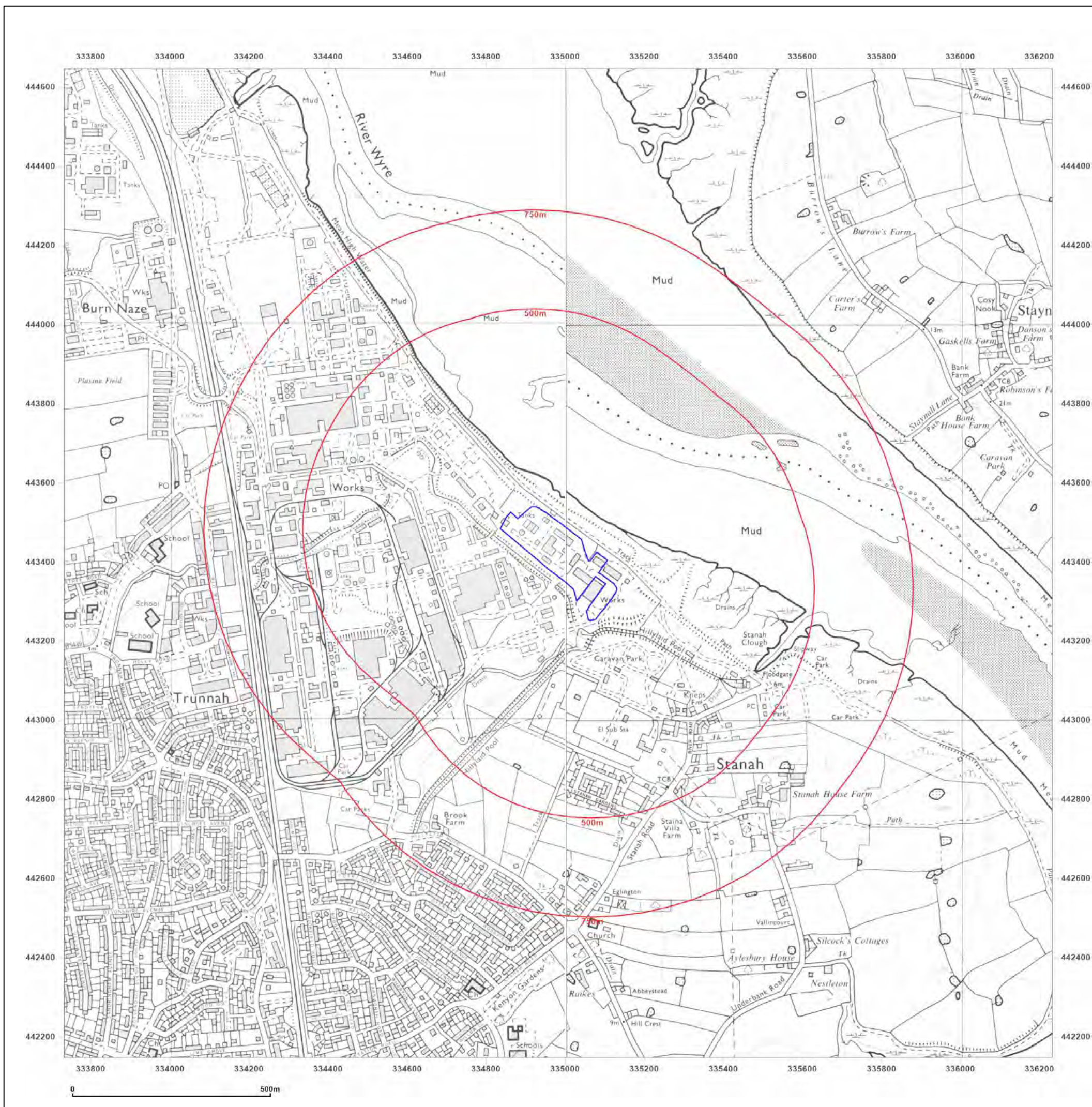


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1992

**Scale:** 1:10,000

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



Surveyed 1981  
Revised 1992  
Edition N/A  
Copyright N/A  
Levelled N/A

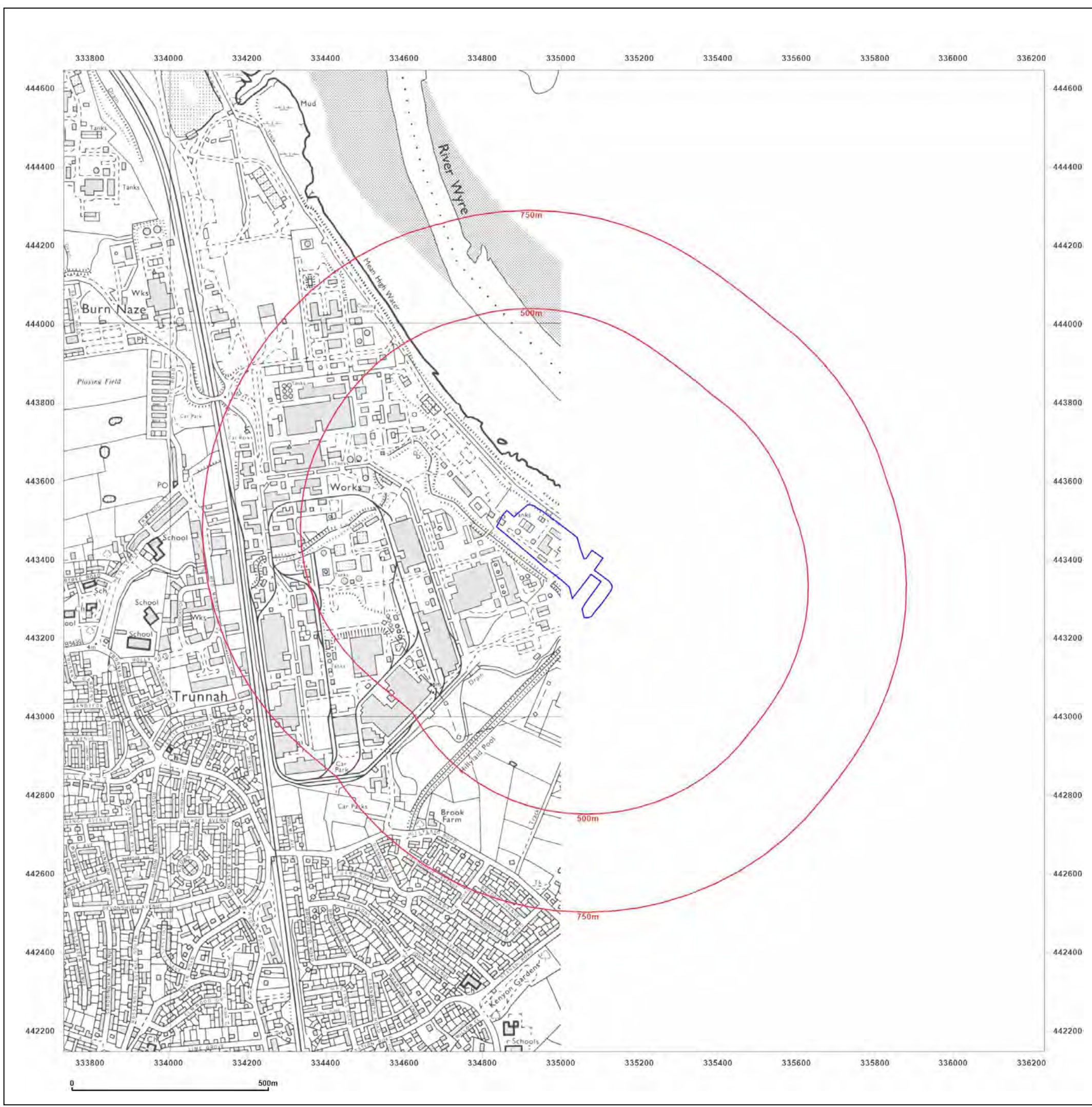


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

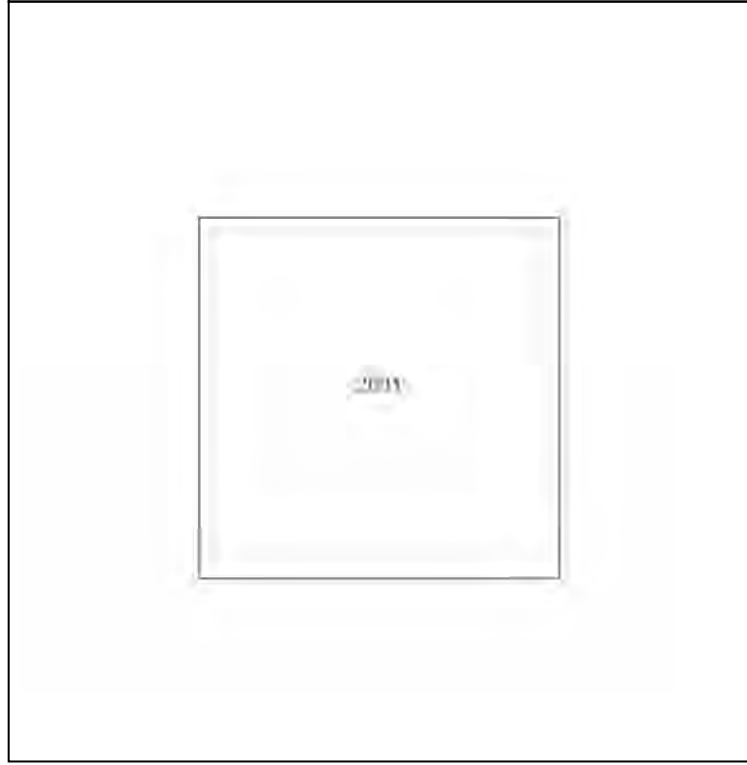
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 2001

**Scale:** 1:10,000

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

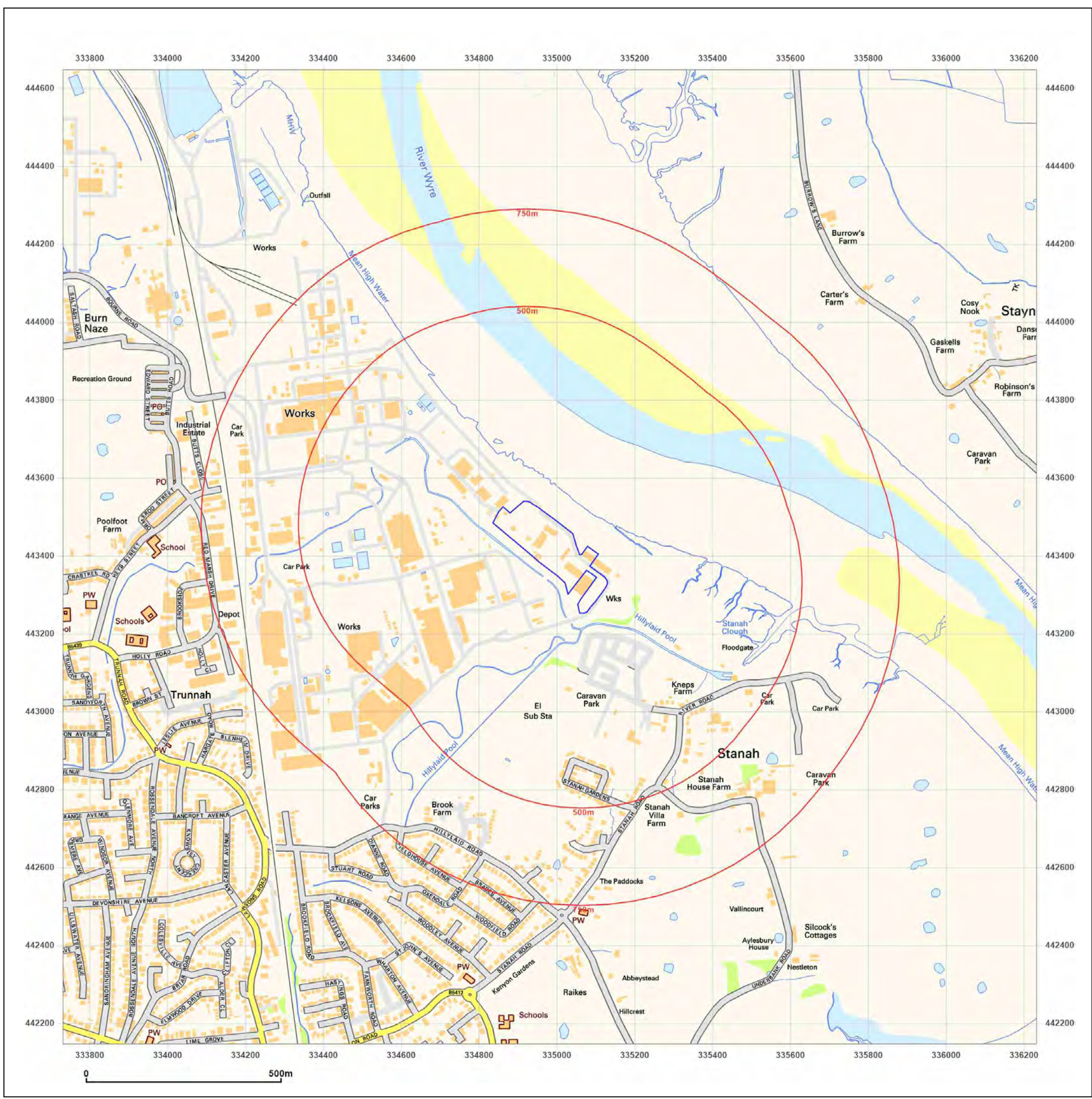


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

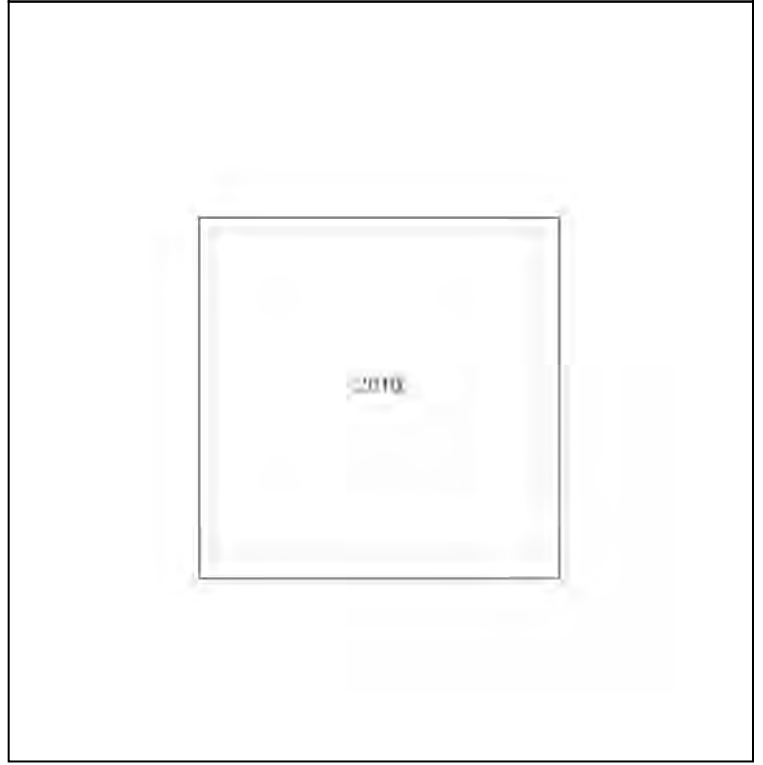
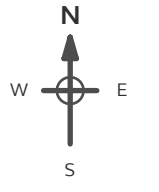
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 334982.9920421878,443421.54  
 84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid  
**Map date:** 2010  
**Scale:** 1:10,000  
**Printed at:** 1:10,000

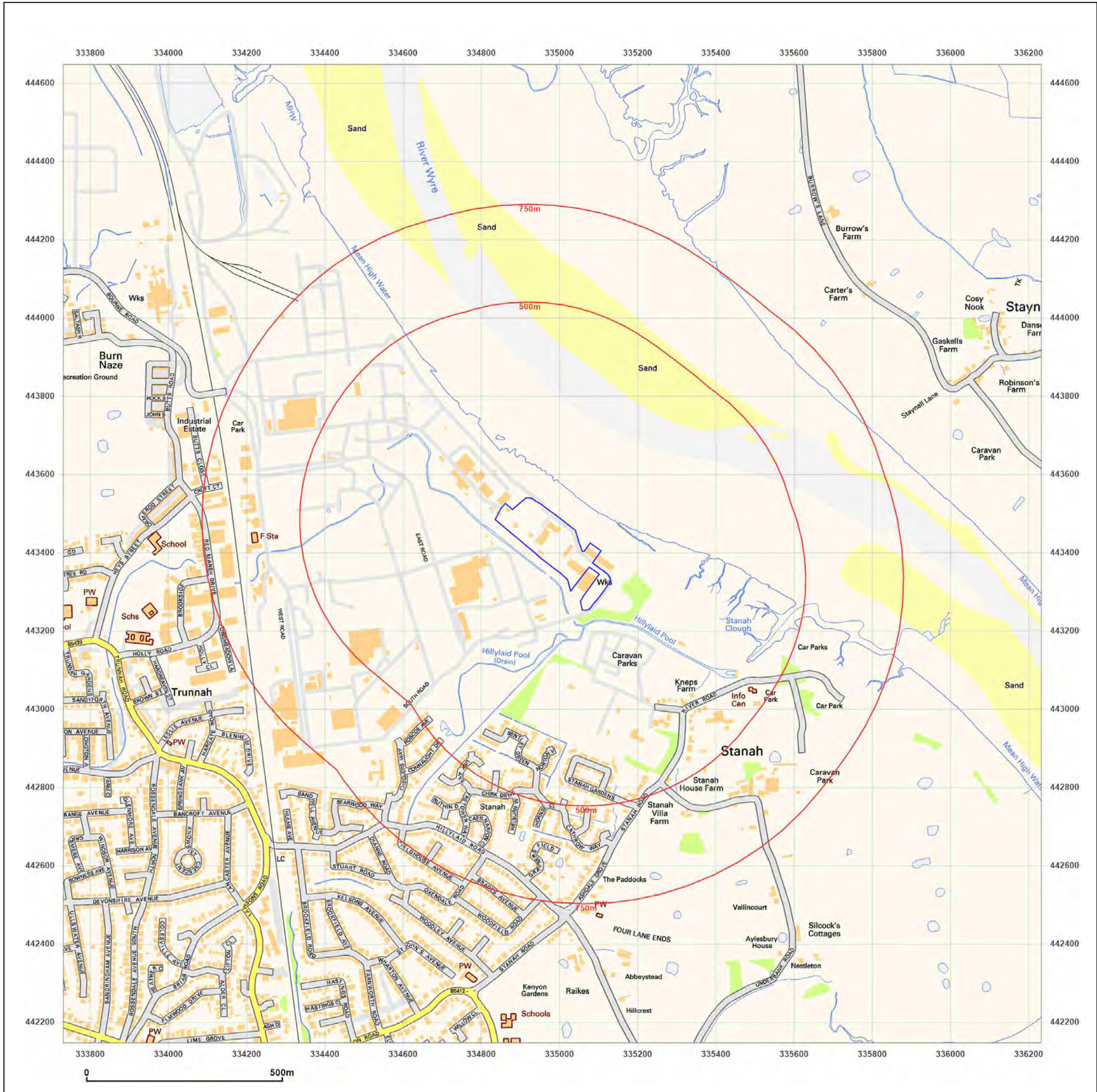


**Powered by**  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

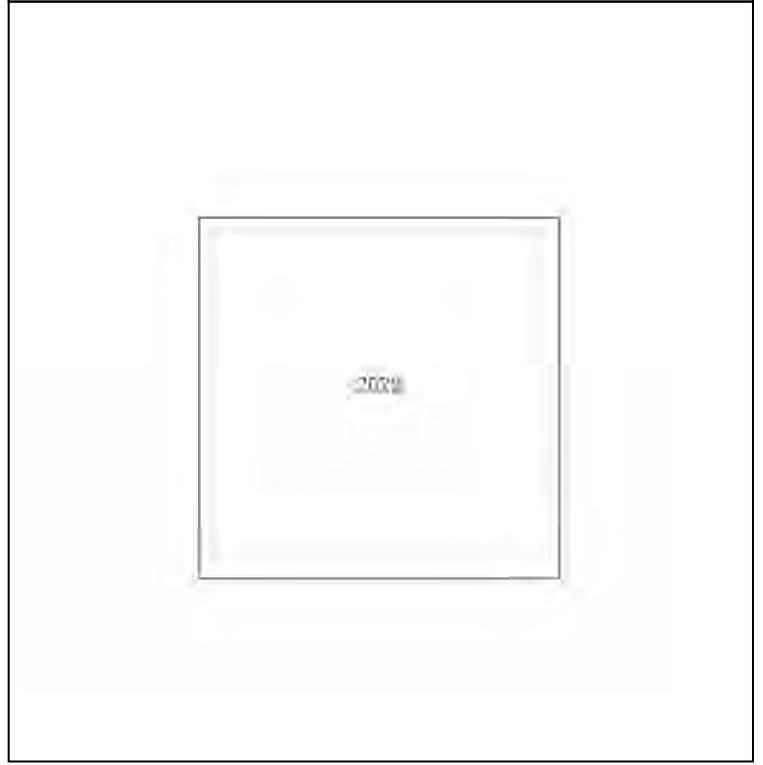
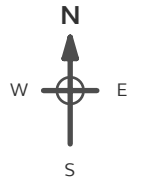
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 334982.9920421878,443421.54  
 84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid  
**Map date:** 2023  
**Scale:** 1:10,000  
**Printed at:** 1:10,000



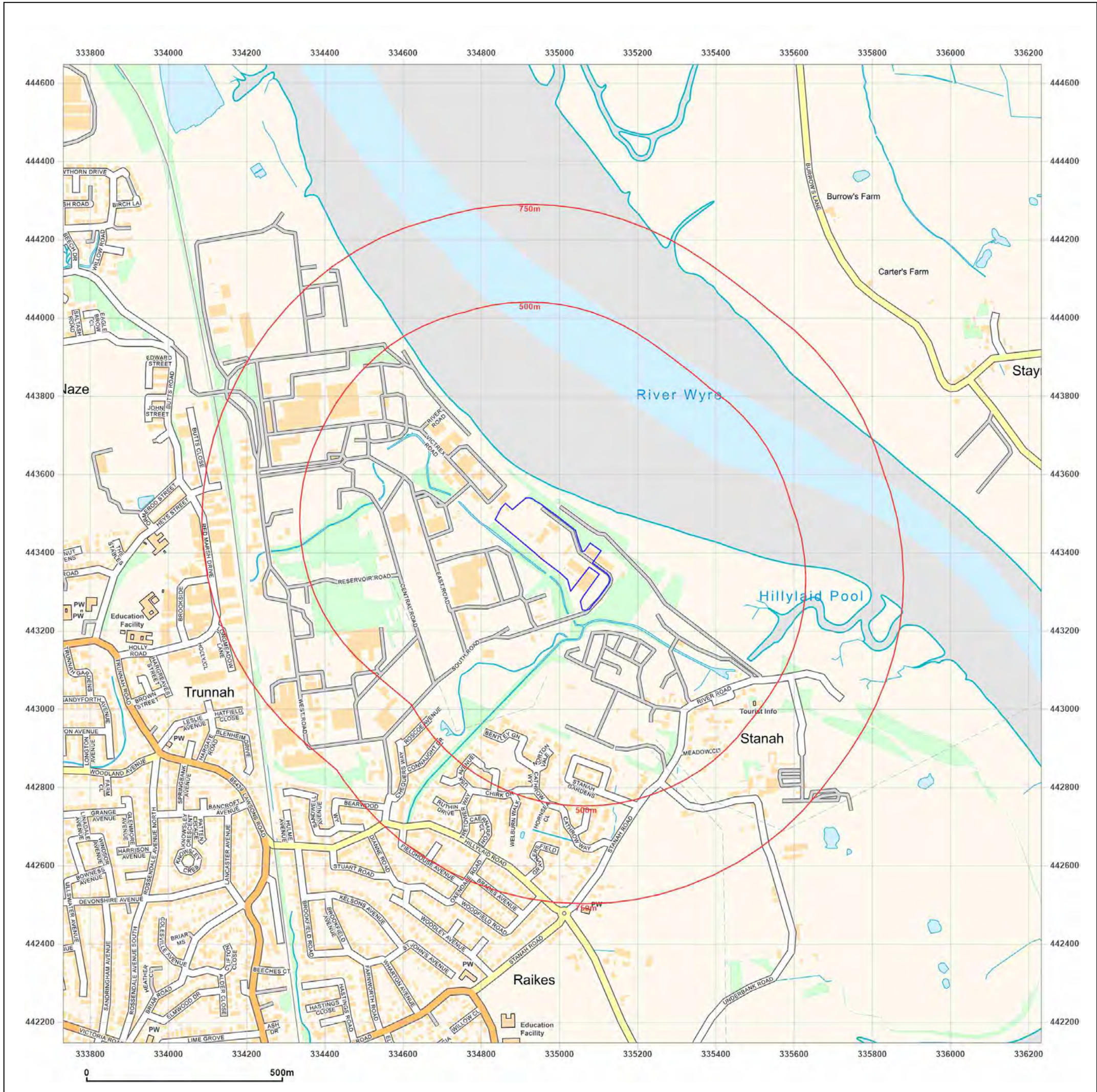
**Powered by**  


Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

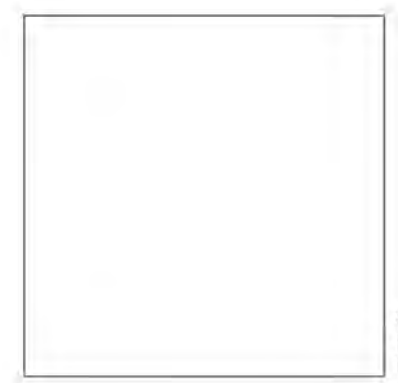
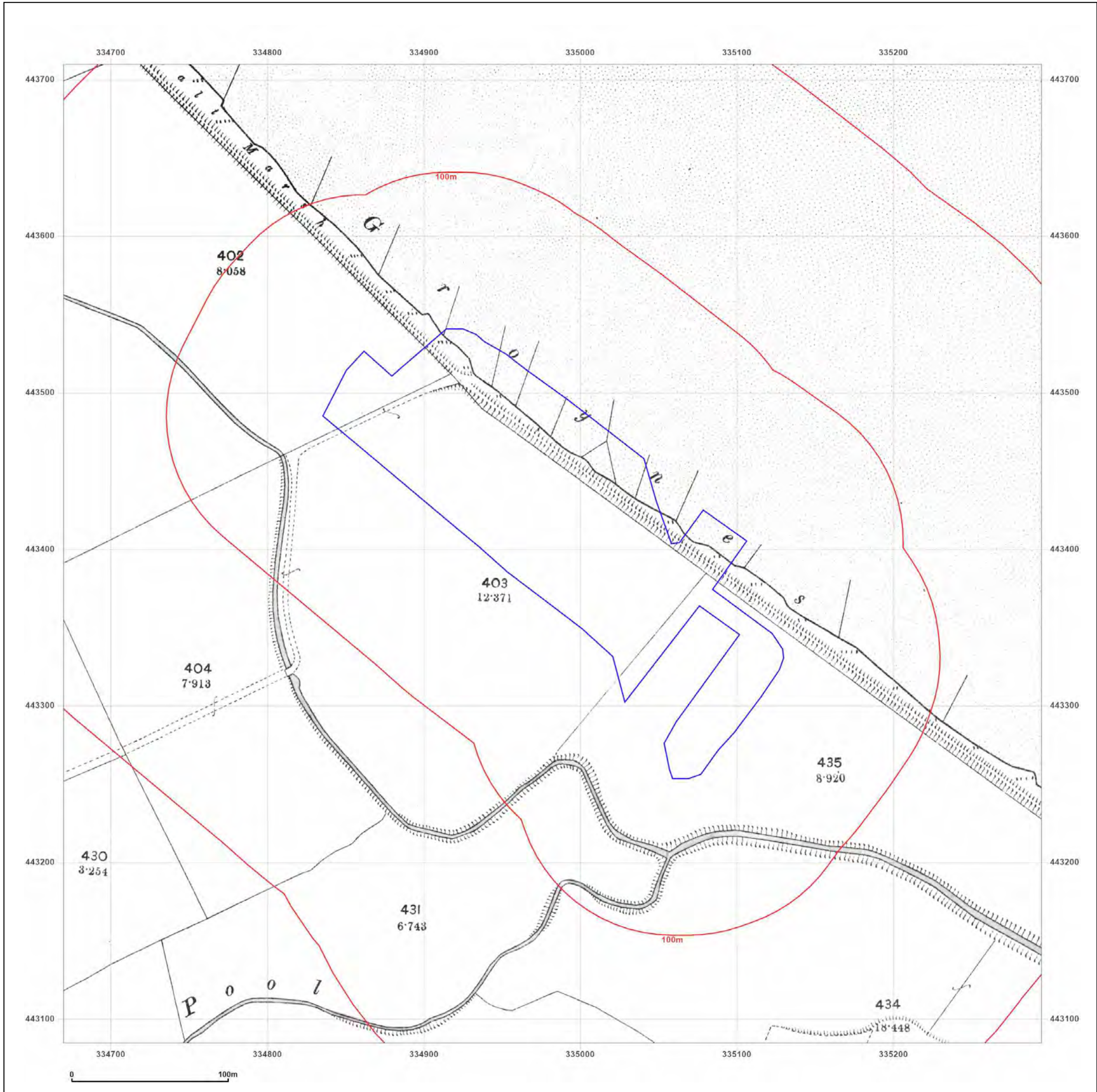
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1890

**Scale:** 1:2,500

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



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



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

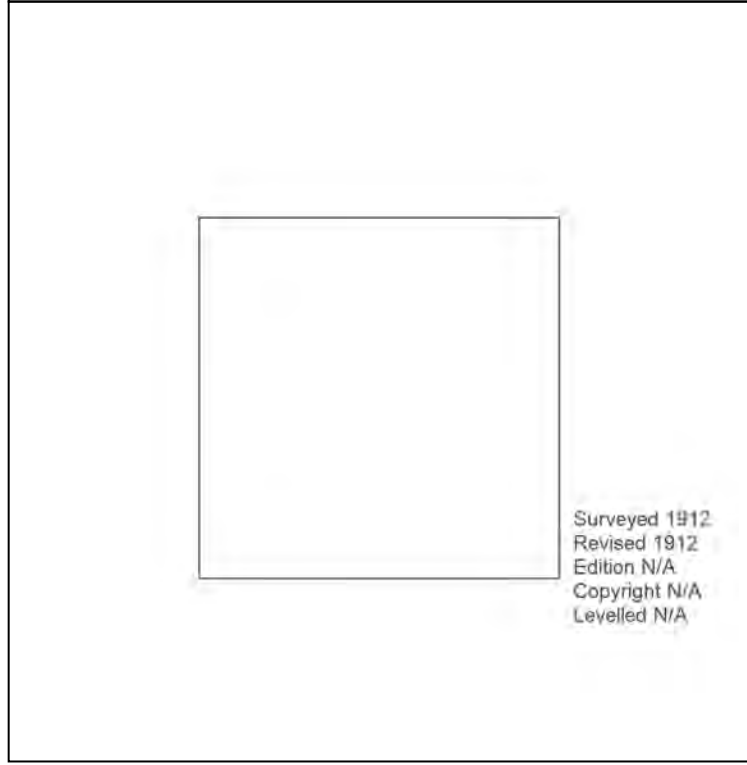
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1912

**Scale:** 1:2,500

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



Surveyed 1912  
Revised 1912  
Edition N/A  
Copyright N/A  
Levelled N/A

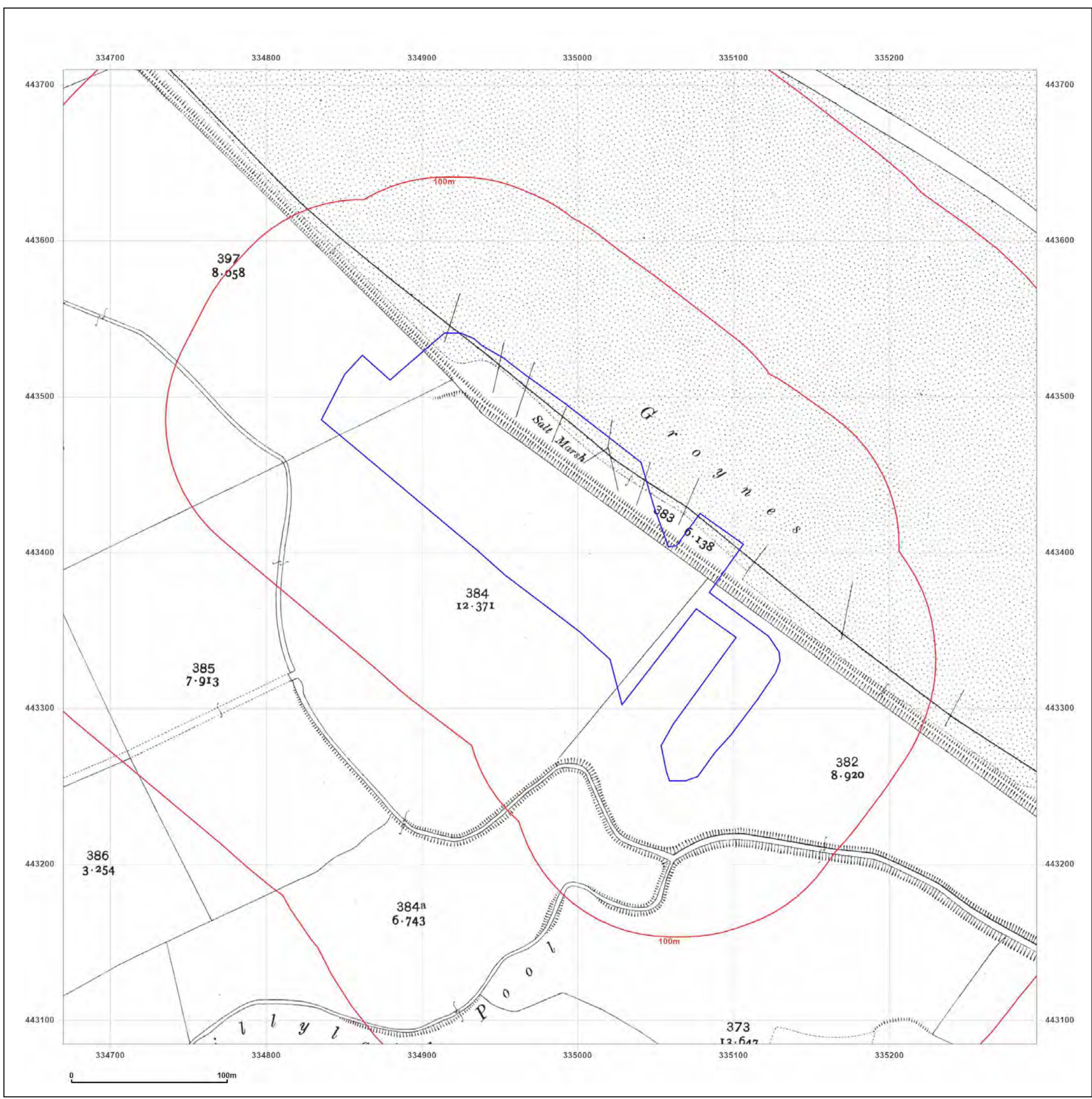


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

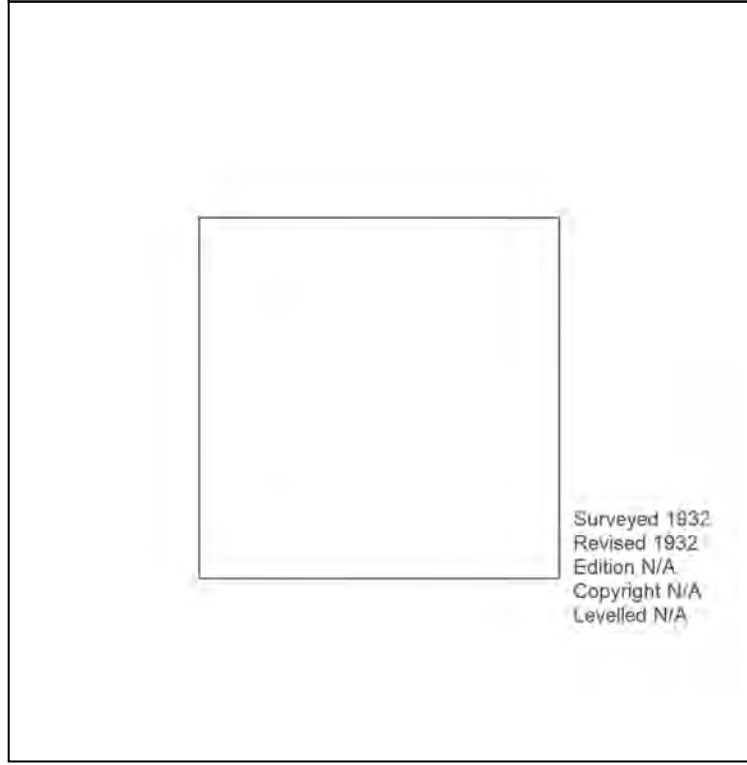
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1932

**Scale:** 1:2,500

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



Surveyed 1832  
Revised 1932  
Edition N/A  
Copyright N/A  
Levelled N/A

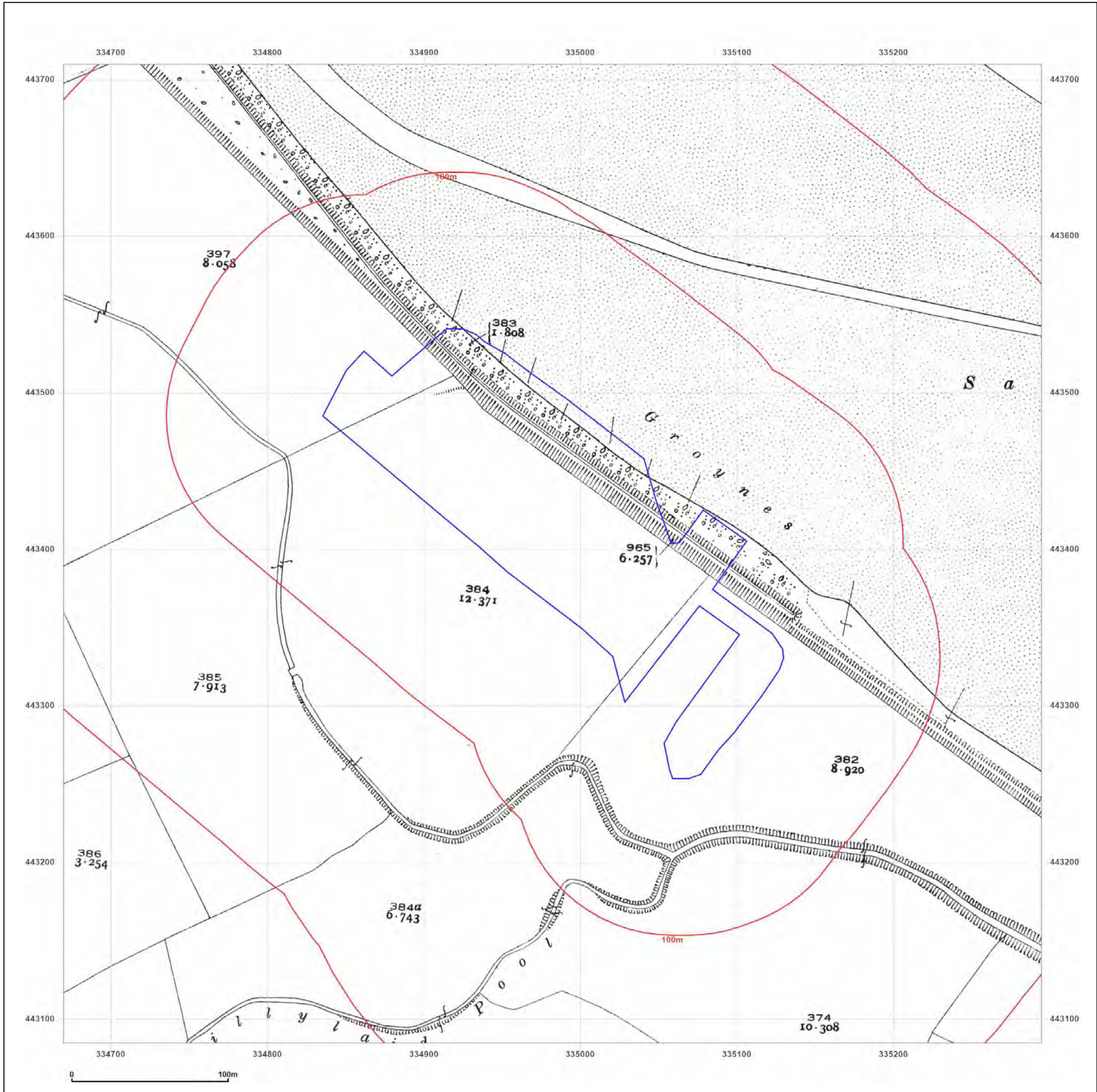


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

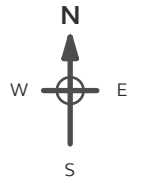
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 334982.9920421878,443421.54  
 84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series  
**Map date:** 1939  
**Scale:** 1:2,500  
**Printed at:** 1:2,500



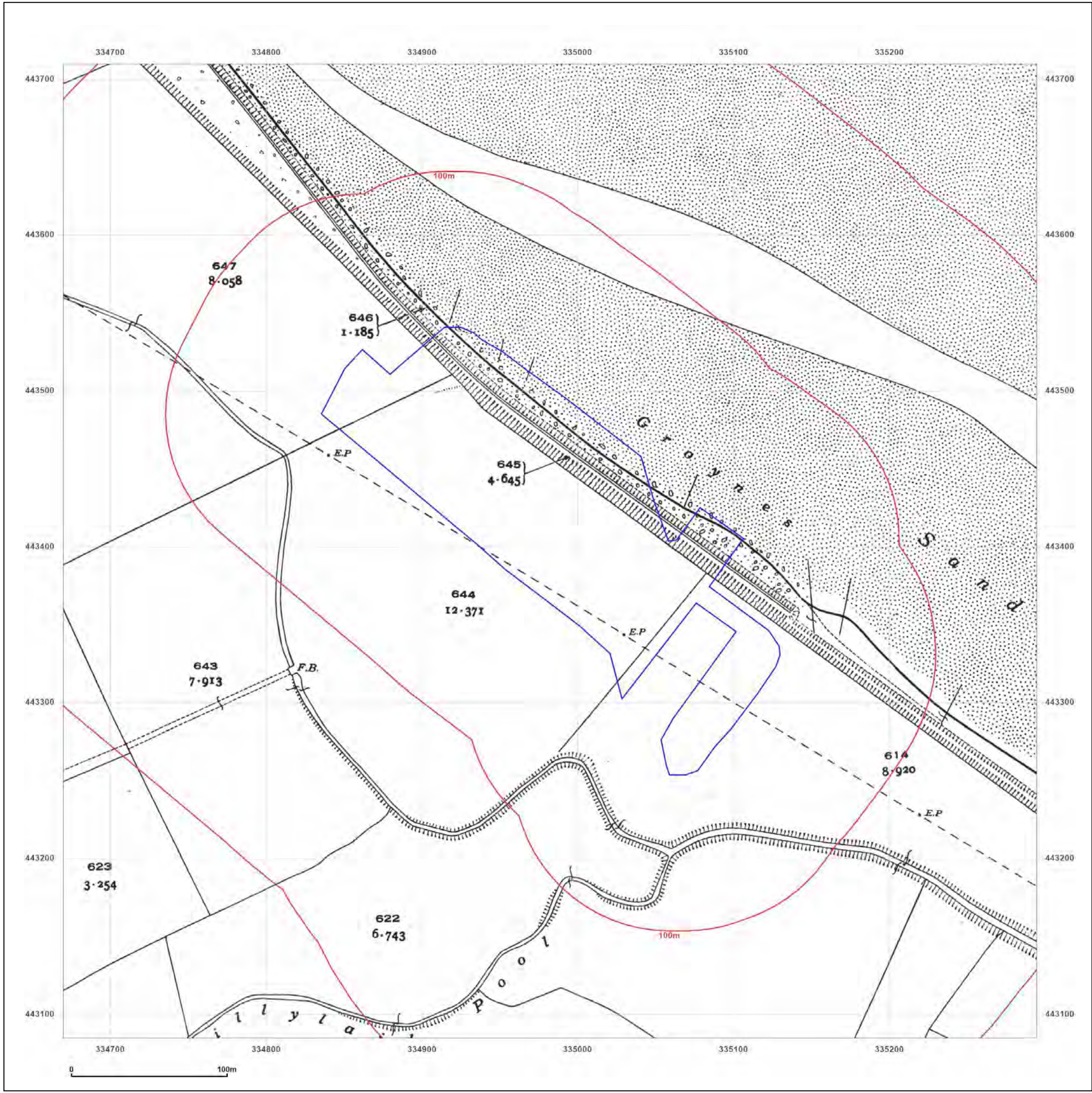
Surveyed 1939  
 Revised 1939  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Powered by  Produced by Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

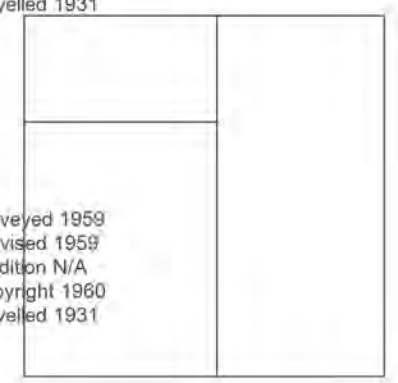
**Map date:** 1960

**Scale:** 1:1,250

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



Surveyed 1959  
Revised 1959  
Edition N/A  
Copyright 1960  
Levelled 1931



Surveyed 1959  
Revised 1959  
Edition N/A  
Copyright 1960  
Levelled 1931



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)

**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1965

**Scale:** 1:2,500

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



Surveyed 1965  
Revised 1965  
Edition N/A  
Copyright 1967  
Levelled 1960

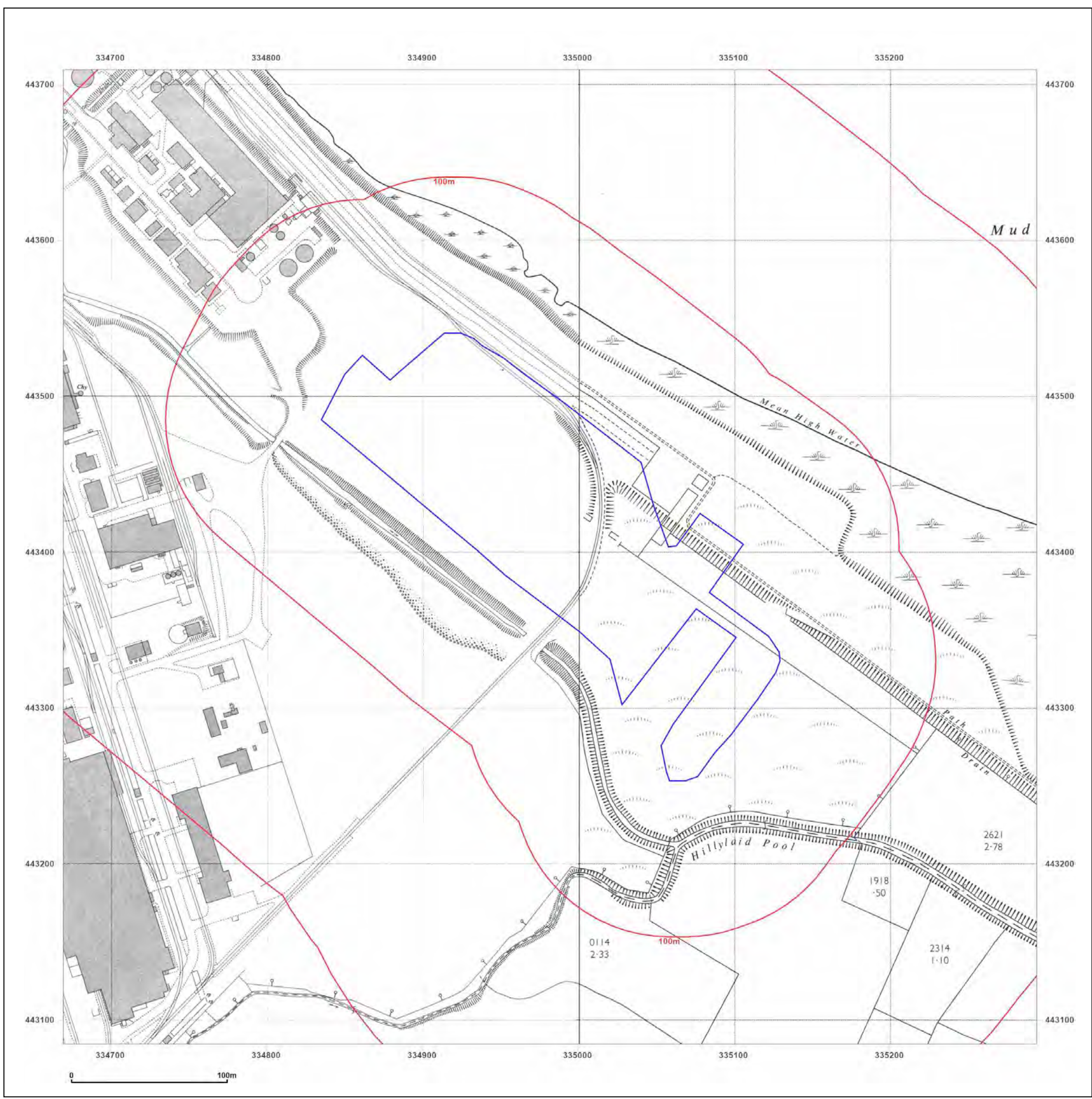


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

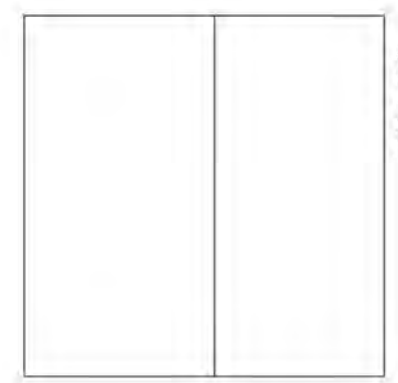
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1967

**Scale:** 1:2,500

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1967  
Levelled 1960

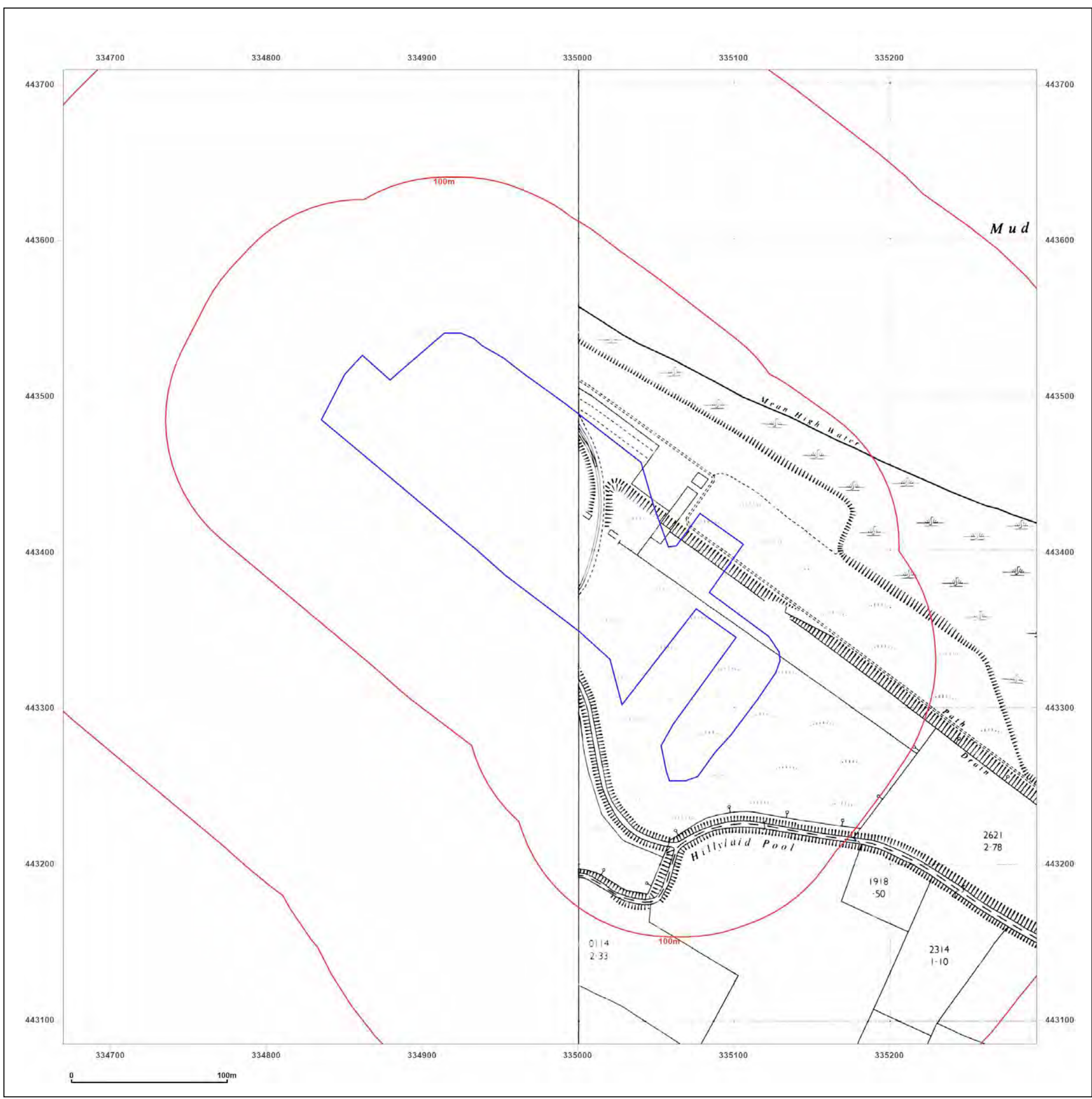


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

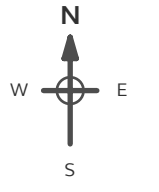
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1976

**Scale:** 1:1,250

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1975  
Levelled N/A



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1975  
Levelled N/A



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

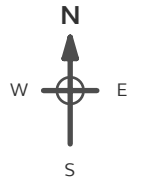
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1977-1980

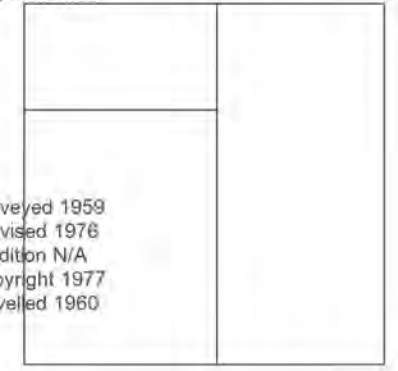
**Scale:** 1:1,250

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1980  
Levelled 1960

Surveyed 1959  
Revised 1976  
Edition N/A  
Copyright 1977  
Levelled 1960

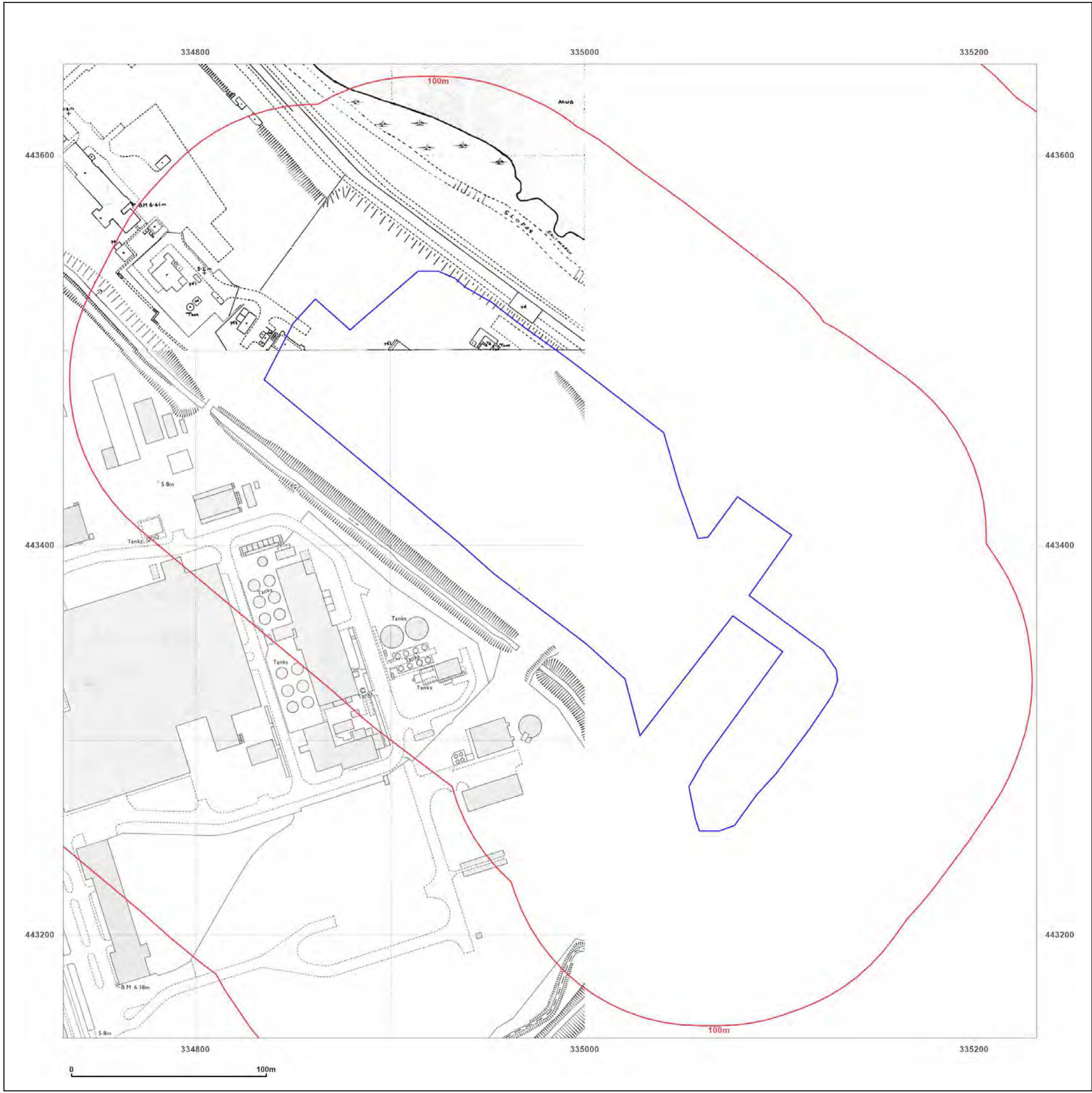


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1979-1980

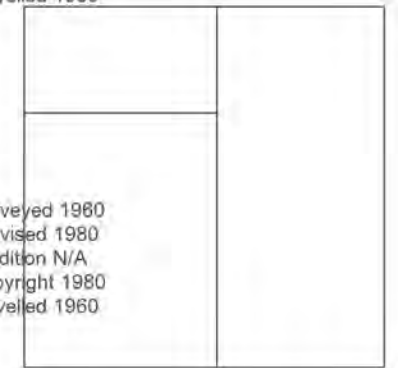
**Scale:** 1:1,250

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1979  
Levelled 1960

Surveyed 1980  
Revised 1980  
Edition N/A  
Copyright 1980  
Levelled 1960

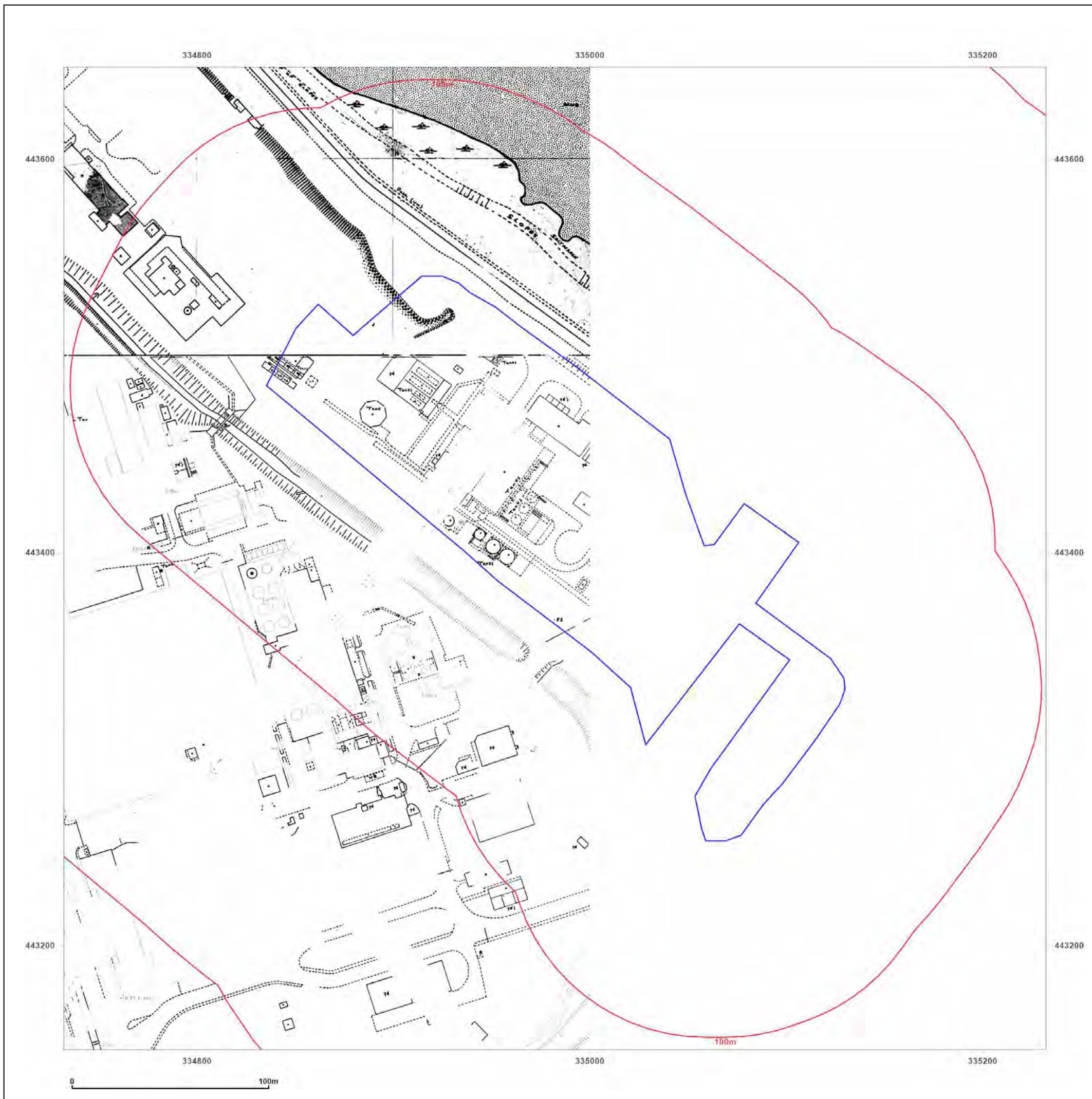


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1980

**Scale:** 1:1,250

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1980  
Levelled 1960



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)

**Site Details:**

334982.9920421878,443421.54  
84771532

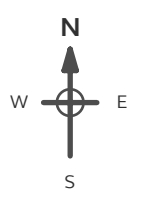
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

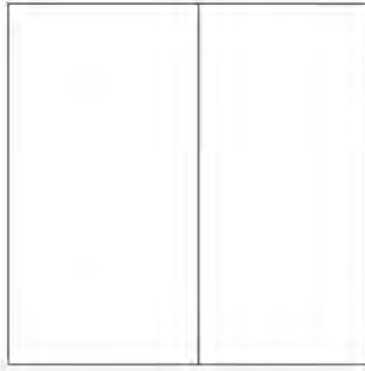
**Map Name:** National Grid

**Map date:** 1981

**Scale:** 1:2,500

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





Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1981  
Levelled 1960

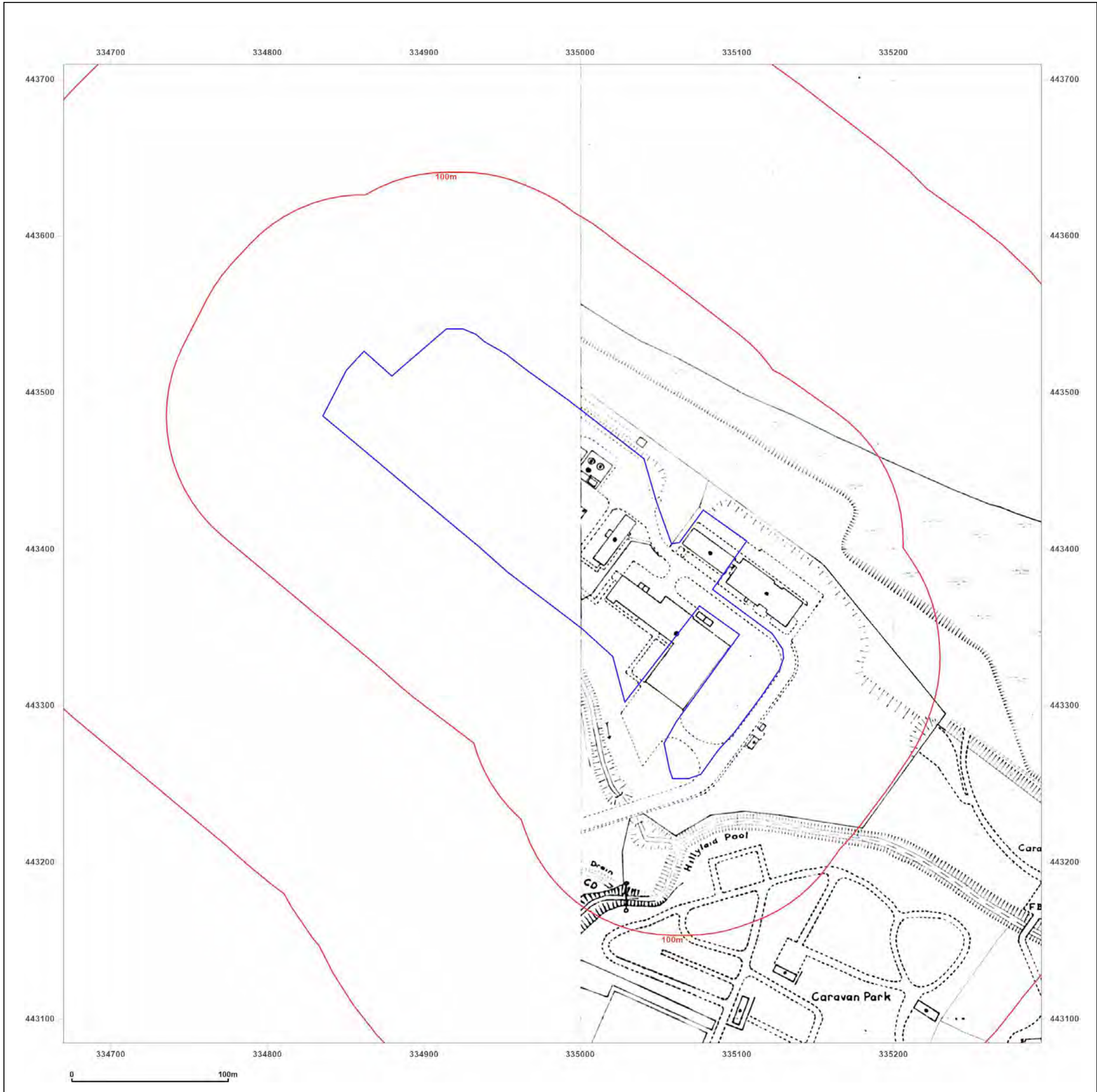


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

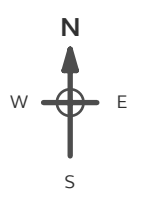
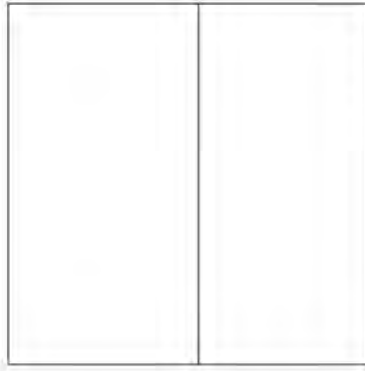
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1985

**Scale:** 1:2,500

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

Surveyed 1965  
Revised 1985  
Edition N/A  
Copyright 1986  
Levelled 1960

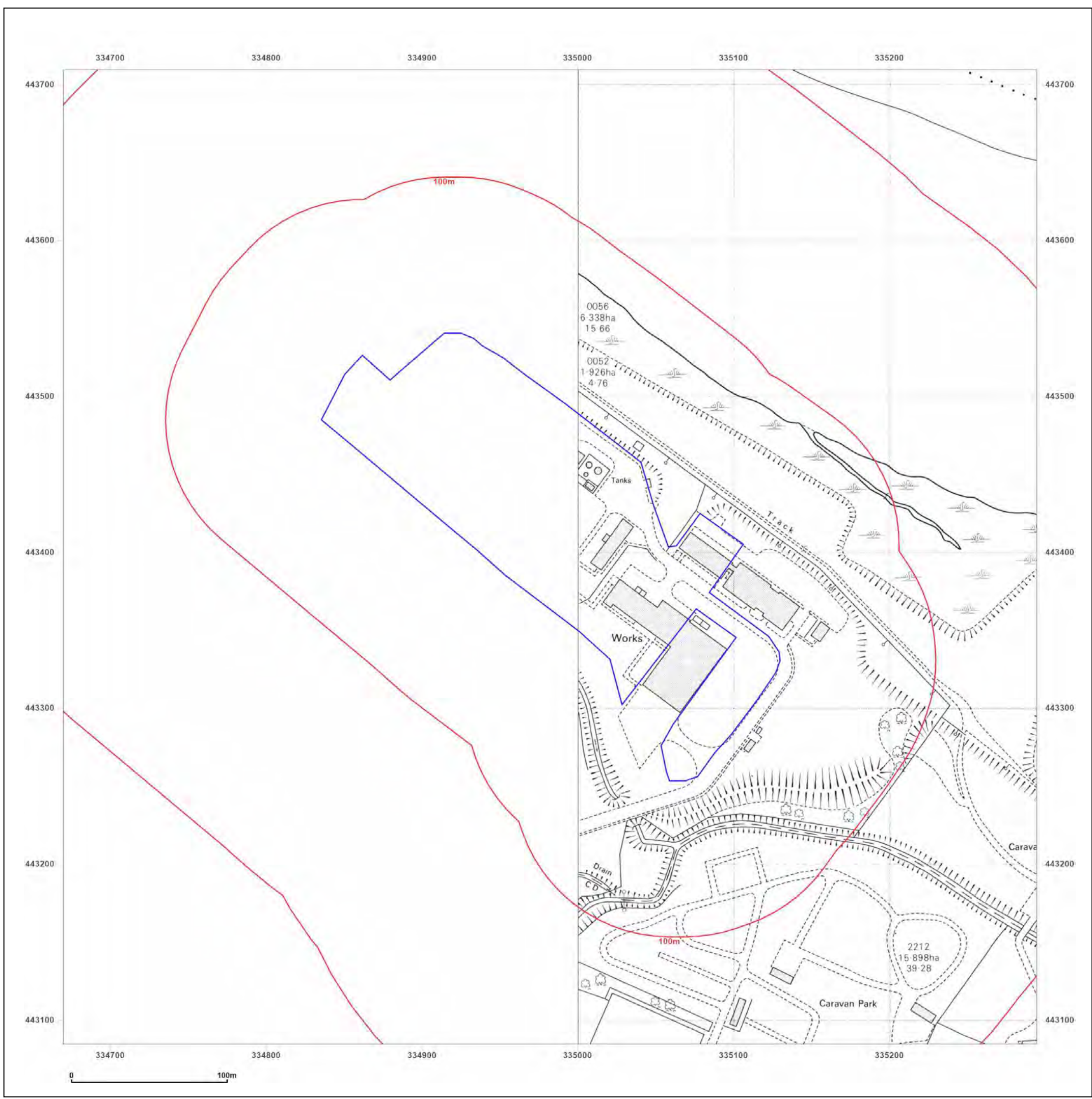


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1993

**Scale:** 1:1,250

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



Surveyed 1993  
Revised N/A  
Edition N/A  
Copyright 1993  
Levelled N/A



Surveyed 1993  
Revised N/A  
Edition N/A  
Copyright 1993  
Levelled N/A



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

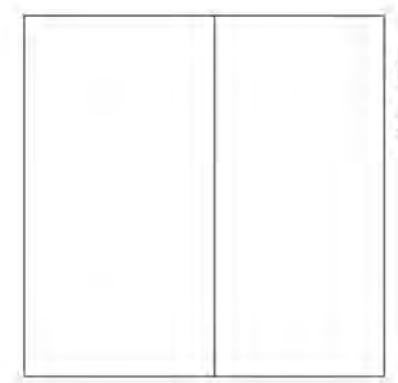
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1993

**Scale:** 1:2,500

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



Surveyed 1993  
Revised N/A  
Edition N/A  
Copyright 1993  
Levelled N/A

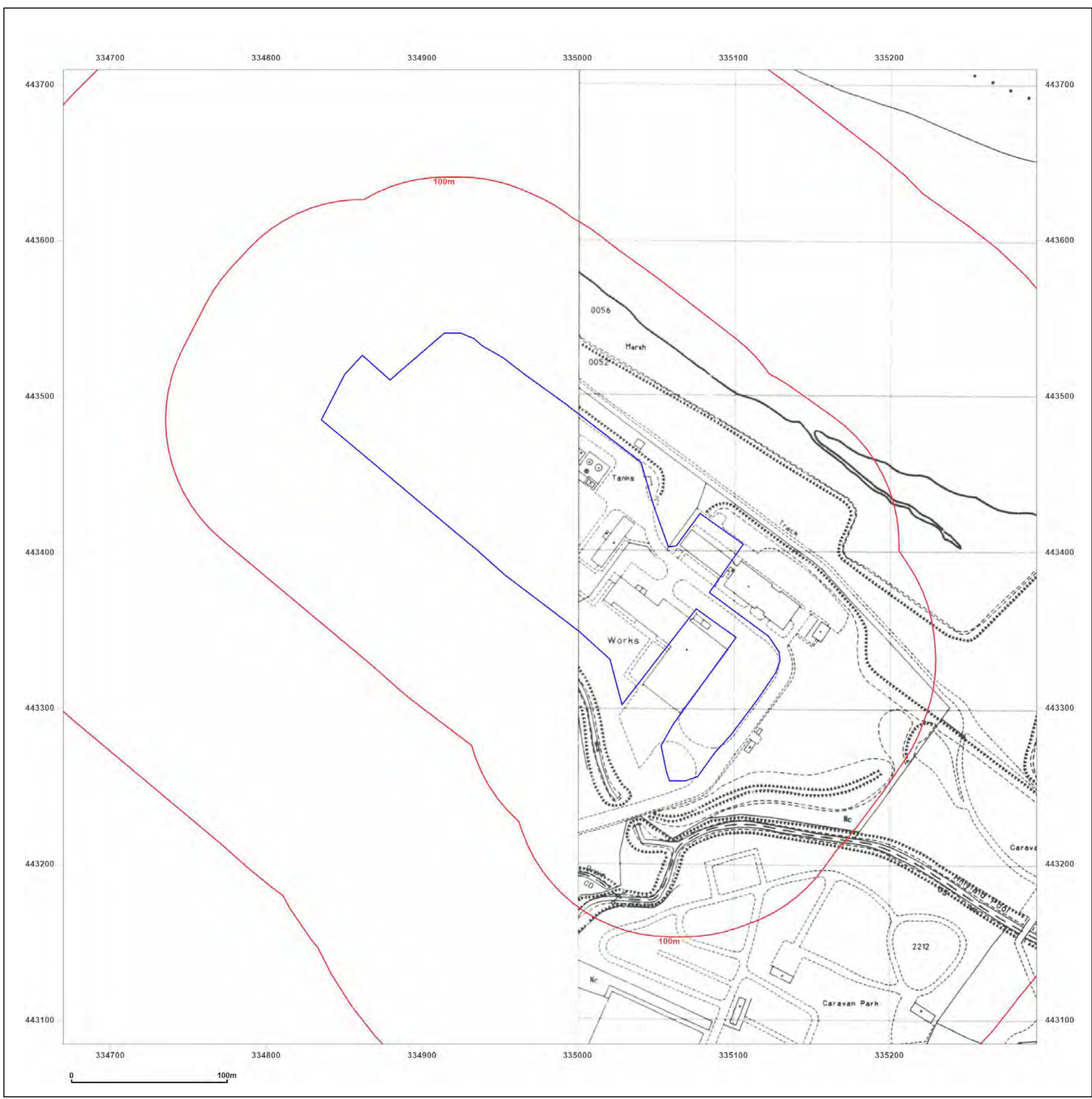


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1994

**Scale:** 1:1,250

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



Surveyed 1994  
Revised N/A  
Edition N/A  
Copyright 1994  
Levelled N/A



Surveyed 1994  
Revised N/A  
Edition N/A  
Copyright 1994  
Levelled N/A



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1994

**Scale:** 1:1,250

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



Surveyed 1994  
Revised 1994  
Edition N/A  
Copyright 1994  
Levelled N/A

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



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**

334982.9920421878,443421.54  
84771532

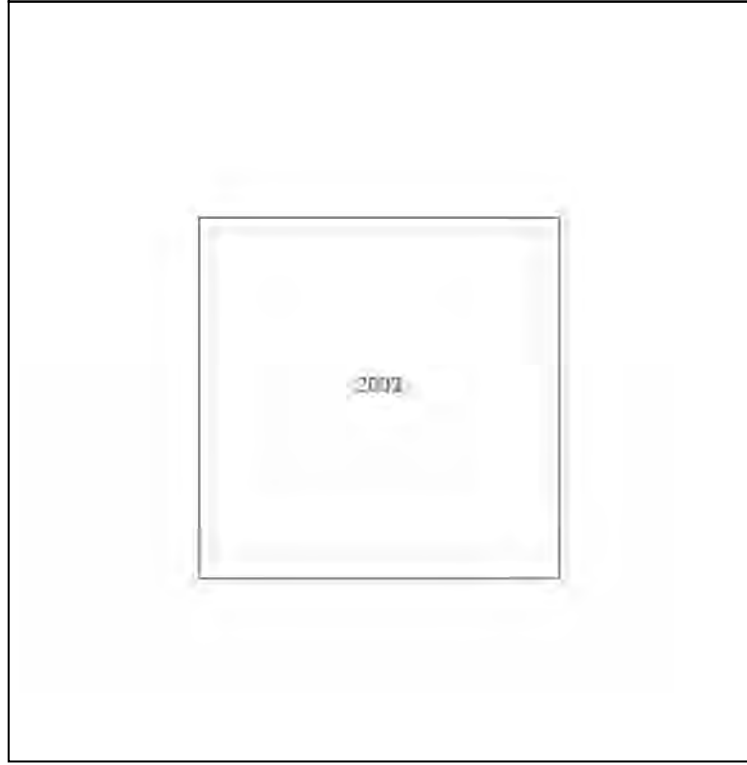
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** LandLine

**Map date:** 2003

**Scale:** 1:1,250

**Printed at:** 1:1,250

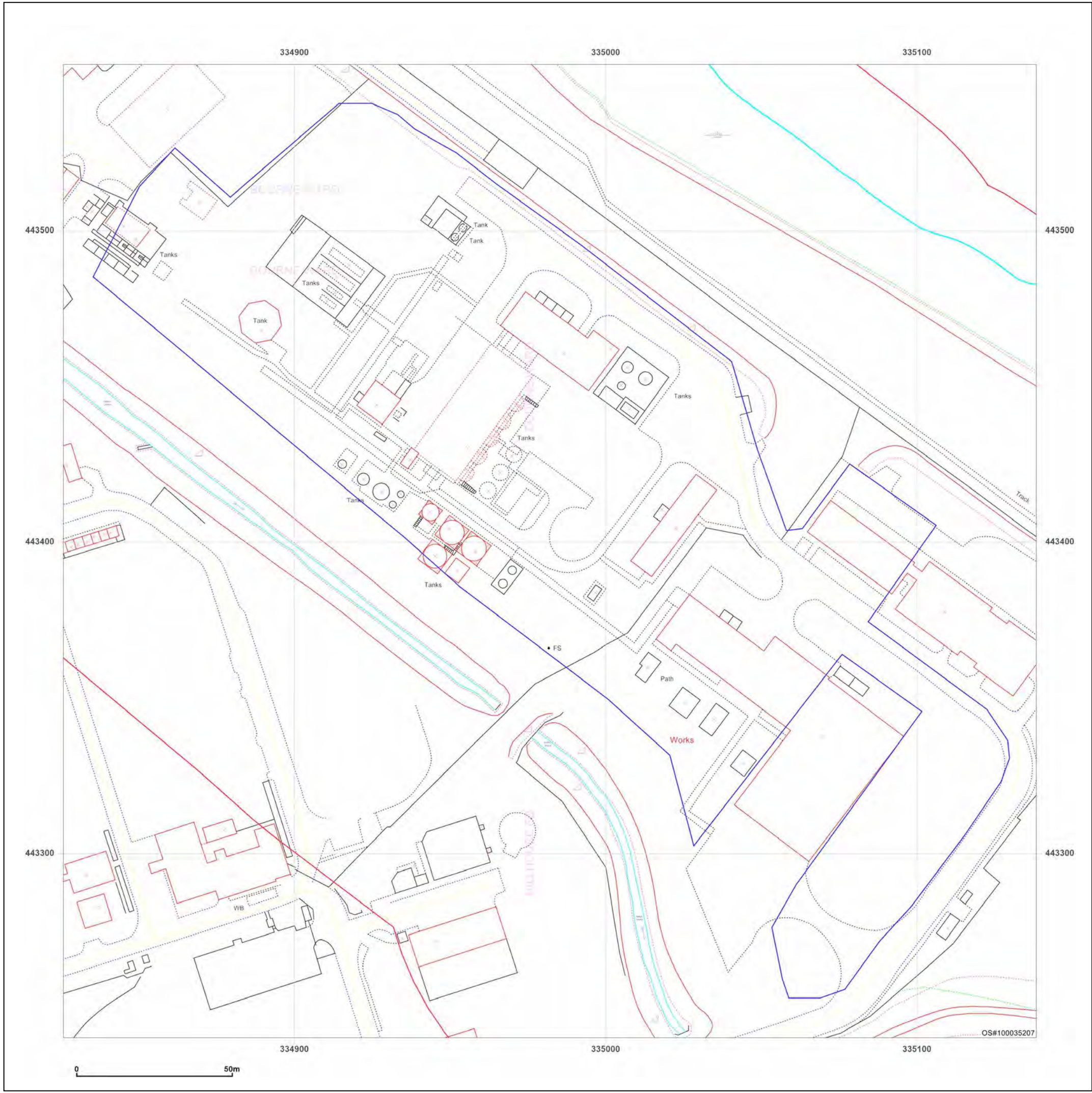


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



334982.9920421878,443421.5484771532,

## Order Details

**Date:** 01/12/2023  
**Your ref:** R3217-Hillhouse\_IBA  
**Our Ref:** GS-A1G-516-6R9-KPQ

## Site Details

**Location:** 335053 443354  
**Area:** 3.04 ha  
**Authority:** [Wyre Council](#) ↗



**Summary of findings**

[p. 2 >](#)

**Aerial image**

[p. 9 >](#)

**OS MasterMap site plan**

[p.14 >](#)

[groundsure.com/insightuserguide](https://groundsure.com/insightuserguide) ↗

Contact us with any questions at:

[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="#">15 &gt;</a>	<a href="#">1.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	12	4	11	37	-
<a href="#">18 &gt;</a>	<a href="#">1.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	23	4	49	71	-
<a href="#">24 &gt;</a>	<a href="#">1.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	0	0	1	2	-
24	1.4	Historical petrol stations	0	0	0	0	-
24	1.5	Historical garages	0	0	0	0	-
25	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="#">26 &gt;</a>	<a href="#">2.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	18	6	21	69	-
<a href="#">31 &gt;</a>	<a href="#">2.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	32	8	79	147	-
<a href="#">40 &gt;</a>	<a href="#">2.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	0	0	1	3	-
41	2.4	Historical petrol stations	0	0	0	0	-
41	2.5	Historical garages	0	0	0	0	-
Page	Section	<a href="#">Waste and landfill &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
42	3.1	Active or recent landfill	0	0	0	0	-
42	3.2	Historical landfill (BGS records)	0	0	0	0	-
43	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
<a href="#">43 &gt;</a>	<a href="#">3.4 &gt;</a>	<a href="#">Historical landfill (EA/NRW records) &gt;</a>	0	0	0	1	-
<a href="#">43 &gt;</a>	<a href="#">3.5 &gt;</a>	<a href="#">Historical waste sites &gt;</a>	0	0	1	0	-
44	3.6	Licensed waste sites	0	0	0	0	-
<a href="#">44 &gt;</a>	<a href="#">3.7 &gt;</a>	<a href="#">Waste exemptions &gt;</a>	0	0	0	12	-
Page	Section	<a href="#">Current industrial land use &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">46 &gt;</a>	<a href="#">4.1 &gt;</a>	<a href="#">Recent industrial land uses &gt;</a>	38	5	17	-	-
50	4.2	Current or recent petrol stations	0	0	0	0	-
50	4.3	Electricity cables	0	0	0	0	-
50	4.4	Gas pipelines	0	0	0	0	-
50	4.5	Sites determined as Contaminated Land	0	0	0	0	-



51 >	4.6 >	<a href="#">Control of Major Accident Hazards (COMAH) &gt;</a>	1	0	0	3	-
51	4.7	Regulated explosive sites	0	0	0	0	-
51 >	4.8 >	<a href="#">Hazardous substance storage/usage &gt;</a>	0	1	0	4	-
52 >	4.9 >	<a href="#">Historical licensed industrial activities (IPC) &gt;</a>	0	0	0	4	-
53 >	4.10 >	<a href="#">Licensed industrial activities (Part A(1)) &gt;</a>	3	0	3	4	-
55 >	4.11 >	<a href="#">Licensed pollutant release (Part A(2)/B) &gt;</a>	0	0	3	0	-
56 >	4.12 >	<a href="#">Radioactive Substance Authorisations &gt;</a>	0	0	0	2	-
56 >	4.13 >	<a href="#">Licensed Discharges to controlled waters &gt;</a>	0	3	35	9	-
63 >	4.14 >	<a href="#">Pollutant release to surface waters (Red List) &gt;</a>	0	0	4	0	-
64	4.15	Pollutant release to public sewer	0	0	0	0	-
64 >	4.16 >	<a href="#">List 1 Dangerous Substances &gt;</a>	1	0	4	10	-
65 >	4.17 >	<a href="#">List 2 Dangerous Substances &gt;</a>	0	0	2	0	-
66 >	4.18 >	<a href="#">Pollution Incidents (EA/NRW) &gt;</a>	0	1	2	1	-
66 >	4.19 >	<a href="#">Pollution inventory substances &gt;</a>	0	0	0	5	-
68 >	4.20 >	<a href="#">Pollution inventory waste transfers &gt;</a>	0	0	0	1	-
73	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<a href="#">Hydrogeology &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
74 >	5.1 >	<a href="#">Superficial aquifer &gt;</a>	Identified (within 500m)				
76 >	5.2 >	<a href="#">Bedrock aquifer &gt;</a>	Identified (within 500m)				
78 >	5.3 >	<a href="#">Groundwater vulnerability &gt;</a>	Identified (within 50m)				
79 >	5.4 >	<a href="#">Groundwater vulnerability- soluble rock risk &gt;</a>	Identified (within 0m)				
80	5.5	Groundwater vulnerability- local information	None (within 0m)				
81	5.6	Groundwater abstractions	0	0	0	0	0
81	5.7	Surface water abstractions	0	0	0	0	0
81	5.8	Potable abstractions	0	0	0	0	0
81	5.9	Source Protection Zones	0	0	0	0	-
82	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<a href="#">Hydrology &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
83 >	6.1 >	<a href="#">Water Network (OS MasterMap) &gt;</a>	0	5	12	-	-



85 >	6.2 >	<a href="#">Surface water features &gt;</a>	0	3	4	-	-
85 >	6.3 >	<a href="#">WFD Surface water body catchments &gt;</a>	1	-	-	-	-
86 >	6.4 >	<a href="#">WFD Surface water bodies &gt;</a>	0	1	1	-	-
86	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	<a href="#">River and coastal flooding &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
87 >	7.1 >	<a href="#">Risk of flooding from rivers and the sea &gt;</a>	High (within 50m)				
88	7.2	Historical Flood Events	0	0	0	-	-
88 >	7.3 >	<a href="#">Flood Defences &gt;</a>	0	0	1	-	-
88 >	7.4 >	<a href="#">Areas Benefiting from Flood Defences &gt;</a>	1	0	0	-	-
89	7.5	Flood Storage Areas	0	0	0	-	-
90 >	7.6 >	<a href="#">Flood Zone 2 &gt;</a>	Identified (within 50m)				
91 >	7.7 >	<a href="#">Flood Zone 3 &gt;</a>	Identified (within 50m)				
Page	Section	<a href="#">Surface water flooding &gt;</a>					
92 >	8.1 >	<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>					
94 >	9.1 >	<a href="#">Groundwater flooding &gt;</a>	Negligible (within 50m)				
Page	Section	<a href="#">Environmental designations &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
95 >	10.1 >	<a href="#">Sites of Special Scientific Interest (SSSI) &gt;</a>	0	1	0	3	12
96 >	10.2 >	<a href="#">Conserved wetland sites (Ramsar sites) &gt;</a>	0	1	0	3	8
101	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
101 >	10.4 >	<a href="#">Special Protection Areas (SPA) &gt;</a>	0	2	0	4	12
106	10.5	National Nature Reserves (NNR)	0	0	0	0	0
106	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
106	10.7	Designated Ancient Woodland	0	0	0	0	0
106	10.8	Biosphere Reserves	0	0	0	0	0
107	10.9	Forest Parks	0	0	0	0	0
107 >	10.10 >	<a href="#">Marine Conservation Zones &gt;</a>	0	0	2	2	21
108 >	10.11 >	<a href="#">Green Belt &gt;</a>	0	0	0	0	2
108	10.12	Proposed Ramsar sites	0	0	0	0	0



109	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
109	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
109	10.15	Nitrate Sensitive Areas	0	0	0	0	0
109	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
<a href="#">110</a> >	<a href="#">10.17</a> >	<a href="#">SSSI Impact Risk Zones</a> >	2	-	-	-	-
<a href="#">111</a> >	<a href="#">10.18</a> >	<a href="#">SSSI Units</a> >	0	1	0	4	16
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
119	11.1	World Heritage Sites	0	0	0	-	-
119	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
119	11.3	National Parks	0	0	0	-	-
119	11.4	Listed Buildings	0	0	0	-	-
120	11.5	Conservation Areas	0	0	0	-	-
120	11.6	Scheduled Ancient Monuments	0	0	0	-	-
120	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	<a href="#">Agricultural designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">121</a> >	<a href="#">12.1</a> >	<a href="#">Agricultural Land Classification</a> >	Urban (within 250m)				
122	12.2	Open Access Land	0	0	0	-	-
122	12.3	Tree Felling Licences	0	0	0	-	-
122	12.4	Environmental Stewardship Schemes	0	0	0	-	-
122	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	<a href="#">Habitat designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">123</a> >	<a href="#">13.1</a> >	<a href="#">Priority Habitat Inventory</a> >	0	2	5	-	-
<a href="#">124</a> >	<a href="#">13.2</a> >	<a href="#">Habitat Networks</a> >	2	6	6	-	-
125	13.3	Open Mosaic Habitat	0	0	0	-	-
125	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	<a href="#">Geology 1:10,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">126</a> >	<a href="#">14.1</a> >	<a href="#">10k Availability</a> >	Identified (within 500m)				
<a href="#">127</a> >	<a href="#">14.2</a> >	<a href="#">Artificial and made ground (10k)</a> >	2	0	0	1	-
<a href="#">128</a> >	<a href="#">14.3</a> >	<a href="#">Superficial geology (10k)</a> >	3	0	0	1	-

129	14.4	Landslip (10k)	0	0	0	0	-
<a href="#">130</a> >	<a href="#">14.5</a> >	<a href="#">Bedrock geology (10k)</a> >	4	0	1	6	-
<a href="#">131</a> >	<a href="#">14.6</a> >	<a href="#">Bedrock faults and other linear features (10k)</a> >	0	0	1	2	-
Page	Section	<a href="#">Geology 1:50,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">132</a> >	<a href="#">15.1</a> >	<a href="#">50k Availability</a> >	Identified (within 500m)				
<a href="#">133</a> >	<a href="#">15.2</a> >	<a href="#">Artificial and made ground (50k)</a> >	1	0	0	0	-
<a href="#">134</a> >	<a href="#">15.3</a> >	<a href="#">Artificial ground permeability (50k)</a> >	2	0	-	-	-
<a href="#">135</a> >	<a href="#">15.4</a> >	<a href="#">Superficial geology (50k)</a> >	2	1	0	5	-
<a href="#">136</a> >	<a href="#">15.5</a> >	<a href="#">Superficial permeability (50k)</a> >	Identified (within 50m)				
136	15.6	Landslip (50k)	0	0	0	0	-
136	15.7	Landslip permeability (50k)	None (within 50m)				
<a href="#">137</a> >	<a href="#">15.8</a> >	<a href="#">Bedrock geology (50k)</a> >	2	0	1	6	-
<a href="#">138</a> >	<a href="#">15.9</a> >	<a href="#">Bedrock permeability (50k)</a> >	Identified (within 50m)				
<a href="#">138</a> >	<a href="#">15.10</a> >	<a href="#">Bedrock faults and other linear features (50k)</a> >	0	1	0	2	-
Page	Section	<a href="#">Boreholes</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">140</a> >	<a href="#">16.1</a> >	<a href="#">BGS Boreholes</a> >	0	3	16	-	-
Page	Section	<a href="#">Natural ground subsidence</a> >					
<a href="#">142</a> >	<a href="#">17.1</a> >	<a href="#">Shrink swell clays</a> >	Low (within 50m)				
<a href="#">143</a> >	<a href="#">17.2</a> >	<a href="#">Running sands</a> >	Moderate (within 50m)				
<a href="#">145</a> >	<a href="#">17.3</a> >	<a href="#">Compressible deposits</a> >	Moderate (within 50m)				
<a href="#">147</a> >	<a href="#">17.4</a> >	<a href="#">Collapsible deposits</a> >	Negligible (within 50m)				
<a href="#">148</a> >	<a href="#">17.5</a> >	<a href="#">Landslides</a> >	Low (within 50m)				
<a href="#">150</a> >	<a href="#">17.6</a> >	<a href="#">Ground dissolution of soluble rocks</a> >	High (within 50m)				
Page	Section	<a href="#">Mining and ground workings</a> >	On site	0-50m	50-250m	250-500m	500-2000m
152	18.1	BritPits	0	0	0	0	-
<a href="#">153</a> >	<a href="#">18.2</a> >	<a href="#">Surface ground workings</a> >	1	3	2	-	-
153	18.3	Underground workings	0	0	0	0	0
153	18.4	Underground mining extents	0	0	0	0	-
154	18.5	Historical Mineral Planning Areas	0	0	0	0	-



<a href="#">154</a> >	<a href="#">18.6</a> >	<a href="#">Non-coal mining</a> >	0	0	0	0	1
154	18.7	JPB mining areas	None (within 0m)				
154	18.8	The Coal Authority non-coal mining	0	0	0	0	-
155	18.9	Researched mining	0	0	0	0	-
155	18.10	Mining record office plans	0	0	0	0	-
155	18.11	BGS mine plans	0	0	0	0	-
155	18.12	Coal mining	None (within 0m)				
156	18.13	Brine areas	None (within 0m)				
156	18.14	Gypsum areas	None (within 0m)				
156	18.15	Tin mining	None (within 0m)				
156	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
157	19.1	Natural cavities	0	0	0	0	-
157	19.2	Mining cavities	0	0	0	0	0
157	19.3	Reported recent incidents	0	0	0	0	-
157	19.4	Historical incidents	0	0	0	0	-
158	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
<a href="#">159</a> >	<a href="#">20.1</a> >	<a href="#">Radon</a> >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">161</a> >	<a href="#">21.1</a> >	<a href="#">BGS Estimated Background Soil Chemistry</a> >	8	5	-	-	-
162	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
162	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
163	22.1	Underground railways (London)	0	0	0	-	-
163	22.2	Underground railways (Non-London)	0	0	0	-	-
164	22.3	Railway tunnels	0	0	0	-	-
<a href="#">164</a> >	<a href="#">22.4</a> >	<a href="#">Historical railway and tunnel features</a> >	4	0	12	-	-
165	22.5	Royal Mail tunnels	0	0	0	-	-



165	22.6	Historical railways	0	0	0	-	-
165	22.7	Railways	0	0	0	-	-
165	22.8	Crossrail 1	0	0	0	0	-
165	22.9	Crossrail 2	0	0	0	0	-
166	22.10	HS2	0	0	0	0	-

## Recent aerial photograph



Capture Date: 10/08/2022

Site Area: 3.04ha



## Recent site history - 2019 aerial photograph



Capture Date: 22/04/2019

Site Area: 3.04ha



## Recent site history - 2018 aerial photograph



Capture Date: 05/09/2018

Site Area: 3.04ha



## Recent site history - 2013 aerial photograph



Capture Date: 19/07/2013

Site Area: 3.04ha



## Recent site history - 2000 aerial photograph



Capture Date: 05/04/2000

Site Area: 3.04ha



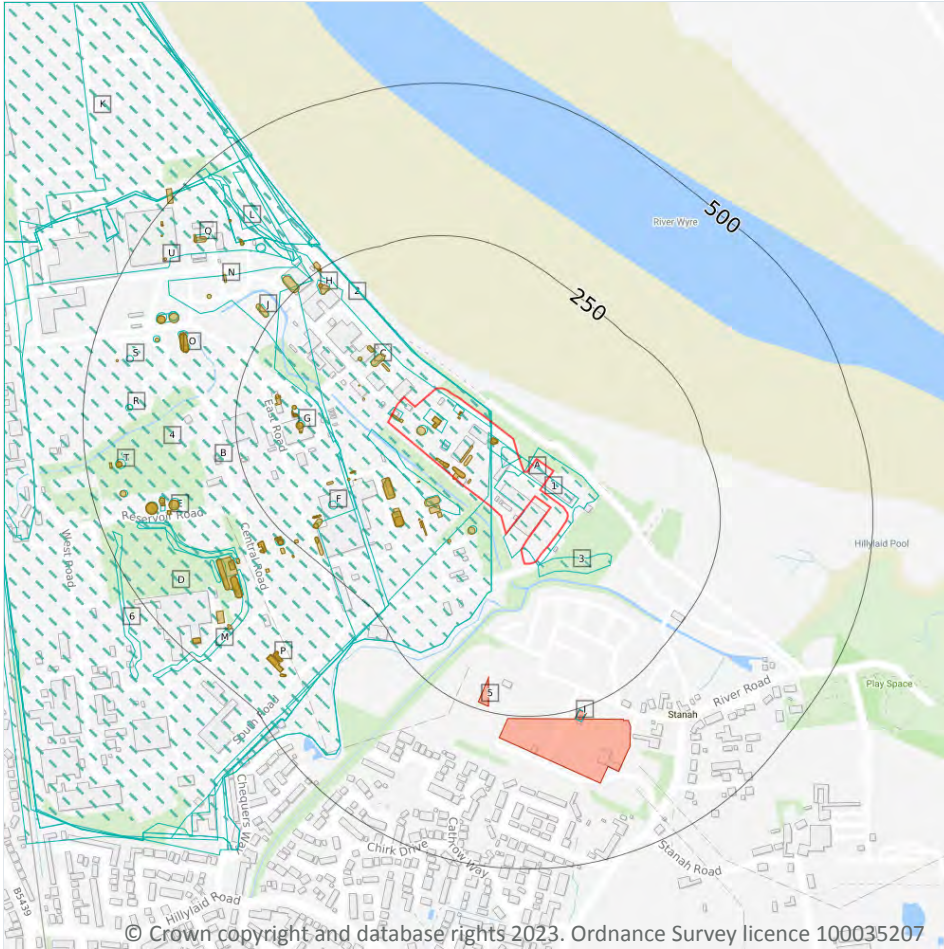
## OS MasterMap site plan



Site Area: 3.04ha






# 1 Past land use



**— Site Outline**

**Search buffers in metres (m)**

-  Historical industrial land uses
-  Historical tanks
-  Historical energy features

## 1.1 Historical industrial land uses

**Records within 500m** **64**

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 15 >](#)

ID	Location	Land use	Dates present	Group ID
1	On site	Unspecified Works	1985	678573





ID	Location	Land use	Dates present	Group ID
2	On site	Railway Sidings	1973	714213
A	On site	Railway Sidings	1951	641435
A	On site	Unspecified Pit	1968	688600
A	On site	Unspecified Tanks	1981 - 1992	714651
A	On site	Unspecified Tanks	1981 - 1992	726363
A	On site	Unspecified Tanks	1981 - 1992	727213
A	On site	Unspecified Tanks	1981 - 1992	787313
A	On site	Unspecified Tanks	1981 - 1992	788022
B	On site	Unspecified Works	1967	716375
B	On site	Unspecified Works	1973 - 1981	729518
B	On site	Unspecified Works	1992	746126
3	7m SE	Unspecified Heap	1985	649452
A	26m W	Refuse Heap	1967	676879
A	39m SW	Unspecified Tanks	1981 - 1992	751240
A	41m S	Unspecified Tank	1981 - 1992	694819
C	71m NW	Unspecified Tanks	1967 - 1973	763973
A	72m W	Unspecified Tanks	1981 - 1992	749014
D	89m W	Railway Sidings	1973 - 1981	697482
4	90m W	Railway Sidings	1951 - 1967	698470
E	90m W	Chemical Works	1951	682676
A	104m SW	Unspecified Tanks	1981 - 1992	742475
G	137m W	Unspecified Tank	1981 - 1992	702019
G	147m W	Unspecified Tank	1967 - 1973	771286
F	155m W	Unspecified Tank	1967 - 1973	707907
H	214m NW	Unspecified Tanks	1967 - 1973	713245
H	250m NW	Unspecified Tanks	1967 - 1973	752240
I	252m S	Electricity Substation	1985	686415
J	256m NW	Unspecified Tanks	1967 - 1992	789517



ID	Location	Land use	Dates present	Group ID
F	258m W	Unspecified Tank	1967 - 1973	770548
F	260m W	Unspecified Tank	1992	742152
K	286m NW	Railway Sidings	1938	738290
K	286m NW	Ammonia Soda Works	1930 - 1938	757831
K	286m NW	Railway Sidings	1930	775128
L	288m NW	Unspecified Ground Workings	1973	734208
L	288m NW	Unspecified Ground Workings	1981 - 1992	777538
L	317m NW	Unspecified Heap	1930 - 1938	748322
D	325m W	Unspecified Ground Workings	1967	696442
D	330m W	Unspecified Ground Workings	1981 - 1992	755081
L	331m NW	Unspecified Tank	1967 - 1973	767586
L	333m NW	Unspecified Tank	1981 - 1992	728267
M	342m SW	Unspecified Ground Workings	1967	646142
O	347m W	Unspecified Tank	1967 - 1992	788469
F	350m SW	Unspecified Tanks	1967 - 1992	738506
O	358m NW	Unspecified Tank	1967 - 1973	713686
O	364m NW	Unspecified Tank	1951	775226
F	366m W	Unspecified Tanks	1951	666073
E	366m W	Unspecified Tank	1967 - 1992	712875
O	382m NW	Unspecified Tanks	1973	666069
O	385m NW	Unspecified Tank	1981 - 1992	730697
O	385m NW	Unspecified Tank	1967	764137
E	386m W	Unspecified Tank	1967 - 1973	787334
E	390m W	Unspecified Tanks	1992	666070
O	397m W	Unspecified Tank	1967	673314
O	401m NW	Unspecified Tank	1981 - 1992	744362
E	402m W	Unspecified Tank	1967 - 1992	703668
Q	412m NW	Unspecified Tanks	1967 - 1973	716149



ID	Location	Land use	Dates present	Group ID
R	419m W	Unspecified Tank	1967 - 1973	695680
R	420m W	Unspecified Tank	1992	714437
S	430m W	Chimney	1967	684453
T	435m W	Unspecified Tank	1973 - 1992	736039
T	442m W	Unspecified Tank	1973 - 1992	789844
K	468m NW	Ammonia Soda Works	1951	694922
6	474m W	Unspecified Ground Workings	1967	646140

This data is sourced from Ordnance Survey / Groundsure.

## 1.2 Historical tanks

**Records within 500m**

**147**

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 15 >](#)

ID	Location	Land use	Dates present	Group ID
A	On site	Tanks	1994	86567
A	On site	Tanks	1980 - 1994	99134
A	On site	Unspecified Tank	1994	80288
A	On site	Unspecified Tank	1980	80289
A	On site	Tanks	1994	86563
A	On site	Tanks	1994	86564
A	On site	Tanks	1994	86565
A	On site	Tanks	1980	88930
A	On site	Tanks	1994	89508
A	On site	Tanks	1980	89643
A	On site	Tanks	1994	92041



ID	Location	Land use	Dates present	Group ID
A	On site	Tanks	1980	92721
A	On site	Tanks	1980	93895
A	On site	Tanks	1985	95270
A	On site	Tanks	1994	95834
A	On site	Tanks	1980	96668
A	On site	Tanks	1981	97055
A	On site	Tanks	1980	99749
A	On site	Tanks	1994	100649
A	On site	Tanks	1994	100650
A	On site	Tanks	1993	101492
A	On site	Tanks	1980	103158
A	On site	Unspecified Tank	1980 - 1994	103198
A	41m W	Tanks	1980	102351
A	41m SW	Tanks	1977 - 1980	92354
A	45m S	Unspecified Tank	1980	90572
C	49m NW	Tanks	1994	86566
A	50m SW	Tanks	1977 - 1980	94479
C	51m NW	Unspecified Tank	1979 - 1980	94507
A	57m SW	Tanks	1977 - 1980	90051
C	68m NW	Tanks	1960 - 1965	90731
C	69m NW	Unspecified Tank	1979 - 1980	100067
A	69m W	Tanks	1980	96585
A	70m W	Tanks	1977	98882
A	83m S	Tanks	1977	86562
A	87m SW	Tanks	1994	86544
A	87m SW	Tanks	1980	96990
A	89m SW	Tanks	1977	95055
A	90m SW	Tanks	1977	86543



ID	Location	Land use	Dates present	Group ID
C	90m NW	Tanks	1960 - 1965	93872
C	93m NW	Unspecified Tank	1960 - 1965	102763
F	95m W	Tanks	1977 - 1980	95228
F	97m W	Tanks	1994	90739
A	97m SW	Tanks	1980	89983
A	100m SW	Tanks	1977	96705
A	104m SW	Tanks	1980	96959
F	106m W	Unspecified Tank	1980	98563
F	111m W	Unspecified Tank	1994	80294
F	133m W	Tanks	1960 - 1965	103233
G	139m W	Tanks	1980	100167
G	140m W	Tanks	1977 - 1994	92825
G	143m W	Tanks	1977 - 1994	99625
G	148m W	Tanks	1980	89956
G	150m W	Tanks	1994	93995
G	150m W	Tanks	1977	95514
G	152m W	Tanks	1994	86568
G	153m W	Unspecified Tank	1979 - 1980	98472
G	154m W	Tanks	1977	88586
G	156m W	Tanks	1994	88592
G	178m W	Tanks	1994	86569
G	180m W	Unspecified Tank	1960 - 1980	99937
F	188m W	Tanks	1977 - 1980	89996
F	188m W	Unspecified Tank	1994	80295
F	192m W	Tanks	1977 - 1980	99186
F	192m W	Unspecified Tank	1965	80296
F	192m W	Tanks	1960 - 1994	91300
F	202m W	Tanks	1980	103149



ID	Location	Land use	Dates present	Group ID
H	213m NW	Tanks	1960 - 1965	93633
F	218m SW	Tanks	1980	90577
F	220m SW	Tanks	1977	92597
H	225m NW	Unspecified Tank	1960	80293
F	242m SW	Tanks	1980	88758
H	246m NW	Tanks	1960 - 1965	89560
H	247m NW	Tanks	1980 - 1994	98695
H	249m NW	Tanks	1994	92131
H	249m NW	Unspecified Tank	1979	80292
J	257m NW	Tanks	1960 - 1980	88781
F	257m W	Tanks	1980 - 1994	91556
F	258m W	Tanks	1977	100647
F	260m W	Unspecified Tank	1960 - 1965	97351
F	261m W	Tanks	1977	92412
F	266m SW	Unspecified Tank	1980 - 1994	99961
F	268m SW	Tanks	1980 - 1994	90810
F	283m W	Tanks	1994	94929
F	283m W	Tanks	1980	103965
F	310m SW	Tanks	1977 - 1994	101142
F	331m W	Unspecified Tank	1980 - 1994	98265
F	340m W	Tanks	1980	101155
F	340m W	Tanks	1994	91209
N	345m NW	Tanks	1979 - 1980	100955
O	347m W	Unspecified Tank	1979 - 1980	95275
O	348m W	Tanks	1965	94446
O	349m W	Tanks	1960	99935
N	352m NW	Unspecified Tank	1960 - 1965	100206
O	355m W	Tanks	1979 - 1988	91743



ID	Location	Land use	Dates present	Group ID
O	355m W	Tanks	1960 - 1970	95408
F	355m W	Tanks	1960 - 1994	102711
F	356m SW	Tanks	1960 - 1965	98181
F	356m SW	Tanks	1977 - 1994	92291
L	363m NW	Unspecified Tank	1960	80290
L	363m NW	Tanks	1965	86571
E	368m W	Unspecified Tank	1965 - 1994	100691
E	368m W	Unspecified Tank	1960 - 1970	103049
L	369m NW	Unspecified Tank	1960	80291
O	382m NW	Unspecified Tank	1960 - 1979	94434
E	385m W	Unspecified Tank	1970 - 1994	101042
E	385m W	Unspecified Tank	1980	92009
E	387m W	Tanks	1965	91157
E	388m W	Unspecified Tank	1960 - 1970	103029
E	390m W	Tanks	1960	92812
O	399m W	Unspecified Tank	1960 - 1965	100721
O	402m NW	Unspecified Tank	1970 - 1988	98470
O	402m NW	Unspecified Tank	1994	89580
E	403m W	Unspecified Tank	1980	93861
E	403m W	Unspecified Tank	1960 - 1970	89220
E	403m W	Unspecified Tank	1965 - 1994	95240
L	404m NW	Unspecified Tank	1960 - 1965	103004
P	404m SW	Tanks	1960 - 1980	94012
P	404m SW	Tanks	1994	88832
P	404m SW	Tanks	1977 - 1980	98026
M	411m SW	Tanks	1977 - 1994	98310
Q	413m NW	Tanks	1960 - 1965	92304
P	415m SW	Tanks	1980	94570



ID	Location	Land use	Dates present	Group ID
P	415m SW	Tanks	1980	97142
P	415m SW	Tanks	1977 - 1994	103558
M	420m SW	Tanks	1977 - 1994	89512
Q	423m NW	Tanks	1979 - 1980	91088
P	424m SW	Unspecified Tank	1980	80297
P	425m SW	Tanks	1980 - 1994	101604
P	426m SW	Tanks	1977	103087
T	441m W	Unspecified Tank	1980	100036
T	442m W	Unspecified Tank	1970 - 1994	100893
T	445m W	Unspecified Tank	1970 - 1994	94746
U	447m NW	Unspecified Tank	1960 - 1988	91577
S	454m W	Unspecified Tank	1970 - 1979	96836
T	458m W	Unspecified Tank	1970 - 1994	93389
M	469m SW	Tanks	1980	101687
M	469m SW	Tanks	1994	89072
U	473m NW	Unspecified Tank	1979 - 1988	91597
U	483m NW	Unspecified Tank	1988	94390
U	483m NW	Unspecified Tank	1983	95988
U	483m NW	Unspecified Tank	1983	96108
U	483m NW	Unspecified Tank	1979	98515
U	483m NW	Unspecified Tank	1994	101933
U	483m NW	Tanks	1960 - 1965	88863
U	483m NW	Unspecified Tank	1970	98917
U	494m NW	Tanks	1970	86572

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





### 1.3 Historical energy features

**Records within 500m****3**

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 15 >](#)

ID	Location	Land use	Dates present	Group ID
5	196m S	Electricity Substation	1994	44439
I	252m S	Electricity Substation	1985 - 1993	58711
I	254m S	Electricity Substation	1993	47082

*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****0**

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'.

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



## 1.6 Historical military land

Records within 500m

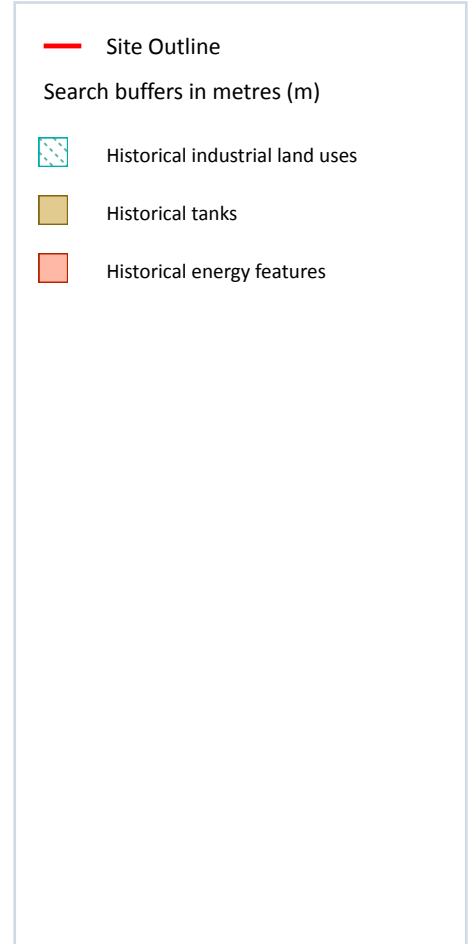
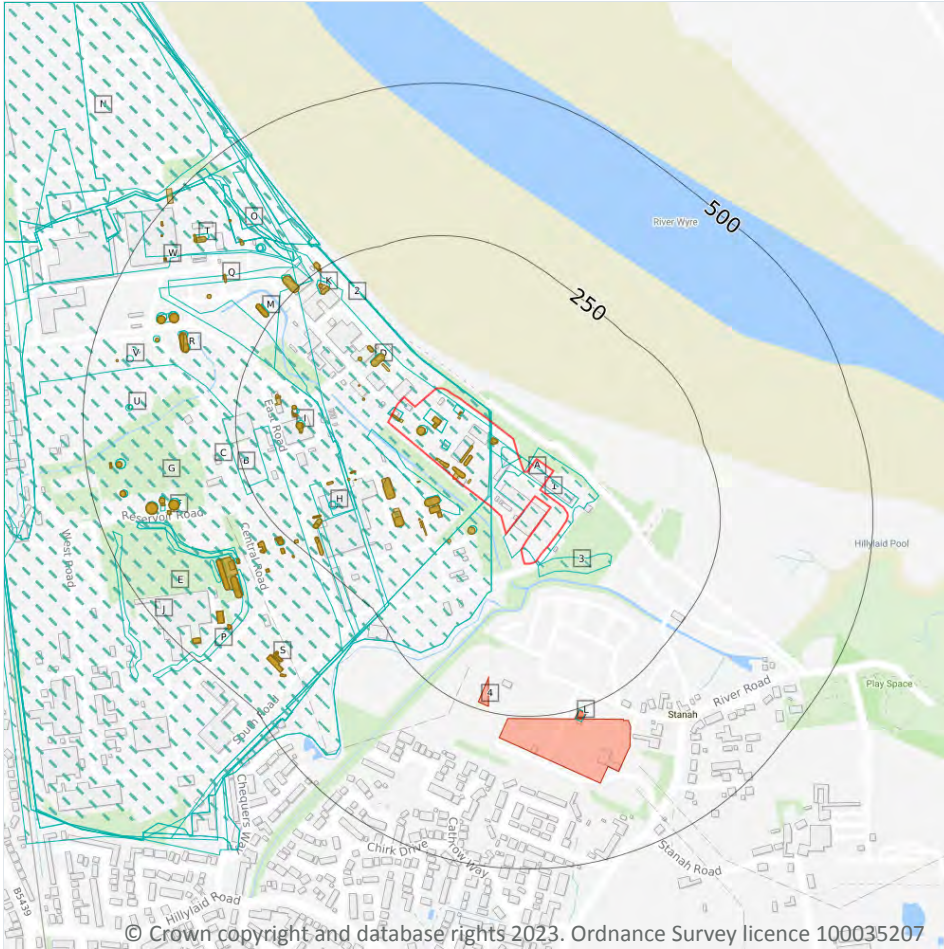
0

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.*



## 2 Past land use - un-grouped



### 2.1 Historical industrial land uses

Records within 500m

114

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 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 26](#) >

ID	Location	Land Use	Date	Group ID
1	On site	Unspecified Works	1985	678573
2	On site	Railway Sidings	1973	714213
A	On site	Railway Sidings	1951	641435

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Pit	1968	688600
A	On site	Unspecified Tanks	1992	714651
A	On site	Unspecified Tanks	1992	726363
A	On site	Unspecified Tanks	1992	788022
A	On site	Unspecified Tanks	1992	727213
A	On site	Unspecified Tanks	1992	787313
A	On site	Unspecified Tanks	1981	727213
A	On site	Unspecified Tanks	1981	714651
A	On site	Unspecified Tanks	1981	726363
A	On site	Unspecified Tanks	1981	787313
A	On site	Unspecified Tanks	1981	788022
B	On site	Unspecified Works	1992	746126
B	On site	Unspecified Works	1981	729518
C	On site	Unspecified Works	1967	716375
C	On site	Unspecified Works	1973	729518
3	7m SE	Unspecified Heap	1985	649452
A	26m W	Refuse Heap	1967	676879
A	39m SW	Unspecified Tanks	1992	751240
A	39m SW	Unspecified Tanks	1981	751240
A	41m S	Unspecified Tank	1992	694819
A	41m S	Unspecified Tank	1981	694819
D	71m NW	Unspecified Tanks	1967	763973
D	71m NW	Unspecified Tanks	1973	763973
A	72m W	Unspecified Tanks	1992	749014
A	72m W	Unspecified Tanks	1981	749014
E	89m W	Railway Sidings	1973	697482
F	90m W	Chemical Works	1951	682676
G	90m W	Railway Sidings	1951	698470



ID	Location	Land Use	Date	Group ID
G	91m W	Railway Sidings	1967	698470
A	104m SW	Unspecified Tanks	1992	742475
A	104m SW	Unspecified Tanks	1981	742475
I	137m W	Unspecified Tank	1992	702019
I	137m W	Unspecified Tank	1981	702019
I	147m W	Unspecified Tank	1973	771286
I	149m W	Unspecified Tank	1967	771286
H	155m W	Unspecified Tank	1973	707907
H	157m W	Unspecified Tank	1967	707907
J	189m W	Railway Sidings	1981	697482
K	214m NW	Unspecified Tanks	1967	713245
K	214m NW	Unspecified Tanks	1973	713245
K	250m NW	Unspecified Tanks	1967	752240
K	250m NW	Unspecified Tanks	1973	752240
L	252m S	Electricity Substation	1985	686415
M	256m NW	Unspecified Tanks	1992	789517
M	256m NW	Unspecified Tanks	1981	789517
M	256m NW	Unspecified Tanks	1967	789517
M	256m NW	Unspecified Tanks	1973	789517
H	258m W	Unspecified Tank	1973	770548
H	259m W	Unspecified Tank	1967	770548
H	260m W	Unspecified Tank	1992	742152
N	286m NW	Ammonia Soda Works	1938	757831
N	286m NW	Railway Sidings	1938	738290
N	286m NW	Ammonia Soda Works	1930	757831
N	286m NW	Railway Sidings	1930	775128
O	288m NW	Unspecified Ground Workings	1992	777538
O	288m NW	Unspecified Ground Workings	1981	777538



ID	Location	Land Use	Date	Group ID
O	288m NW	Unspecified Ground Workings	1973	734208
O	317m NW	Unspecified Heap	1938	748322
O	317m NW	Unspecified Heap	1930	748322
E	325m W	Unspecified Ground Workings	1967	696442
E	330m W	Unspecified Ground Workings	1992	755081
E	330m W	Unspecified Ground Workings	1981	755081
O	331m NW	Unspecified Tank	1973	767586
O	333m NW	Unspecified Tank	1981	728267
O	334m NW	Unspecified Tank	1992	728267
O	336m NW	Unspecified Tank	1967	767586
P	342m SW	Unspecified Ground Workings	1967	646142
R	347m W	Unspecified Tank	1992	788469
R	347m W	Unspecified Tank	1981	788469
R	347m W	Unspecified Tank	1967	788469
R	347m W	Unspecified Tank	1973	788469
H	350m SW	Unspecified Tanks	1992	738506
H	350m SW	Unspecified Tanks	1981	738506
H	354m W	Unspecified Tanks	1967	738506
H	354m W	Unspecified Tanks	1973	738506
R	358m NW	Unspecified Tank	1967	713686
R	358m NW	Unspecified Tank	1973	713686
R	364m NW	Unspecified Tank	1951	775226
H	366m W	Unspecified Tanks	1951	666073
F	366m W	Unspecified Tank	1992	712875
F	366m W	Unspecified Tank	1981	712875
F	366m W	Unspecified Tank	1967	712875
F	366m W	Unspecified Tank	1973	712875
R	382m NW	Unspecified Tanks	1973	666069



ID	Location	Land Use	Date	Group ID
R	385m NW	Unspecified Tank	1992	730697
R	385m NW	Unspecified Tank	1981	730697
R	385m NW	Unspecified Tank	1967	764137
F	386m W	Unspecified Tank	1967	787334
F	386m W	Unspecified Tank	1973	787334
F	390m W	Unspecified Tanks	1992	666070
R	397m W	Unspecified Tank	1967	673314
R	401m NW	Unspecified Tank	1992	744362
R	401m NW	Unspecified Tank	1981	744362
F	402m W	Unspecified Tank	1992	703668
F	402m W	Unspecified Tank	1981	703668
F	402m W	Unspecified Tank	1967	703668
F	402m W	Unspecified Tank	1973	703668
T	412m NW	Unspecified Tanks	1967	716149
T	412m NW	Unspecified Tanks	1973	716149
U	419m W	Unspecified Tank	1973	695680
U	420m W	Unspecified Tank	1992	714437
U	420m W	Unspecified Tank	1967	695680
V	430m W	Chimney	1967	684453
G	435m W	Unspecified Tank	1992	736039
G	435m W	Unspecified Tank	1981	736039
G	435m W	Unspecified Tank	1973	736039
G	442m W	Unspecified Tank	1992	789844
G	442m W	Unspecified Tank	1981	789844
G	442m W	Unspecified Tank	1973	789844
N	468m NW	Ammonia Soda Works	1951	694922
J	474m W	Unspecified Ground Workings	1967	646140

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



## 2.2 Historical tanks

Records within 500m

266

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 26 >](#)

ID	Location	Land Use	Date	Group ID
A	On site	Tanks	1994	86564
A	On site	Tanks	1985	95270
A	On site	Tanks	1981	97055
A	On site	Tanks	1980	99749
A	On site	Unspecified Tank	1980	103198
A	On site	Tanks	1980	93895
A	On site	Tanks	1980	89643
A	On site	Tanks	1980	103158
A	On site	Tanks	1980	99134
A	On site	Tanks	1980	92721
A	On site	Tanks	1980	96668
A	On site	Tanks	1980	93895
A	On site	Tanks	1980	89643
A	On site	Tanks	1980	92721
A	On site	Tanks	1980	99134
A	On site	Tanks	1980	88930
A	On site	Tanks	1980	96668
A	On site	Tanks	1980	103158
A	On site	Unspecified Tank	1980	103198
A	On site	Unspecified Tank	1980	80289
A	On site	Tanks	1993	101492
A	On site	Unspecified Tank	1994	80288
A	On site	Tanks	1994	100650





ID	Location	Land Use	Date	Group ID
A	On site	Tanks	1994	99134
A	On site	Tanks	1994	86563
A	On site	Tanks	1994	86565
A	On site	Tanks	1994	89508
A	On site	Tanks	1994	86567
A	On site	Unspecified Tank	1994	103198
A	On site	Tanks	1994	92041
A	On site	Tanks	1994	95834
A	On site	Tanks	1994	100649
A	41m W	Tanks	1980	102351
A	41m W	Tanks	1980	102351
A	41m SW	Tanks	1980	92354
A	41m SW	Tanks	1980	92354
A	42m SW	Tanks	1977	92354
A	45m S	Unspecified Tank	1980	90572
A	45m S	Unspecified Tank	1980	90572
D	49m NW	Tanks	1994	86566
A	50m SW	Tanks	1980	94479
A	50m SW	Tanks	1980	94479
A	51m SW	Tanks	1977	94479
D	51m NW	Unspecified Tank	1979	94507
D	51m NW	Unspecified Tank	1980	94507
A	57m SW	Tanks	1980	90051
A	57m SW	Tanks	1980	90051
A	57m SW	Tanks	1977	90051
D	68m NW	Tanks	1965	90731
D	68m NW	Tanks	1960	90731
D	69m NW	Unspecified Tank	1979	100067



ID	Location	Land Use	Date	Group ID
D	69m NW	Unspecified Tank	1980	100067
A	69m W	Tanks	1980	96585
A	69m W	Tanks	1980	96585
A	70m W	Tanks	1977	98882
A	83m S	Tanks	1977	86562
A	87m SW	Tanks	1994	86544
A	87m SW	Tanks	1980	96990
A	87m SW	Tanks	1980	96990
A	89m SW	Tanks	1977	95055
A	90m SW	Tanks	1977	86543
D	90m NW	Tanks	1965	93872
D	91m NW	Tanks	1960	93872
D	93m NW	Unspecified Tank	1965	102763
D	93m NW	Unspecified Tank	1960	102763
H	95m W	Tanks	1980	95228
H	95m W	Tanks	1980	95228
H	97m W	Tanks	1977	95228
H	97m W	Tanks	1994	90739
A	97m SW	Tanks	1980	89983
A	100m SW	Tanks	1977	96705
A	104m SW	Tanks	1980	96959
H	106m W	Unspecified Tank	1980	98563
H	106m W	Unspecified Tank	1980	98563
H	111m W	Unspecified Tank	1994	80294
H	133m W	Tanks	1965	103233
H	133m W	Tanks	1960	103233
I	139m W	Tanks	1980	100167
I	139m W	Tanks	1980	100167



ID	Location	Land Use	Date	Group ID
I	140m W	Tanks	1994	92825
I	140m W	Tanks	1977	92825
I	143m W	Tanks	1977	99625
I	143m W	Tanks	1994	99625
I	148m W	Tanks	1980	89956
I	148m W	Tanks	1980	89956
I	150m W	Tanks	1994	93995
I	150m W	Tanks	1977	95514
I	152m W	Tanks	1994	86568
I	153m W	Unspecified Tank	1979	98472
I	153m W	Unspecified Tank	1980	98472
I	154m W	Tanks	1977	88586
I	156m W	Tanks	1994	88592
I	178m W	Tanks	1994	86569
I	180m W	Unspecified Tank	1980	99937
I	185m W	Unspecified Tank	1965	99937
I	185m W	Unspecified Tank	1960	99937
H	188m W	Tanks	1980	89996
H	188m W	Tanks	1980	89996
H	188m W	Unspecified Tank	1994	80295
H	189m W	Tanks	1977	89996
H	192m W	Tanks	1980	99186
H	192m W	Unspecified Tank	1965	80296
H	192m W	Tanks	1994	91300
H	192m W	Tanks	1960	91300
H	193m W	Tanks	1977	99186
H	202m W	Tanks	1980	103149
K	213m NW	Tanks	1965	93633



ID	Location	Land Use	Date	Group ID
K	214m NW	Tanks	1960	93633
H	218m SW	Tanks	1980	90577
H	218m SW	Tanks	1980	90577
H	220m SW	Tanks	1977	92597
K	225m NW	Unspecified Tank	1960	80293
H	242m SW	Tanks	1980	88758
H	242m SW	Tanks	1980	88758
K	246m NW	Tanks	1965	89560
K	246m NW	Tanks	1960	89560
K	247m NW	Tanks	1980	98695
K	249m NW	Tanks	1994	92131
K	249m NW	Unspecified Tank	1979	80292
K	252m NW	Tanks	1994	98695
M	257m NW	Tanks	1960	88781
H	257m W	Tanks	1994	91556
H	257m W	Tanks	1980	91556
H	257m W	Tanks	1980	91556
M	257m NW	Tanks	1965	88781
M	257m NW	Tanks	1979	88781
M	257m NW	Tanks	1980	88781
H	258m W	Tanks	1977	100647
H	260m W	Unspecified Tank	1965	97351
H	261m W	Unspecified Tank	1960	97351
H	261m W	Tanks	1977	92412
H	266m SW	Unspecified Tank	1980	99961
H	266m SW	Unspecified Tank	1980	99961
H	267m SW	Unspecified Tank	1994	99961
H	268m SW	Tanks	1980	90810



ID	Location	Land Use	Date	Group ID
H	268m SW	Tanks	1980	90810
H	269m SW	Tanks	1994	90810
H	283m W	Tanks	1994	94929
H	283m W	Tanks	1980	103965
H	283m W	Tanks	1980	103965
H	310m SW	Tanks	1980	101142
H	310m SW	Tanks	1980	101142
H	310m SW	Tanks	1994	101142
H	311m SW	Tanks	1977	101142
H	331m W	Unspecified Tank	1980	98265
H	331m W	Unspecified Tank	1980	98265
H	332m W	Unspecified Tank	1994	98265
H	340m W	Tanks	1980	101155
H	340m W	Tanks	1980	101155
H	340m W	Tanks	1994	91209
Q	345m NW	Tanks	1979	100955
Q	345m NW	Tanks	1980	100955
R	347m W	Unspecified Tank	1979	95275
R	347m W	Unspecified Tank	1980	95275
R	348m W	Tanks	1965	94446
R	349m W	Tanks	1960	99935
Q	352m NW	Unspecified Tank	1960	100206
Q	352m NW	Unspecified Tank	1965	100206
R	355m W	Tanks	1979	91743
R	355m W	Tanks	1983	91743
R	355m W	Tanks	1983	91743
R	355m W	Tanks	1988	91743
R	355m W	Tanks	1960	95408



ID	Location	Land Use	Date	Group ID
R	355m W	Tanks	1970	95408
H	355m W	Tanks	1965	102711
H	356m W	Tanks	1994	102711
H	356m SW	Tanks	1965	98181
H	356m W	Tanks	1960	102711
H	356m W	Tanks	1977	102711
H	356m SW	Tanks	1994	92291
H	356m SW	Tanks	1960	98181
H	356m SW	Tanks	1977	92291
O	363m NW	Unspecified Tank	1960	80290
O	363m NW	Tanks	1965	86571
F	368m W	Unspecified Tank	1994	100691
F	368m W	Unspecified Tank	1960	103049
F	368m W	Unspecified Tank	1970	103049
F	368m W	Unspecified Tank	1965	100691
F	369m W	Unspecified Tank	1980	100691
O	369m NW	Unspecified Tank	1960	80291
R	382m NW	Unspecified Tank	1979	94434
R	383m NW	Unspecified Tank	1960	94434
R	383m NW	Unspecified Tank	1970	94434
R	383m NW	Unspecified Tank	1965	94434
F	385m W	Unspecified Tank	1994	101042
F	385m W	Unspecified Tank	1970	101042
F	385m W	Unspecified Tank	1980	92009
F	387m W	Tanks	1965	91157
F	388m W	Unspecified Tank	1960	103029
F	388m W	Unspecified Tank	1970	103029
F	390m W	Tanks	1960	92812



ID	Location	Land Use	Date	Group ID
R	399m W	Unspecified Tank	1960	100721
R	399m W	Unspecified Tank	1965	100721
R	402m NW	Unspecified Tank	1979	98470
R	402m NW	Unspecified Tank	1983	98470
R	402m NW	Unspecified Tank	1983	98470
R	402m NW	Unspecified Tank	1988	98470
R	402m NW	Unspecified Tank	1994	89580
R	402m NW	Unspecified Tank	1970	98470
F	403m W	Unspecified Tank	1980	93861
F	403m W	Unspecified Tank	1960	89220
F	403m W	Unspecified Tank	1970	89220
F	403m W	Unspecified Tank	1994	95240
F	403m W	Unspecified Tank	1965	95240
O	404m NW	Unspecified Tank	1960	103004
S	404m SW	Tanks	1980	94012
S	404m SW	Tanks	1994	88832
S	404m SW	Tanks	1980	98026
O	405m NW	Unspecified Tank	1965	103004
S	405m SW	Tanks	1977	98026
S	409m SW	Tanks	1965	94012
S	410m SW	Tanks	1960	94012
P	411m SW	Tanks	1980	98310
P	411m SW	Tanks	1980	98310
P	411m SW	Tanks	1994	98310
P	412m SW	Tanks	1977	98310
T	413m NW	Tanks	1960	92304
T	413m NW	Tanks	1965	92304
S	415m SW	Tanks	1980	94570



ID	Location	Land Use	Date	Group ID
S	415m SW	Tanks	1980	97142
S	415m SW	Tanks	1994	103558
S	416m SW	Tanks	1977	103558
P	420m SW	Tanks	1980	89512
P	420m SW	Tanks	1980	89512
P	421m SW	Tanks	1994	89512
P	421m SW	Tanks	1977	89512
T	423m NW	Tanks	1979	91088
T	423m NW	Tanks	1980	91088
S	424m SW	Unspecified Tank	1980	80297
S	425m SW	Tanks	1980	101604
S	426m SW	Tanks	1994	101604
S	426m SW	Tanks	1977	103087
G	441m W	Unspecified Tank	1980	100036
G	442m W	Unspecified Tank	1970	100893
G	442m W	Unspecified Tank	1994	100893
G	445m W	Unspecified Tank	1980	94746
G	446m W	Unspecified Tank	1994	94746
G	446m W	Unspecified Tank	1970	94746
W	447m NW	Unspecified Tank	1960	91577
W	447m NW	Unspecified Tank	1970	91577
W	447m NW	Unspecified Tank	1979	91577
W	447m NW	Unspecified Tank	1983	91577
W	447m NW	Unspecified Tank	1983	91577
W	447m NW	Unspecified Tank	1988	91577
W	448m NW	Unspecified Tank	1965	91577
V	454m W	Unspecified Tank	1979	96836
V	454m W	Unspecified Tank	1970	96836





ID	Location	Land Use	Date	Group ID
G	458m W	Unspecified Tank	1980	93389
G	459m W	Unspecified Tank	1970	93389
G	459m W	Unspecified Tank	1994	93389
P	469m SW	Tanks	1980	101687
P	469m SW	Tanks	1980	101687
P	469m SW	Tanks	1994	89072
W	473m NW	Unspecified Tank	1979	91597
W	473m NW	Unspecified Tank	1983	91597
W	473m NW	Unspecified Tank	1983	91597
W	473m NW	Unspecified Tank	1988	91597
W	483m NW	Unspecified Tank	1979	98515
W	483m NW	Unspecified Tank	1983	96108
W	483m NW	Unspecified Tank	1983	95988
W	483m NW	Unspecified Tank	1988	94390
W	483m NW	Unspecified Tank	1994	101933
W	483m NW	Tanks	1960	88863
W	483m NW	Unspecified Tank	1970	98917
W	484m NW	Tanks	1965	88863
W	494m NW	Tanks	1970	86572

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

### 2.3 Historical energy features

**Records within 500m**

**4**

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 26 >](#)

ID	Location	Land Use	Date	Group ID
4	196m S	Electricity Substation	1994	44439



ID	Location	Land Use	Date	Group ID
L	252m S	Electricity Substation	1993	58711
L	253m S	Electricity Substation	1985	58711
L	254m S	Electricity Substation	1993	47082

*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

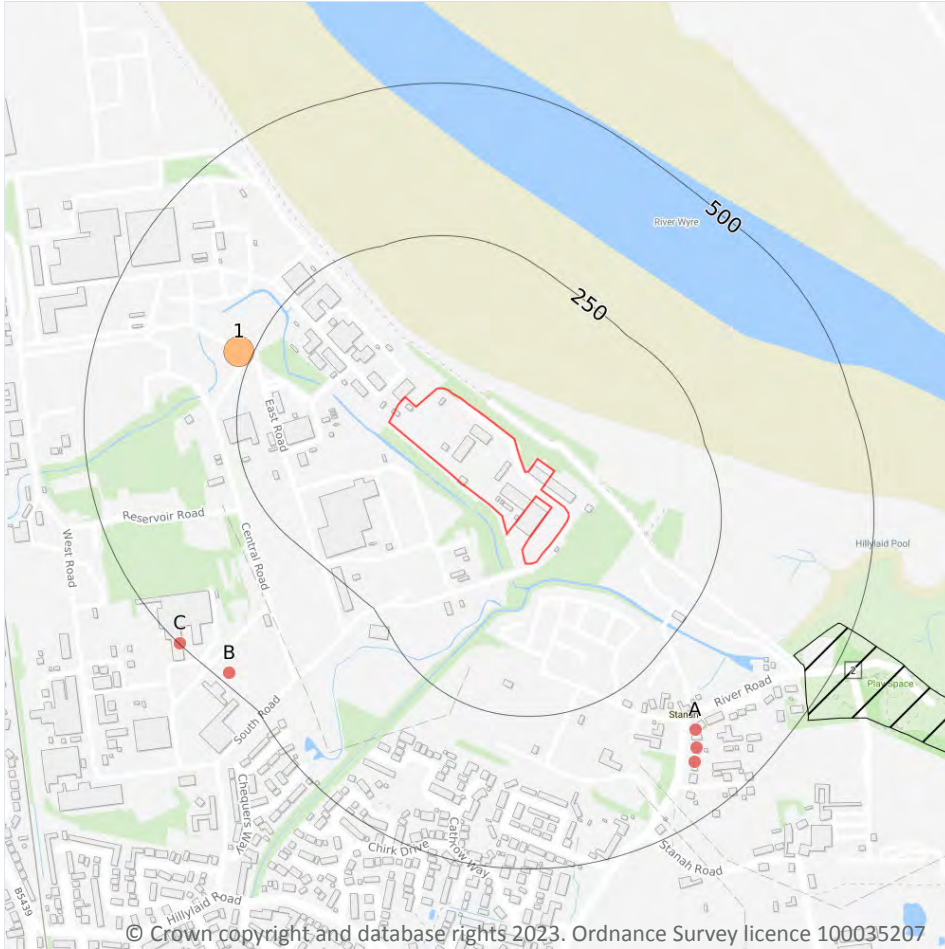
**Records within 500m**

**0**

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'.

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

## 3 Waste and landfill



### 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

1

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.

Features are displayed on the Waste and landfill map on [page 42 >](#)

ID	Location	Details		
2	431m SE	Site Address: Stanah House Farm, River Road, Thornton, Lancashire Licence Holder Address: -	Waste Licence: - Site Reference: K1/02/019 Waste Type: Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: Wyre Borough Council First Recorded 31/12/1960 Last Recorded: 31/12/1970

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

### 3.5 Historical waste sites

Records within 500m

1

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

Features are displayed on the Waste and landfill map on [page 42 >](#)

ID	Location	Address	Further Details	Date
1	247m NW	Site Address: Hillhouse International Works, East Road, Thornton Cleveleys, Lancashire, FY5, N.WEST	Type of Site: Advanced Thermal Treatment Facility Planning application reference: SCR/2023/0004 Description: Scheme comprises screening opinion request for a proposed small-scale advanced thermal treatment facility. Data source: Historic Planning Application Data Type: Point	01/03/2023

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



### 3.6 Licensed waste sites

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

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

<b>Records within 500m</b>	<b>12</b>
----------------------------	-----------

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 42 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
A	378m SE	STANNAH PUMPING STATION, RIVER ROAD, OFF STANNAH ROAD, THORNTON CLEVELEYS, FY5 5LR	WEX156853	Storing waste exemption	Not on a Farm	Storage of waste in a secure place
A	378m SE	STANNAH PUMPING STATION, RIVER ROAD, OFF STANNAH ROAD, THORNTON CLEVELEYS, FY5 5LR	WEX156853	Storing waste exemption	Not on a Farm	Storage of waste in secure containers
A	402m SE	16, RIVER ROAD, THORNTON-CLEVELEYS, FY5 5LR	WEX099791	Using waste exemption	Not on a farm	Use of depolluted end-of-life vehicles for vehicle parts
A	402m SE	16, RIVER ROAD, THORNTON-CLEVELEYS, FY5 5LR	WEX242409	Using waste exemption	Not on a farm	Use of depolluted end-of-life vehicles for vehicle parts
A	418m SE	STANNAH PUMPING STATION, RIVER ROAD, OFF STANNAH ROAD, THORNTON CLEVELEYS, FY5 5LR	WEX294951	Storing waste exemption	Not on a Farm	Storage of waste in secure containers
A	418m SE	STANNAH PUMPING STATION, RIVER ROAD, OFF STANNAH ROAD, THORNTON CLEVELEYS, FY5 5LR	WEX294951	Storing waste exemption	Not on a Farm	Storage of waste in a secure place

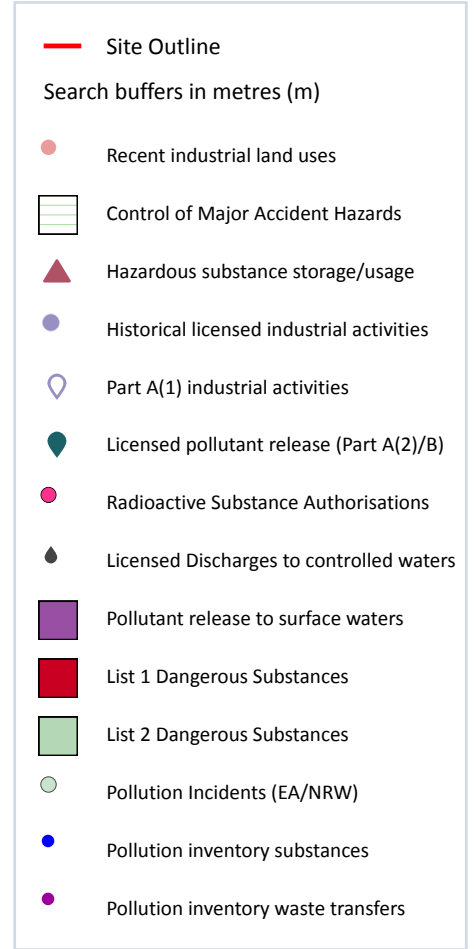
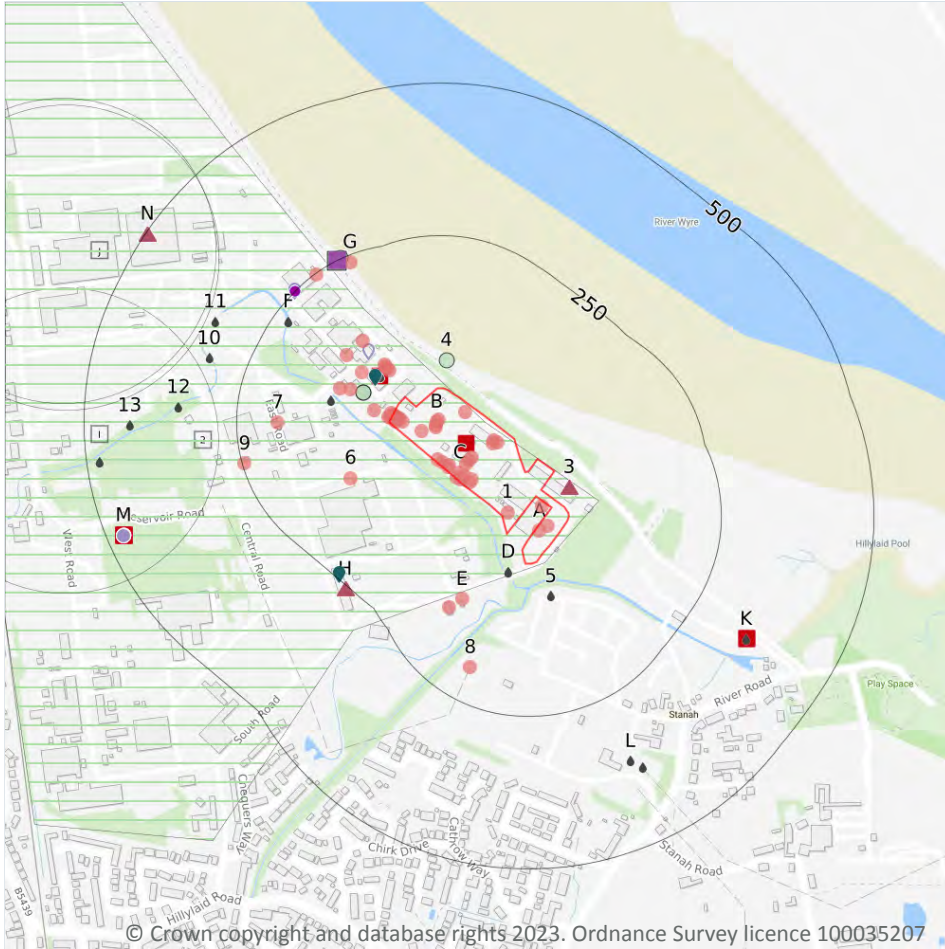


ID	Location	Site	Reference	Category	Sub-Category	Description
B	484m SW	Hillhouse Industrial Site Fleetwood Road North THORNTON-CLEVELEYS Lancashire FY5 4QD	EPR/KF0309N U/A001	Treating waste exemption	Non- Agricultural Waste Only	Dewatering using flocculants
B	484m SW	Hillhouse Industrial Site Fleetwood Road North THORNTON-CLEVELEYS Lancashire FY5 4QD	EPR/KF0309N U/A001	Using waste exemption	Non- Agricultural Waste Only	Use of waste in construction
B	484m SW	Hillhouse Industrial Site Fleetwood Road North THORNTON-CLEVELEYS Lancashire FY5 4QD	EPR/KF0309N U/A001	Using waste exemption	Non- Agricultural Waste Only	Use of waste to manufacture finished goods
C	499m SW	HILLHOUSE BUSINESS PARK FLEETWOOD ROAD NORTH LANCASHIRE FY5 4QD	EPR/EH0110R H/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in secure containers
C	499m SW	HILLHOUSE BUSINESS PARK FLEETWOOD ROAD NORTH LANCASHIRE FY5 4QD	EPR/EH0110R H/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place
C	499m SW	HILLHOUSE BUSINESS PARK FLEETWOOD ROAD NORTH LANCASHIRE FY5 4QD	EPR/EH0110R H/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of sludge

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



## 4 Current industrial land use



### 4.1 Recent industrial land uses

Records within 250m

60

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 46](#) >

ID	Location	Company	Address	Activity	Category
1	On site	Works	Lancashire, FY5	Unspecified Works Or Factories	Industrial Features
A	On site	Chimney	Lancashire, FY5	Chimneys	Industrial Features
A	On site	Business Park	Lancashire, FY5	Business Parks and Industrial Estates	Industrial Features



ID	Location	Company	Address	Activity	Category
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features





ID	Location	Company	Address	Activity	Category
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	2m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features



ID	Location	Company	Address	Activity	Category
B	3m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	6m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
A	8m SE	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
B	32m NW	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
B	50m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	55m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	59m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	64m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	80m NW	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
B	82m NW	Chimney	Lancashire, FY5	Chimneys	Industrial Features
B	97m NW	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
6	111m W	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	116m NW	Works	Lancashire, FY5	Unspecified Works Or Factories	Industrial Features
B	118m NW	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
E	119m S	Mast	Lancashire, FY5	Telecommunications Features	Infrastructure and Facilities
E	144m S	Electricity Sub Station	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
7	183m W	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
8	192m S	Pylon	Lancashire, FY5	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
G	239m NW	Outfall	Lancashire, FY5	Waste Storage, Processing and Disposal	Infrastructure and Facilities
9	246m W	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
G	247m NW	Electricity Sub Station	Lancashire, FY5	Electrical Features	Infrastructure and Facilities

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

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

Open, closed, under development and obsolete petrol stations.

*This data is sourced from Experian.*

## 4.3 Electricity cables

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

High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*

## 4.4 Gas pipelines

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

High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*

## 4.5 Sites determined as Contaminated Land

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

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

4

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Company	Address	Operational status	Tier
2	On site	<b>Victrex Manufacturing Limited</b>	<b>Victrex Manufacturing Limited, Thornton Cleveleys, Hillhouse International, Thornton Cleveleys, Lancashire, FY5 4QD</b>	<b>Current COMAH Site</b>	<b>COMAH Lower Tier Operator</b>
I	280m W	Victrex Manufacturing Limited	Victrex Manufacturing Limited, Thornton Cleveleys, Hillhouse International, Thornton Cleveleys, Lancashire, FY5 4QD	Current COMAH Site	COMAH Lower Tier Operator
J	343m NW	AGC Chemicals Europe Limited	AGC Chemicals Europe Limited, Hillhouse, PO Box 4, York House, Hillhouse International, Thornton Cleveleys, Lancashire, FY5 4QD	Current COMAH Site	COMAH Lower Tier Operator
J	353m NW	Victrex Manufacturing Limited	Victrex Manufacturing Limited, Thornton Cleveleys, Hillhouse International, Thornton Cleveleys, Lancashire, FY5 4QD	Current COMAH Site	COMAH Lower Tier Operator

*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

5

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)



ID	Location	Details	
3	30m E	Application reference number: No Details Application status: Approved Application date: No Details Address: Vinnolit Hillhouse Limited, Vinnolit Hillhouse, Bourne Road, Thornton Cleveleys, Blackpool, Wyre Borough Council, England, FY5 4QD	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details
H	255m SW	Application reference number: DHSC 2 5792/45882 Application status: Historical Consent Application date: 19/10/1992 Address: Vinnolit pka European Vinyls Corporation (UK) Ltd, PVC 9 Hillhouse International, Thornton Cleveleys, Lancs, FY5 4QD	Details: Vinyl Chloride (250 tonnes) Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
H	255m SW	Application reference number: 04/01410/HAZ Application status: Historical Consent Application date: 22/11/2004 Address: Zeneca Resins, PVC 9 Plant, Hillhouse International Site, Fleetwood Road, North Thornton-Cleveleys, FY5 4QD	Details: Vinyl Chloride Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
N	497m NW	Application reference number: 13/00555/HAZ Application status: Historical Consent Application date: 26/07/2013 Address: Victrex Manufacturing Ltd, Hillhouse International, Fleetwood Road North, Thornton Cleveleys, Lancashire, FY5 4QD	Details: Hazardous Substances Consent application for removal of condition imposed on previous application 11/00338/HAZ associated with the manufacture of polyaryletherketone polymers Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
N	497m NW	Application reference number: 11/00338/HAZ Application status: Approved Application date: 09/05/2011 Address: Victrex Manufacturing Limited, Hillhouse Technology Centre, Thornton Cleveleys, Blackpool, Wyre Borough Council, England, FY5 4QD	Details: Application for Hazardous Substances Consent associated with the manufacture of Polyaryletherketone polymers Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

**Records within 500m**

**4**

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)



ID	Location	Details	
M	473m W	Operator: Astrazeneca UK Ltd Address: Zeneca Resins Ltd, Hillhouse International, Thornton-cleveleys, Lancashire, FY5 4ZR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK4125	Original Permit Number: IPCAIRAPP Date Approved: 31-3-1995 Effective Date: 1-5-1995 Status: Superseded By Variation
M	473m W	Operator: Imperial Chemical Industries Plc Address: PO Box 4, York House, Hillhouse International, Thornton-cleveleys, Blackpool, FY5 4QD Process: Gasification And Associated Processes Permit Number: AM4720	Original Permit Number: IPCAIRAPP Date Approved: 12-4-1995 Effective Date: 1-5-1995 Status: Superseded By Variation
M	473m W	Operator: Imperial Chemical Industries Plc Address: PO Box 4, York House, Hillhouse International, Thornton-cleveleys, Blackpool, FY5 4QD Process: Gasification And Associated Processes Permit Number: AU3626	Original Permit Number: IPCMINVAR Date Approved: 21-12-1995 Effective Date: 29-12-1995 Status: Revoked
M	473m W	Operator: Astrazeneca UK Ltd Address: Zeneca Resins Ltd, Hillhouse International, Thornton-cleveleys, Lancashire, FY5 4ZR Process: Manufacture And Use Of Organic Chemicals Permit Number: BC6560	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked

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

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

**Records within 500m**

**10**

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

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Details	
C	On site	Operator: INEOS VINYLs UK LIMITED Installation Name: PVC9 Plant Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS Permit Number: BU5534IQ Original Permit Number: BU5534IQ	EPR Reference: EPR/BU5534IQ Issue Date: 22/01/2007 Effective Date: 22/01/2007 Last date noted as effective: 08/11/2023 Status: Superseded



ID	Location	Details	
C	On site	<b>Operator: VINNOLIT HILLHOUSE LIMITED</b> <b>Installation Name: Vinnolit Hillhouse Ltd - EPR/TP3833GG</b> <b>Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS</b> <b>Permit Number: TP3833GG</b> <b>Original Permit Number: TP3833GG</b>	<b>EPR Reference: EPR/TP3833GG</b> <b>Issue Date: 04/11/2021</b> <b>Effective Date: 04/11/2021</b> <b>Last date noted as effective: 08/11/2023</b> <b>Status: Surrendered</b>
C	On site	<b>Operator: Vinnolit Hillhouse Ltd</b> <b>Installation Name: Vinnolit Hillhouse Ltd - EPR/TP3833GG</b> <b>Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS</b> <b>Permit Number: EP3109MW</b> <b>Original Permit Number: TP3833GG</b>	<b>EPR Reference: -</b> <b>Issue Date: -</b> <b>Effective Date: 04/11/2021</b> <b>Last date noted as effective: 21/03/2023</b> <b>Status: Surrender Effective</b>
B	95m NW	<b>Operator: Victrex Manufacturing Limited</b> <b>Installation Name: Victrex Polymer Production Hillhouse EPR/BU5640IA</b> <b>Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS</b> <b>Permit Number: BU5640IA</b> <b>Original Permit Number: BU5640IA</b>	<b>EPR Reference: EA/EPR/BU5640IA/V002</b> <b>Issue Date: 03/11/2006</b> <b>Effective Date: 03/11/2006</b> <b>Last date noted as effective: 21/03/2023</b> <b>Status: Superseded</b>
B	95m NW	<b>Operator: Victrex Manufacturing Limited</b> <b>Installation Name: Victrex Polymer Production Hillhouse EPR/BU5640IA</b> <b>Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS</b> <b>Permit Number: BU5640IA</b> <b>Original Permit Number: BU5640IA</b>	<b>EPR Reference: EA/EPR/BU5640IA/V002</b> <b>Issue Date: 03/11/2006</b> <b>Effective Date: 03/11/2006</b> <b>Last date noted as effective: 21/03/2023</b> <b>Status: Superseded</b>
B	95m NW	<b>Operator: Victrex Manufacturing Limited</b> <b>Installation Name: Victrex Polymer Production Hillhouse EPR/BU5640IA</b> <b>Process: RECOVERY OF WASTE; BY DISTILLATION OF OIL/ORGANIC SOLVENT</b> <b>Permit Number: BU5640IA</b> <b>Original Permit Number: BU5640IA</b>	<b>EPR Reference: EA/EPR/BU5640IA/V002</b> <b>Issue Date: 03/11/2006</b> <b>Effective Date: 03/11/2006</b> <b>Last date noted as effective: 21/03/2023</b> <b>Status: Superseded</b>
G	251m NW	<b>Operator: VICTREX MANUFACTURING LIMITED</b> <b>Installation Name: Hillhouse International- Victrex Manufacturing Limited EPR/BU5640IA</b> <b>Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS</b> <b>Permit Number: BU5640IA</b> <b>Original Permit Number: BU5640IA</b>	<b>EPR Reference: EPR/BU5640IA</b> <b>Issue Date: 21/11/2016</b> <b>Effective Date: 21/11/2016</b> <b>Last date noted as effective: 08/11/2023</b> <b>Status: Effective</b>



ID	Location	Details	
G	251m NW	Operator: VICTREX MANUFACTURING LIMITED Installation Name: Hillhouse International- Victrex Manufacturing Limited Process: ASSOCIATED PROCESS Permit Number: BU5640IA Original Permit Number: BU5640IA	EPR Reference: EPR/BU5640IA Issue Date: 21/11/2016 Effective Date: 21/11/2016 Last date noted as effective: 08/11/2023 Status: Effective
G	251m NW	Operator: Victrex Manufacturing Limited Installation Name: Hillhouse International- Victrex Manufacturing Limited Process: ASSOCIATED PROCESS Permit Number: QP3338DB Original Permit Number: BU5640IA	EPR Reference: - Issue Date: 21/11/2016 Effective Date: 21/11/2016 Last date noted as effective: 21/03/2023 Status: Effective
G	251m NW	Operator: Victrex Manufacturing Limited Installation Name: Hillhouse International- Victrex Manufacturing Limited Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS Permit Number: QP3338DB Original Permit Number: BU5640IA	EPR Reference: - Issue Date: 21/11/2016 Effective Date: 21/11/2016 Last date noted as effective: 21/03/2023 Status: Effective

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

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

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

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Address	Details	
B	59m NW	BOC Ltd, Hillhouse International Limited, Thornton Cleveleys, FY5 4QD	Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
B	59m NW	Victrex Manufacturing Ltd, Hillhouse International, Po Box 4, Thornton-Cleveleys, Lancashire, FY5 4QD	Process: Chemical & Acid Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified





ID	Location	Address	Details	
H	244m SW	Ineos Vinyls, Hillhouse International, Po Box 4. Thornton-Cleveleys, Lancashire, FY5 4QD	Process: Chemical & Acid Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

<b>Records within 500m</b>	<b>2</b>
----------------------------	----------

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

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Address	Details	
M	473m W	Ici Chemicals And Polymers Ltd, Hillhouse Site, Thornton-cleveleys, Lancashire, FY5 4QD	Operator: Ici Chemicals And Polymers Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AC9076 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled
M	473m W	Ici Chemicals And Polymers Ltd, Hillhouse Site, Thornton-cleveleys, Lancashire, FY5 4QD	Operator: Ici Chemicals And Polymers Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AC9084 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled

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

## 4.13 Licensed Discharges to controlled waters

<b>Records within 500m</b>	<b>47</b>
----------------------------	-----------

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

Features are displayed on the Current industrial land use map on [page 46 >](#)



ID	Location	Address	Details	
D	31m S	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: 017290086 Permit Version: 2 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/09/1993 Revocation Date: 03/06/1996
D	31m S	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: 017290086 Permit Version: 3 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 04/06/1996 Revocation Date: 23/07/1996
D	31m S	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: 017290086 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 18/08/1979 Revocation Date: 06/09/1993
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 10 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/06/1996 Revocation Date: 02/09/1996
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 10 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/06/1996 Revocation Date: 02/09/1996
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 6 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/06/1993 Revocation Date: 08/02/1994
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 9 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/03/1996 Revocation Date: 06/06/1996
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 8 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/06/1995 Revocation Date: 06/03/1996



ID	Location	Address	Details	
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 11 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 03/09/1996 Revocation Date: 20/01/1999
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 8 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/06/1995 Revocation Date: 06/03/1996
B	53m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 017290033 Permit Version: 12 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 21/01/1999 Effective Date: 21/01/1999 Revocation Date: 17/03/2004
B	53m NW	ROYLES BROOK OUTFALL NO 47, HILLHOUSE INTERNATIONAL, THORTON CLEVELEYS, FLEETWOOD, LANCASHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 017290385 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: SURRENDERED UNDER EPR 2010 Issue date: 21/01/1999 Effective Date: 21/01/1999 Revocation Date: 31/08/2017
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 9 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/03/1996 Revocation Date: 06/06/1996
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 7 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1994 Revocation Date: 26/06/1995
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 7 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1994 Revocation Date: 26/06/1995
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 6 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/06/1993 Revocation Date: 08/02/1994



ID	Location	Address	Details	
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 11 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 03/09/1996 Revocation Date: 20/01/1999
5	61m SE	INGOL GOLF CENTRE SWO, TENTERTON HALL, INGOL, PRESTON, LANCASHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 017190205 Permit Version: 1 Receiving Water: TRIB SAVICK BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 13/08/1986 Revocation Date: 01/11/1994
B	101m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
F	225m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 8 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/06/1995 Revocation Date: 06/03/1996
F	225m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 7 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1994 Revocation Date: 26/06/1995
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 2 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1982 Revocation Date: 08/09/1983
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 1 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1980 Revocation Date: 31/12/1981



ID	Location	Address	Details	
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 5 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1993 Revocation Date: 07/06/1993
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 3 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/09/1983 Revocation Date: 17/01/1988
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 017290034 Permit Version: 1 Receiving Water: RIVER WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 18/08/1979 Revocation Date: 07/06/1993
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 6 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/06/1993 Revocation Date: 08/02/1994
G	249m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE & TRADE COMBINED - UNSPECIFIED Permit Number: 017290033 Permit Version: 12 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 21/01/1999 Effective Date: 21/01/1999 Revocation Date: 17/03/2004
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 017290034 Permit Version: 2 Receiving Water: RIVER WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/06/1993 Revocation Date: 03/08/1993
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 7 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1994 Revocation Date: 26/06/1995



ID	Location	Address	Details	
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 4 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 18/01/1988 Revocation Date: 08/02/1993
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 9 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/03/1996 Revocation Date: 06/06/1996
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 10 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/06/1996 Revocation Date: 02/09/1996
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 11 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 03/09/1996 Revocation Date: 20/01/1999
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 8 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/06/1995 Revocation Date: 06/03/1996
G	249m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE & TRADE COMBINED - UNSPECIFIED Permit Number: 017290033 Permit Version: 13 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 18/03/2004 Effective Date: 18/03/2004 Revocation Date: 30/07/2008
G	249m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 017290033 Permit Version: 12 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 21/01/1999 Effective Date: 21/01/1999 Revocation Date: 17/03/2004



ID	Location	Address	Details	
G	249m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 017290033 Permit Version: 14 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 31/07/2008 Effective Date: 31/07/2008 Revocation Date: -
10	313m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
11	329m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
12	346m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
K	351m SE	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290100 Permit Version: 1 Receiving Water: HILLYLAID POOL- OLD COURSE	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
L	360m SE	PRESTON DOCK ESTATE, PRESTON, LANCASHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 017190217 Permit Version: 1 Receiving Water: RIVER RIBBLE	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/12/1986 Revocation Date: 01/07/1991
L	378m SE	PRESTON DOCK ESTATE, PRESTON, LANCASHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 017190217 Permit Version: 1 Receiving Water: RIVER RIBBLE	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/12/1986 Revocation Date: 01/07/1991



ID	Location	Address	Details	
13	425m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
I	478m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
I	479m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991

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

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

Records within 500m

4

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

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Address	Details	
G	249m NW	THORNTON FACILITIES MANAGEMENT LTD, ICI HILLHOUSE, THORNTON, BLACKPOOL, LANCASHIRE	Permit Number: 017290033 Permit Version: 12 Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Sewage disposal works - other	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Catchment: - Approval Date: 21/01/1999
G	249m NW	THORNTON FACILITIES MANAGEMENT LTD, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Permit Number: 017290033 Permit Version: 13 Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Basic Ind. Chemicals Inorganic	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Catchment: - Approval Date: 18/03/2004





ID	Location	Address	Details	
G	249m NW	THORNTON FACILITIES MANAGEMENT LTD, ICI HILLHOUSE, THORNTON, BLACKPOOL, LANCASHIRE	Permit Number: 017290033 Permit Version: 12 Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Sewage disposal works - other	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Catchment: - Approval Date: 21/01/1999
G	249m NW	THORNTON FACILITIES MANAGEMENT LTD, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Permit Number: 017290033 Permit Version: 13 Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Basic Ind. Chemicals Organic	Effluent Type: SEWAGE & TRADE COMBINED - UNSPECIFIED Catchment: - Approval Date: 18/03/2004

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

## 4.15 Pollutant release to public sewer

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

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

<b>Records within 500m</b>	<b>15</b>
----------------------------	-----------

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
<b>C</b>	<b>On site</b>	<b>Ineos Vinyls Uk Limited, Pvc9 Plant, Fy5 4qd</b>	<b>Active</b>	<b>Wyre Estuary</b>	<b>Mercury (other)</b>
B	53m NW	Ici Hillhouse No 47	Active	Wyre Estuary	Mercury (other)
G	250m NW	Ici Hillhouse Main Outfall	Active	-	-
G	250m NW	Ici Hillhouse Main Outfall	Active	-	-
G	250m NW	Ici Hillhouse Main Outfall	Not Active	Wyre Estuary	Mercury (other)
K	351m SE	Ici Mdi Lagoon	Active	-	-



ID	Location	Name	Status	Receiving Water	Authorised Substances
K	351m SE	Ici Mdi Lagoon	Active	-	-
K	351m SE	Ici Mdi Lagoon	Active	Wyre Estuary	Carbon tetrachloride, Chloroform
M	473m W	Asahi Glass Fluoropolymers Uk, Hillhouse International	Not Active	Trd_notcons	Mercury (other)
M	473m W	European Vinyls Corporation (uk) Ltd - Treatment Plant	Not Active	Wyre Estuary, River Wyre	Carbon tetrachloride, Chloroform, 1,2-dichloroethane
M	473m W	European Vinyls Corporation (uk) Ltd - Treatment Plant	Not Active	Wyre Estuary, River Wyre	Carbon tetrachloride, Chloroform, 1,2-dichloroethane
M	473m W	Ici Chemical & Polymers	Not Active	Wyre Estuary, River Wyre	Mercury (other)
M	473m W	Asahi Glass Fluoropolymers Uk, Hillhouse International	Not Active	Trd_notcons	-
M	473m W	European Vinyls Corporation (uk) Ltd	Not Active	Wyre Estuary, River Wyre	1,2-dichloroethane
M	473m W	Ici Chemical & Polymers	Not Active	Wyre Estuary, River Wyre	-

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

## 4.17 List 2 Dangerous Substances

**Records within 500m**

**2**

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
G	250m NW	I.c.i. Chemicals & Polymers Ltd, Hillhouse Sewage/trade	Active	Wyre Estuary	Copper
G	250m NW	Ici Chemicals & Polymers, Hillhouse Main Outfall	Active	Wyre Estuary	Copper

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



## 4.18 Pollution Incidents (EA/NRW)

Records within 500m

4

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 46](#) >

ID	Location	Details	
4	46m N	Incident Date: 01/01/2005 Incident Identification: 285281 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	59m NW	Incident Date: 28/08/2018 Incident Identification: 1647147 Pollutant: Inorganic Chemicals/Products Pollutant Description: Alkalis	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
B	59m NW	Incident Date: 28/08/2018 Incident Identification: 1647147 Pollutant: Inorganic Chemicals/Products Pollutant Description: Acids	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
G	252m NW	Incident Date: 14/09/2003 Incident Identification: 189693 Pollutant: Contaminated Water Pollutant Description: Chemically Contaminated Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) 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

5

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.

Features are displayed on the Current industrial land use map on [page 46](#) >

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:



Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Fluorides - as F	2000kg	226769kg

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Fluorides - as F	2000kg	156685kg

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Particulate matter - PM2.5	1000kg	Below Reporting Threshold
Air	Particulate matter - total	10000kg	Below Reporting Threshold
Controlled Waters	Mercury	0.1kg	Below Reporting Threshold
Air	Sulphur oxides (SO2 and SO3) as SO2	100000kg	Below Reporting Threshold
Controlled Waters	Cadmium	1kg	Below Reporting Threshold
Wastewater	Total organic carbon (TOC)	50000kg	Below Reporting Threshold
Air	Carbon monoxide	100000kg	Below Reporting Threshold
Air	Nitrogen oxides (NO and NO2) as NO2	100000kg	Below Reporting Threshold
Air	Fluorine and inorganic fluorine compounds - as HF	1000kg	Below Reporting Threshold
Air	Non-methane volatile organic compounds (NMVOCs)	10000kg	Below Reporting Threshold
Air	Particulate matter - PM10	1000kg	Below Reporting Threshold
Controlled Waters	Phosphorus - as total P	5000kg	Below Reporting Threshold



ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Carbon dioxide	10000000kg	22808000kg

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Total organic carbon (TOC)	50000kg	50451kg

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

## 4.20 Pollution inventory waste transfers

<b>Records within 500m</b>	<b>1</b>
----------------------------	----------

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D10	Incineration on Land	57.5	absolute value	07 02 13	waste plastic	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	118	absolute value	07 02 13	waste plastic	No
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	64.7	absolute value	15 01 01	paper and cardboard packaging	No
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	10.3	absolute value	15 01 03	wooden packaging	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	15.9	absolute value	15 01 06	mixed packaging	No
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	8.4	absolute value	16 03 04	inorganic wastes other than those mentioned in 16 03 03	No
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	1241.2	absolute value	16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	10.2	absolute value	17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	No



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	116.6	absolute value	20 01 38	wood other than that mentioned in 20 01 37	No
R4	Recycling/reclamation of metals and metal compounds	49.5	absolute value	20 01 40	metals	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	37.9	absolute value	20 03 01	mixed municipal waste	No
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	620	absolute value	20 03 04	septic tank sludge	No
D10	Incineration on Land	5.74	absolute value	07 02 04	other organic solvents, washing liquids and mother liquors	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	11	absolute value	07 02 04	other organic solvents, washing liquids and mother liquors	Yes
D10	Incineration on Land	136.4	absolute value	07 02 08	other still bottoms and reaction residues	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	93.4	absolute value	07 02 08	other still bottoms and reaction residues	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	4.5	absolute value	07 04 04	other organic solvents, washing liquids and mother liquors	Yes



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R9	Oil e-refining or other reuses of oil	7.6	absolute value	13 03 07	mineral-based non-chlorinated insulating and heat transmission oils	Yes
D10	Incineration on Land	12.4	absolute value	13 03 08	synthetic insulating and heat transmission oils	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	4	absolute value	13 03 08	synthetic insulating and heat transmission oils	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	14.3	absolute value	13 03 08	synthetic insulating and heat transmission oils	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	187.8	absolute value	13 03 08	synthetic insulating and heat transmission oils	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	177.7	absolute value	13 05 03	interceptor sludges	Yes
D10	Incineration on Land	32.1	absolute value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	4.3	absolute value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	8.9	absolute value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes





Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D10	Incineration on Land	4.9	absolute value	15 02 02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.3	absolute value	15 02 02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.2	absolute value	16 02 13	discarded equipment containing hazardous components (2) other than those mentioned in 16 02 09 to 16 02 12	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbers D1 to D12 (eg evaporation, drying, calcination, etc.)	0.2	absolute value	16 05 06	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	Yes
D10	Incineration on Land	15.2	absolute value	16 05 07	discarded inorganic chemicals consisting of or containing dangerous substances	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	3.2	absolute value	16 05 07	discarded inorganic chemicals consisting of or containing dangerous substances	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbers D1 to D12 (eg evaporation, drying, calcination, etc.)	0.5	absolute value	16 05 07	discarded inorganic chemicals consisting of or containing dangerous substances	Yes
D10	Incineration on Land	51.7	absolute value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	Yes



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	14.8	absolute value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 (eg evaporation, drying, calcination, etc.)	8.3	absolute value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	Yes

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

## 4.21 Pollution inventory radioactive waste

**Records within 500m**

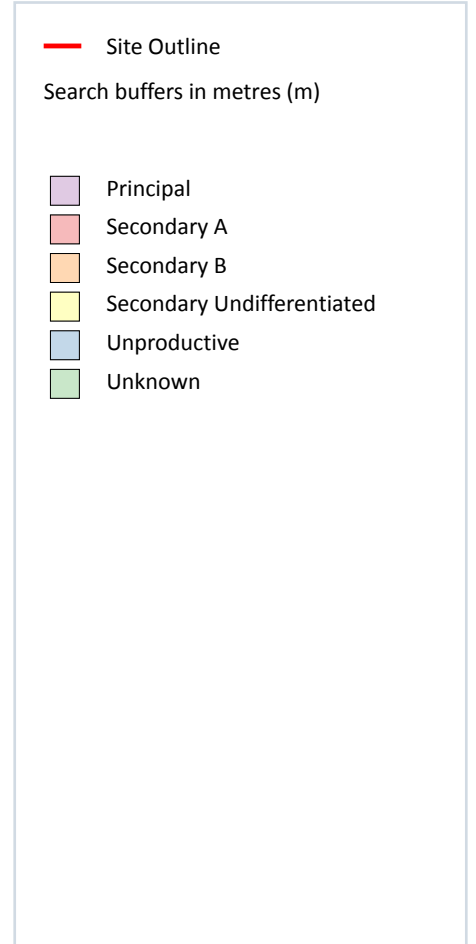
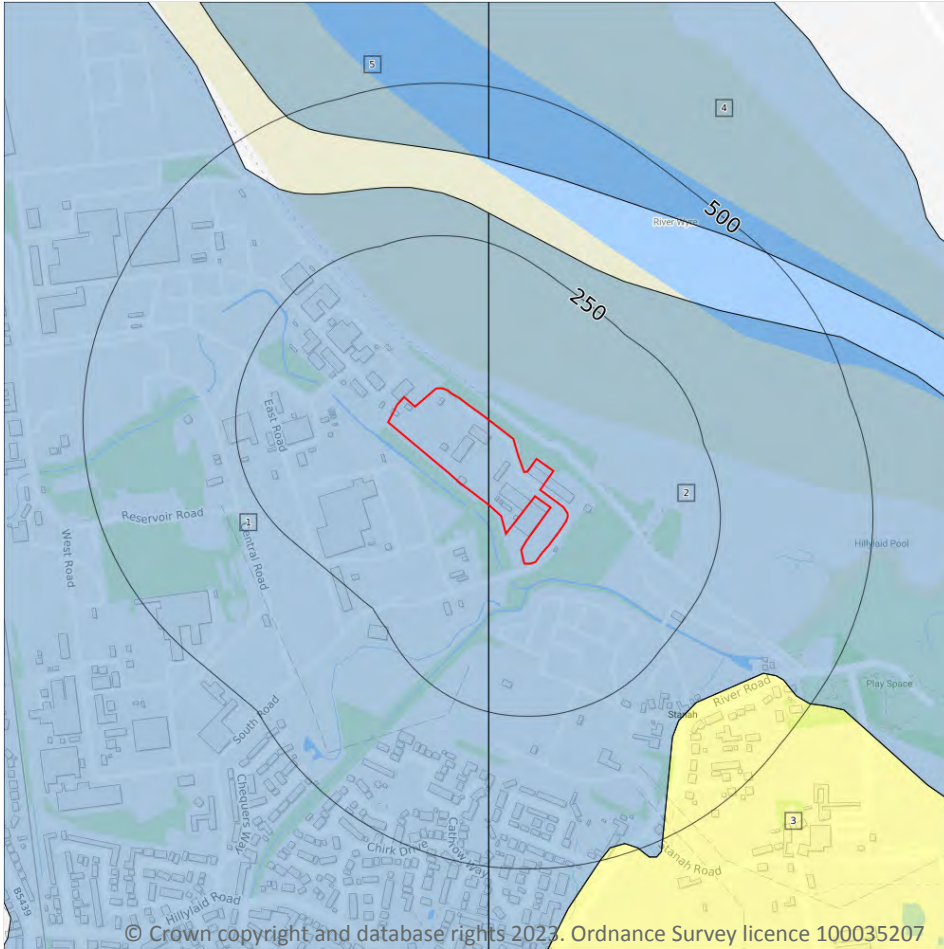
**0**

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



### 5.1 Superficial aquifer

Records within 500m

5

Aquifer status of groundwater held within superficial geology.

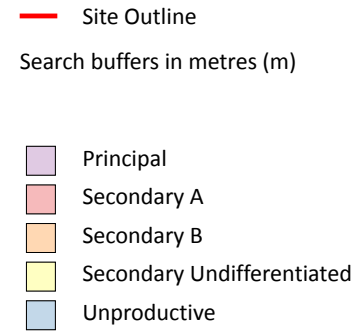
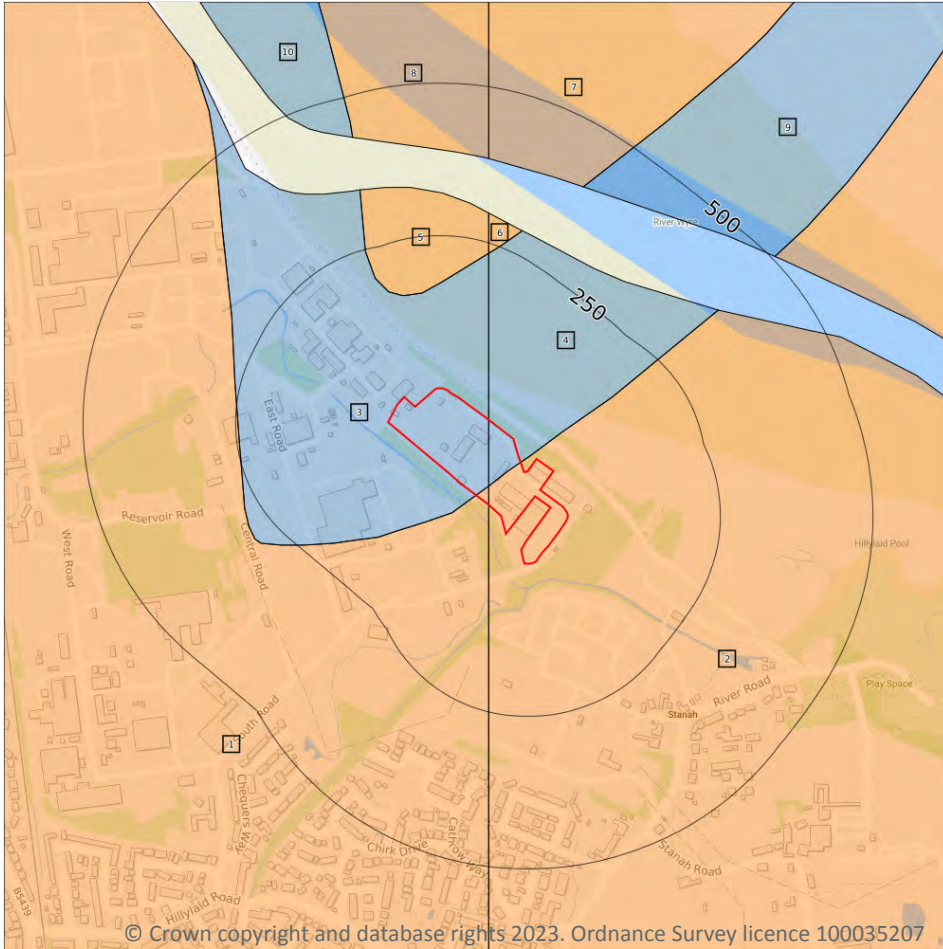
Features are displayed on the Hydrogeology map on [page 74 >](#)

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

ID	Location	Designation	Description
3	349m SE	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
4	383m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
5	384m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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

## Bedrock aquifer



### 5.2 Bedrock aquifer

Records within 500m

10

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 76](#) >

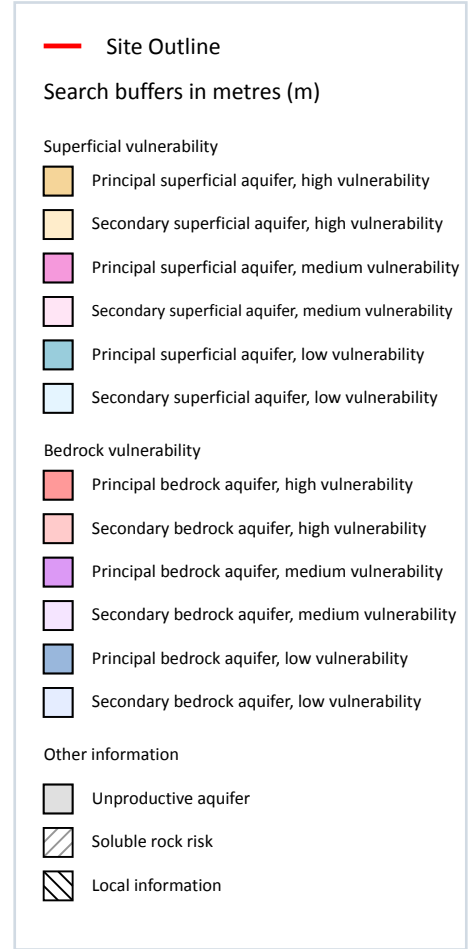
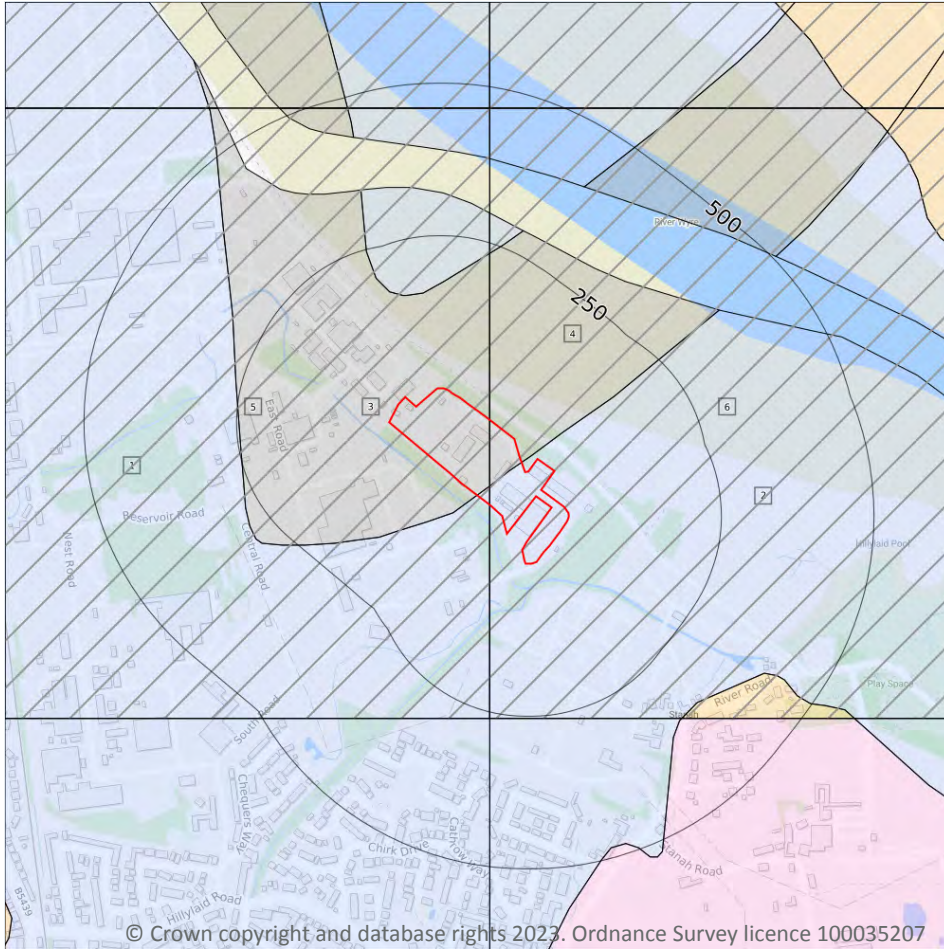
ID	Location	Designation	Description
1	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
2	On site	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

ID	Location	Designation	Description
3	On site	Unproductive	<b>These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow</b>
4	On site	Unproductive	<b>These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow</b>
5	158m N	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
6	234m N	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
7	383m N	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
8	384m N	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
9	401m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
10	434m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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



## Groundwater vulnerability



### 5.3 Groundwater vulnerability

Records within 50m

4

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 78 >](#)



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	<b>Summary Classification:</b> Secondary bedrock aquifer - Low Vulnerability <b>Combined classification:</b> Productive Bedrock Aquifer, Unproductive Superficial Aquifer	<b>Leaching class:</b> High <b>Infiltration value:</b> >70% <b>Dilution value:</b> 300-550mm/year	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Thickness:</b> >10m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> High	<b>Vulnerability:</b> Low <b>Aquifer type:</b> Secondary <b>Flow mechanism:</b> Well connected fractures
2	On site	<b>Summary Classification:</b> Secondary bedrock aquifer - Low Vulnerability <b>Combined classification:</b> Productive Bedrock Aquifer, Unproductive Superficial Aquifer	<b>Leaching class:</b> High <b>Infiltration value:</b> >70% <b>Dilution value:</b> 300-550mm/year	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Thickness:</b> >10m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Low <b>Aquifer type:</b> Secondary <b>Flow mechanism:</b> Well connected fractures
3	On site	<b>Summary Classification:</b> Unproductive aquifer (may have productive aquifer beneath) <b>Combined classification:</b> Unproductive Bedrock Aquifer, Unproductive Superficial Aquifer	<b>Leaching class:</b> High <b>Infiltration value:</b> >70% <b>Dilution value:</b> 300-550mm/year	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Thickness:</b> >10m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> High	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures
4	On site	<b>Summary Classification:</b> Unproductive aquifer (may have productive aquifer beneath) <b>Combined classification:</b> Unproductive Bedrock Aquifer, Unproductive Superficial Aquifer	<b>Leaching class:</b> High <b>Infiltration value:</b> >70% <b>Dilution value:</b> 300-550mm/year	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Thickness:</b> >10m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well 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

### Records on site

2

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
5	Very significant soluble rocks are likely to be present with a high possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, especially in adverse conditions such as concentrated surface or subsurface water flow.	28.999999999999996%





ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
6	<b>Very significant soluble rocks are likely to be present with a high possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, especially in adverse conditions such as concentrated surface or subsurface water flow.</b>	<b>23.0%</b>

*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

### 5.6 Groundwater abstractions

Records within 2000m

0

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.

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

### 5.7 Surface water abstractions

Records within 2000m

0

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.

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

### 5.8 Potable abstractions

Records within 2000m

0

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.

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

### 5.9 Source Protection Zones

Records within 500m

0

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

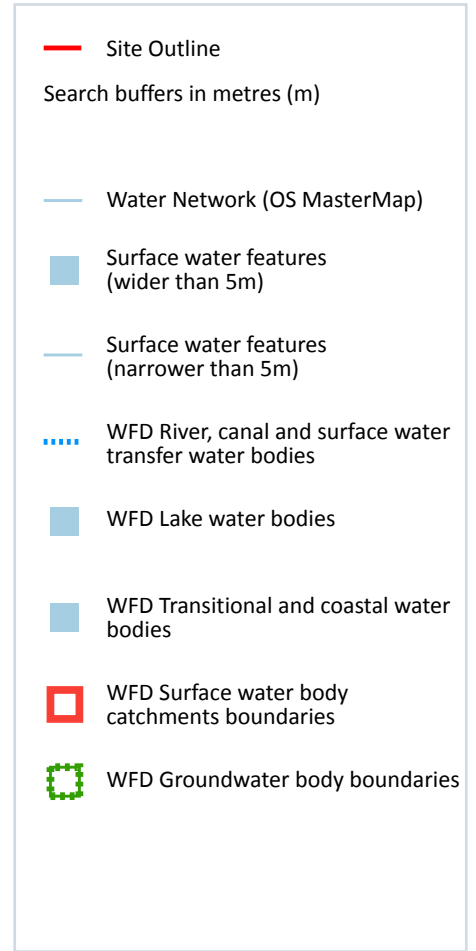
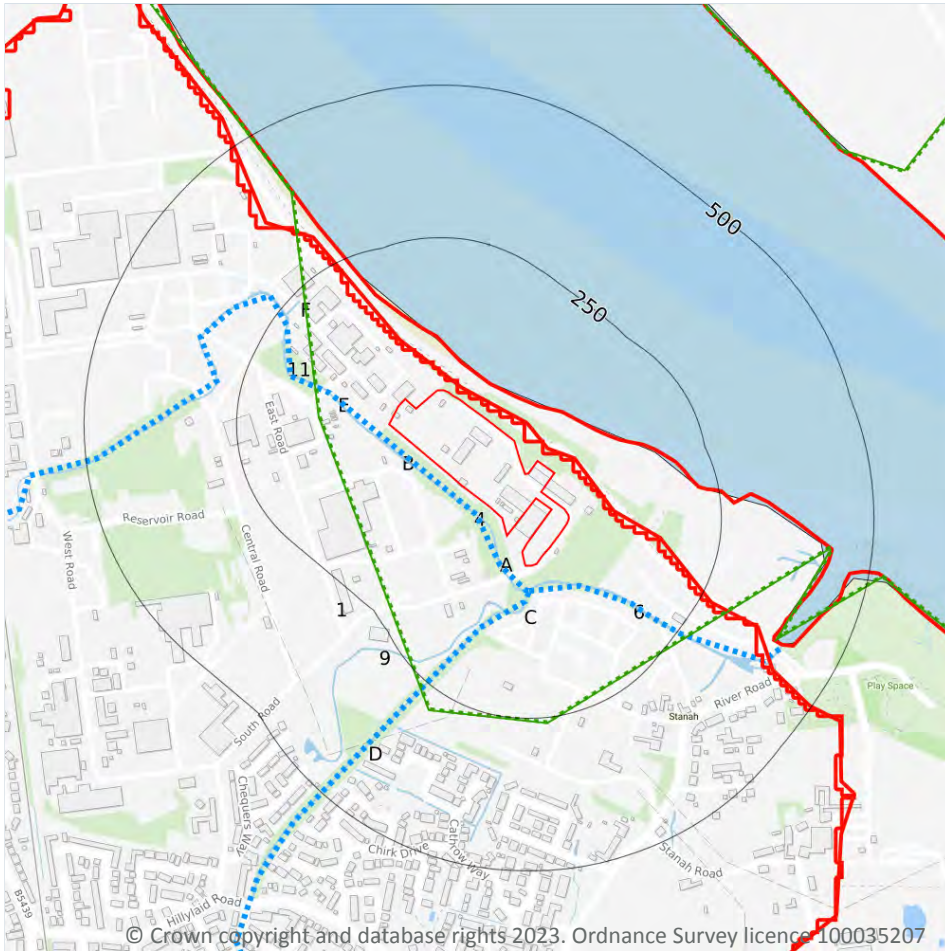
0

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



### 6.1 Water Network (OS MasterMap)

Records within 250m

17

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 83 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
A	21m S	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
B	23m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	23m S	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
6	33m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
C	41m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
9	80m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
C	80m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
C	82m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
D	83m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
E	96m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	98m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	103m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
11	128m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	236m NW	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
F	236m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	236m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	237m NW	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

**Records within 250m**

**7**

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 83 >](#)

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

**Records on site**

**1**

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 83 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Hillylaid Pool - Main Dyke	GB112072066160	Fleetwood Peninsula Trib	Wyre

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



## 6.4 WFD Surface water bodies

<b>Records identified</b>	<b>2</b>
---------------------------	----------

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 83](#) >

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
3	21m SW	River	Hillylaid Pool - Main Dyke	<a href="#">GB112072066160</a> ↗	Moderate	Fail	Moderate	2019
7	51m N	Transi	WYRE	<a href="#">GB531207212200</a> ↗	Poor	Fail	Poor	2019

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

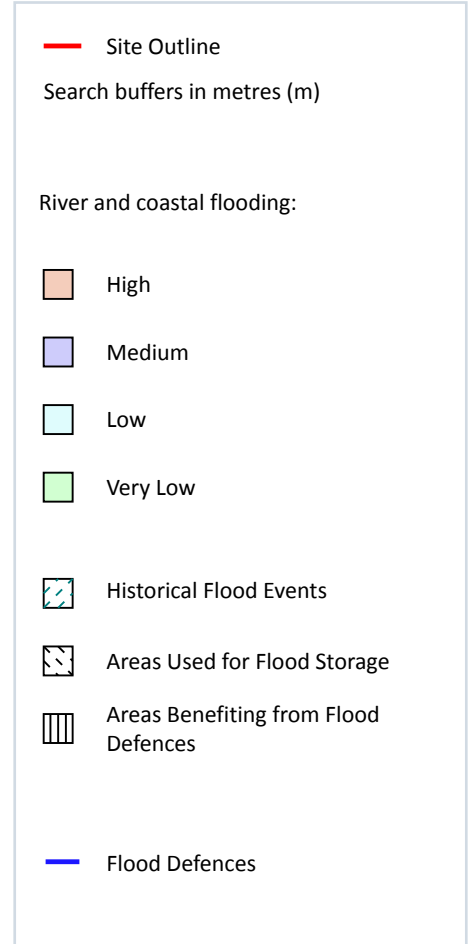
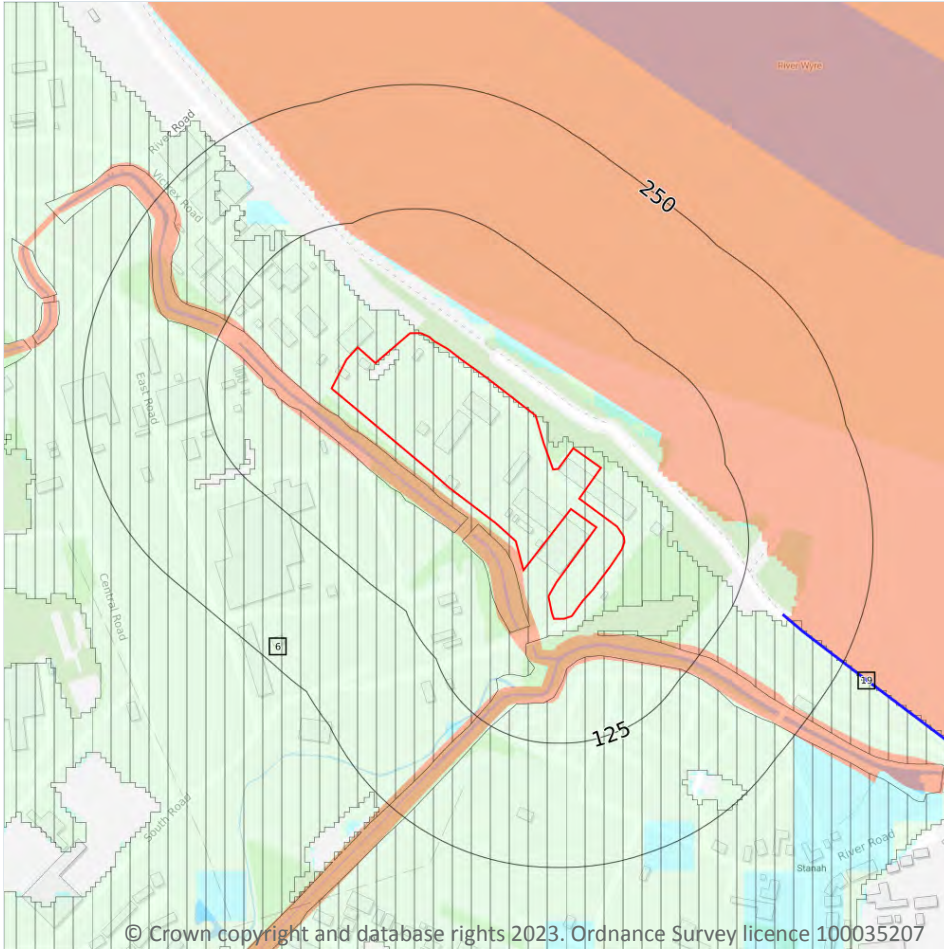
## 6.5 WFD Groundwater bodies

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

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.

*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

24

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).

Features are displayed on the River and coastal flooding map on [page 87 >](#)



Distance	Flood risk category
<b>On site</b>	<b>High</b>
0 - 50m	High

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

## 7.2 Historical Flood Events

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

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

<b>Records within 250m</b>	<b>1</b>
----------------------------	----------

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.

Features are displayed on the River and coastal flooding map on [page 87 >](#)

ID	Location	Update
19	174m SE	08/11/2022

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

## 7.4 Areas Benefiting from Flood Defences

<b>Records within 250m</b>	<b>1</b>
----------------------------	----------

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.

Features are displayed on the River and coastal flooding map on [page 87 >](#)

ID	Location	
6	On site	Area benefiting from flood defences



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

## 7.5 Flood Storage Areas

**Records within 250m**

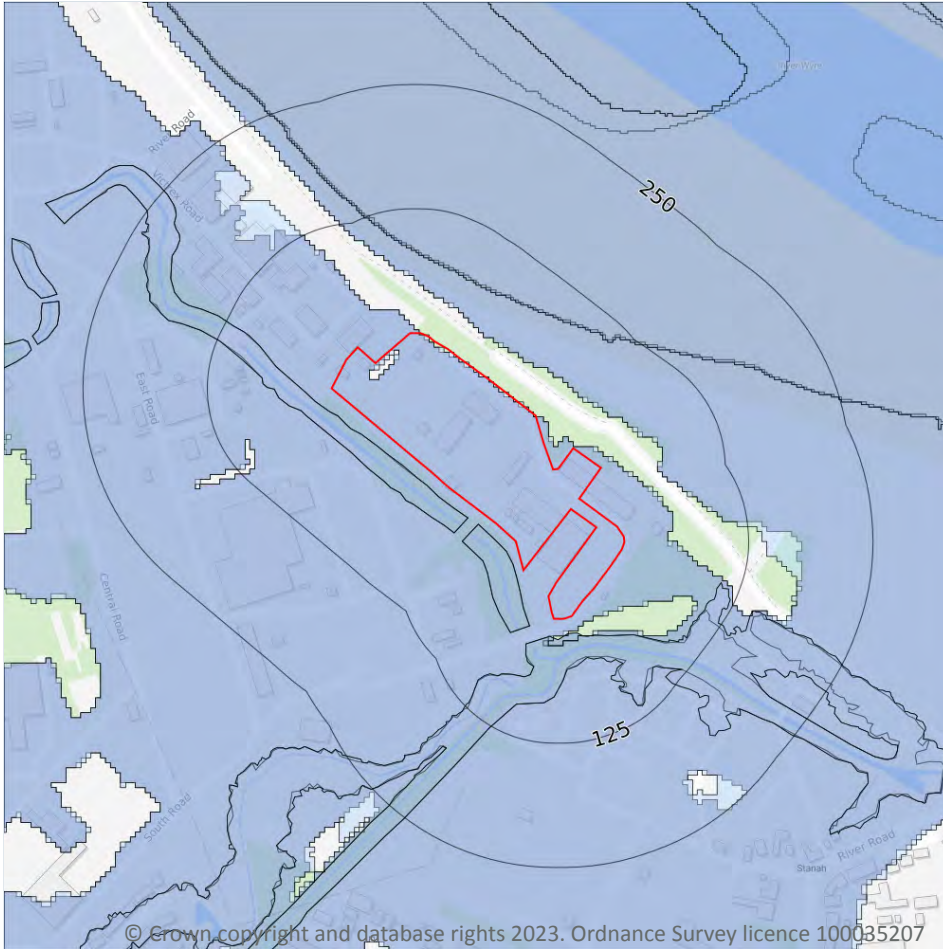
**0**

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



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

### 7.6 Flood Zone 2

**Records within 50m**

**1**

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.

Features are displayed on the River and coastal flooding map on [page 87](#) >

Location	Type
On site	Zone 2 - (Fluvial /Tidal Models)

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

## 7.7 Flood Zone 3

Records within 50m

1

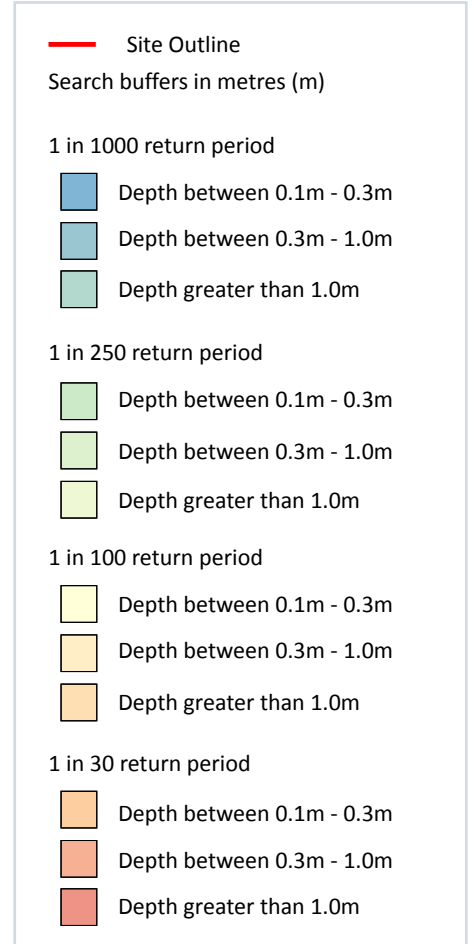
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on [page 87](#) >

Location	Type
On site	Zone 3 - (Fluvial Models)

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

## 8 Surface water flooding



### 8.1 Surface water flooding

**Highest risk on site**

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

**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 92 >](#)

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.

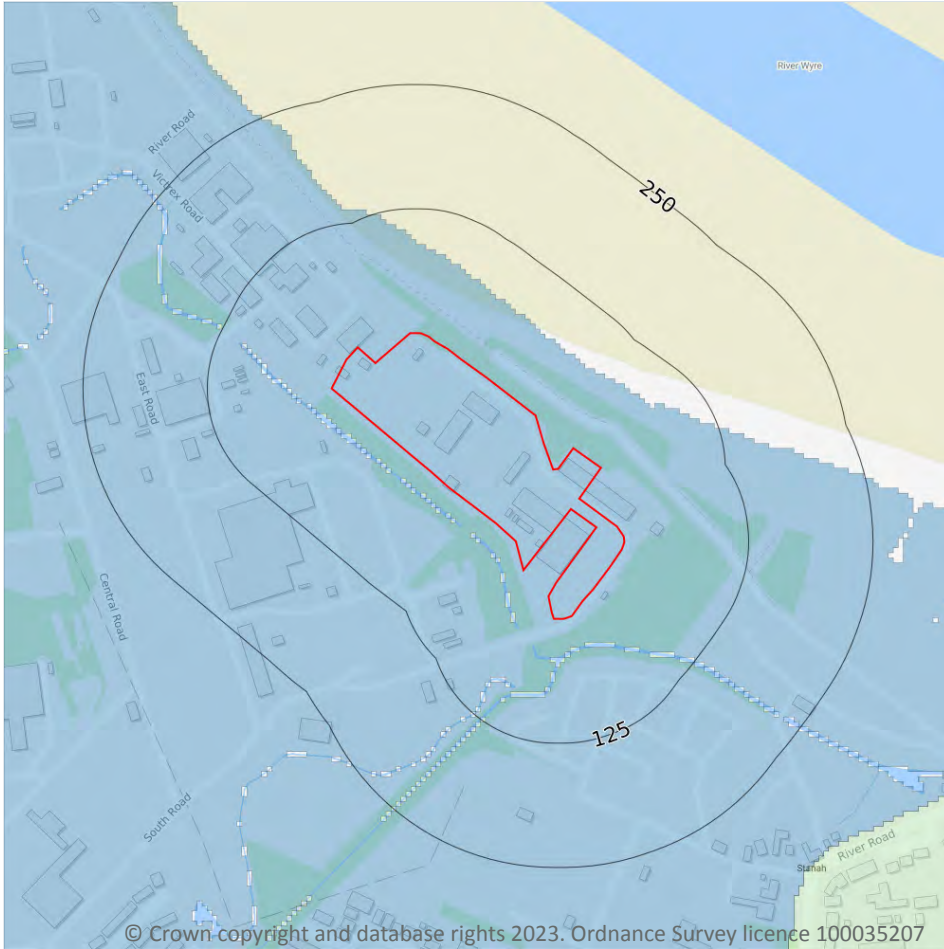
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.1m and 0.3m

*This data is sourced from Ambiental Risk Analytics.*



## 9 Groundwater flooding



### 9.1 Groundwater flooding

**Highest risk on site**

**Negligible**

**Highest risk within 50m**

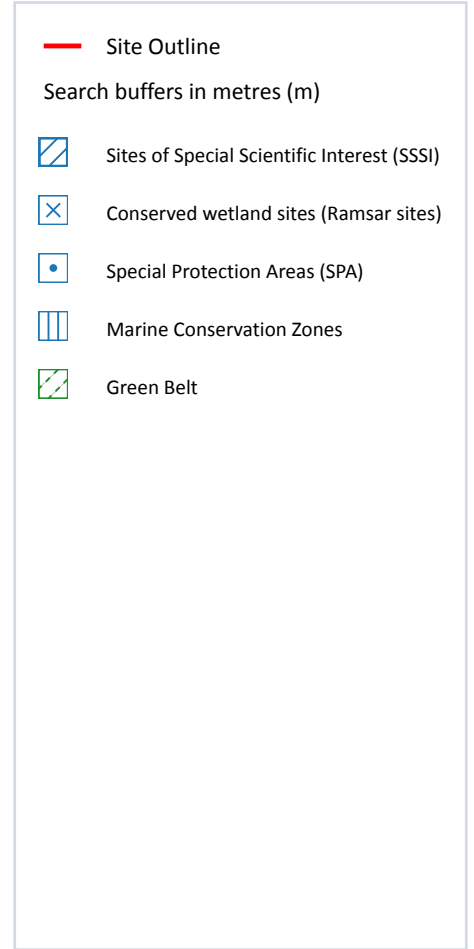
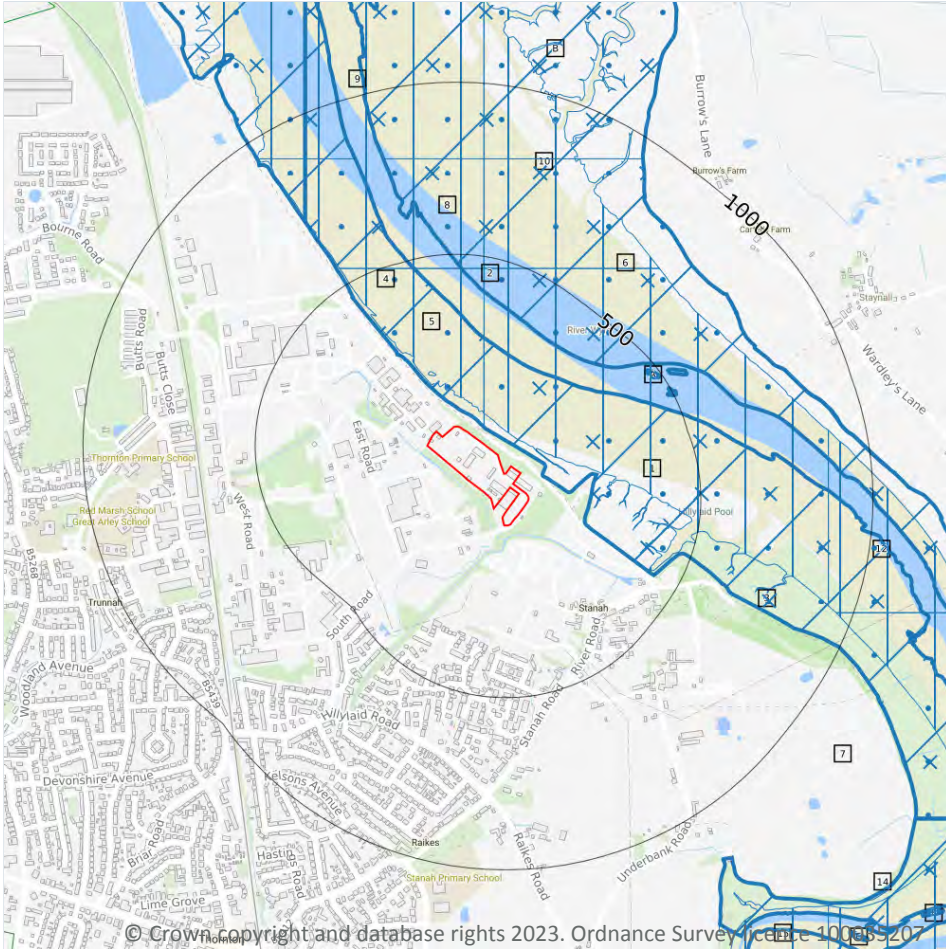
**Negligible**

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 94](#) >

*This data is sourced from Ambiantal Risk Analytics.*

## 10 Environmental designations



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

Records within 2000m

16

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.

Features are displayed on the Environmental designations map on [page 95 >](#)

ID	Location	Name	Data source
1	39m N	Wyre Estuary	Natural England





ID	Location	Name	Data source
B	353m NE	Wyre Estuary	Natural England
A	467m NE	Wyre Estuary	Natural England
A	484m E	Wyre Estuary	Natural England
A	522m NE	Wyre Estuary	Natural England
C	718m NW	Wyre Estuary	Natural England
14	1152m SE	Wyre Estuary	Natural England
17	1382m SE	Wyre Estuary	Natural England
E	1541m SE	Wyre Estuary	Natural England
F	1648m SE	Wyre Estuary	Natural England
-	1674m SE	Wyre Estuary	Natural England
-	1723m SE	Wyre Estuary	Natural England
-	1729m SE	Wyre Estuary	Natural England
-	1743m N	Wyre Estuary	Natural England
-	1841m SE	Wyre Estuary	Natural England
-	1853m SE	Wyre Estuary	Natural England

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

## 10.2 Conserved wetland sites (Ramsar sites)

**Records within 2000m**

**12**

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.

Features are displayed on the Environmental designations map on [page 95](#) >



ID	Location	Site	Details
2	38m N	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
6	352m NE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
A	467m NE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>

ID	Location	Site	Details
A	484m E	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
A	521m NE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
E	1540m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>



ID	Location	Site	Details
F	1647m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
-	1673m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
-	1723m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>



ID	Location	Site	Details
-	1728m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
-	1840m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
-	1852m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>

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



### 10.3 Special Areas of Conservation (SAC)

<b>Records within 2000m</b>	<b>0</b>
-----------------------------	----------

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)

<b>Records within 2000m</b>	<b>18</b>
-----------------------------	-----------

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.

Features are displayed on the Environmental designations map on [page 95 >](#)

ID	Location	Name	Species of interest	Habitat description	Data source
3	39m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
4	40m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England

ID	Location	Name	Species of interest	Habitat description	Data source
7	353m NE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
8	399m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
A	467m NE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
A	484m E	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England



ID	Location	Name	Species of interest	Habitat description	Data source
A	522m NE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
11	778m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
B	781m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
C	826m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England





ID	Location	Name	Species of interest	Habitat description	Data source
E	1542m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
F	1650m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1673m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1722m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England



ID	Location	Name	Species of interest	Habitat description	Data source
-	1728m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1840m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1852m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1967m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England

*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

0

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.

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

## 10.7 Designated Ancient Woodland

Records within 2000m

0

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.

*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

<b>Records within 2000m</b>	<b>0</b>
-----------------------------	----------

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

<b>Records within 2000m</b>	<b>25</b>
-----------------------------	-----------

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.

Features are displayed on the Environmental designations map on [page 95 >](#)

ID	Location	Name	Status
5	69m N	Wyre-Lune	Designated
A	69m NE	Wyre-Lune	Designated
9	459m N	Wyre-Lune	Designated
10	465m N	Wyre-Lune	Designated
12	870m E	Wyre-Lune	Designated
13	953m E	Wyre-Lune	Designated
15	1252m SE	Wyre-Lune	Designated
-	1305m N	Wyre-Lune	Designated
-	1409m SE	Wyre-Lune	Designated
-	1424m N	Wyre-Lune	Designated
-	1460m N	Wyre-Lune	Designated
-	1510m N	Wyre-Lune	Designated
-	1515m N	Wyre-Lune	Designated
-	1559m SE	Wyre-Lune	Designated
-	1567m N	Wyre-Lune	Designated
-	1666m N	Wyre-Lune	Designated
-	1673m NW	Wyre-Lune	Designated
-	1704m NW	Wyre-Lune	Designated



ID	Location	Name	Status
-	1744m NW	Wyre-Lune	Designated
-	1782m NW	Wyre-Lune	Designated
-	1846m N	Wyre-Lune	Designated
-	1848m NW	Wyre-Lune	Designated
-	1874m NW	Wyre-Lune	Designated
-	1919m NW	Wyre-Lune	Designated
-	1981m N	Wyre-Lune	Designated

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

## 10.11 Green Belt

<b>Records within 2000m</b>	<b>2</b>
-----------------------------	----------

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

Features are displayed on the Environmental designations map on [page 95 >](#)

ID	Location	Name	Local Authority name
23	1658m NW	Blackpool	Wyre
25	1700m S	Blackpool	Wyre

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

## 10.12 Proposed Ramsar sites

<b>Records within 2000m</b>	<b>0</b>
-----------------------------	----------

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

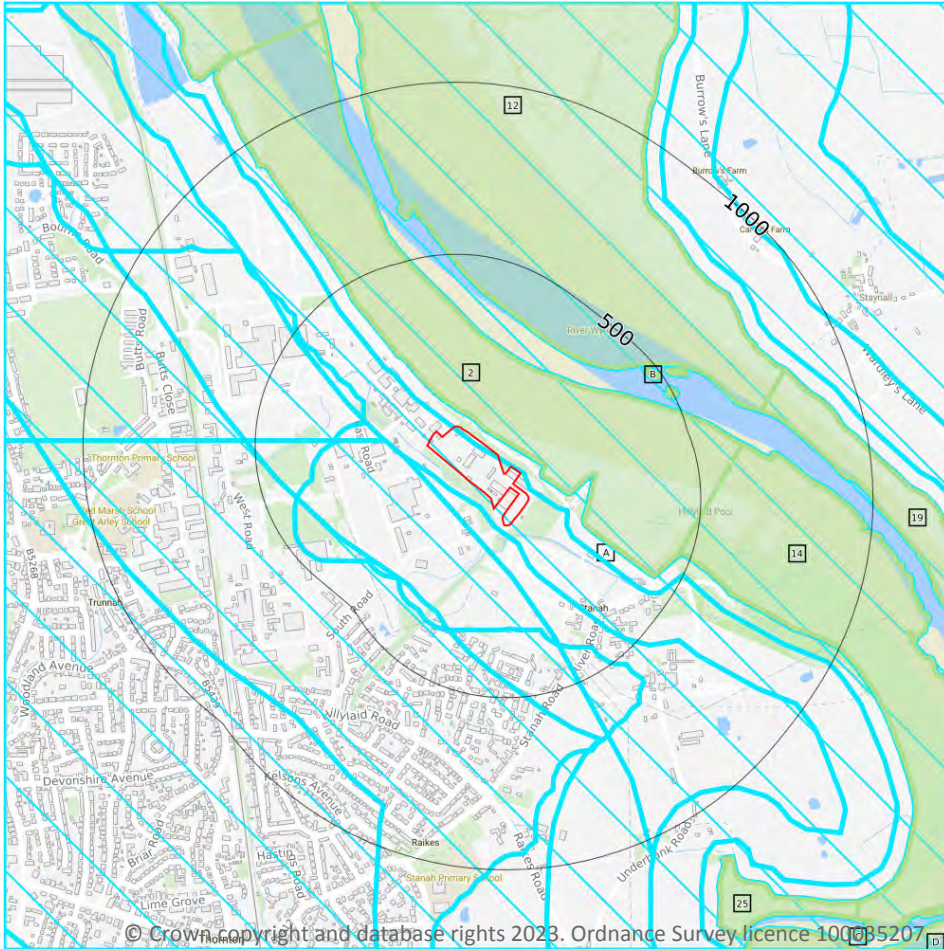
0

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

2

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 110](#) >

ID	Location	Type of developments requiring consultation
A	On site	<b>All applications - ALL PLANNING APPLICATIONS - EXCEPT HOUSEHOLDER APPLICATIONS.</b> <b>Notes: New residential developments in this area should consider recreational disturbance impacts on the coastal designated sites. Please consider this issue in the HRA screening.</b>



ID	Location	Type of developments requiring consultation
A	On site	<p>All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures</p> <p>Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.</p> <p>Wind and Solar - Solar schemes with footprint &gt; 0.5ha, all wind turbines</p> <p>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.</p> <p>Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is &gt; 1,000m<sup>2</sup> or footprint exceeds 0.2ha</p> <p>Residential - Residential development of 10 units or more.</p> <p>Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units</p> <p>Air pollution - Any development that could cause AIR POLLUTION or DUST either in its construction or operation (incl: industrial/commercial processes, livestock &amp; poultry units, slurry lagoons &amp; digestate stores, manure stores).</p> <p>Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management</p> <p>Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.</p> <p>Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream.</p> <p>Notes: New residential developments in this area should consider recreational disturbance impacts on the coastal designated sites. Please consider this issue in the HRA screening.</p>

*This data is sourced from Natural England.*

## 10.18 SSSI Units

Records within 2000m

21

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.

Features are displayed on the SSSI Impact Zones and Units map on [page 110 >](#)

ID: 2  
 Location: 39m N  
 SSSI name: Wyre Estuary  
 Unit name: Hill House International Frontage  
 Broad habitat: Littoral Sediment  
 Condition: Favourable





## Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	20/12/2022
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 12  
 Location: 353m NE  
 SSSI name: Wyre Estuary  
 Unit name: Burrows Marsh Sssi  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	20/12/2022
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 14  
 Location: 464m SE  
 SSSI name: Wyre Estuary  
 Unit name: Stanah Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: B  
 Location: 467m NE  
 SSSI name: Wyre Estuary  
 Unit name: Skippool Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable



## Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: B  
 Location: 484m E  
 SSSI name: Wyre Estuary  
 Unit name: Skippool Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: B  
 Location: 522m NE  
 SSSI name: Wyre Estuary  
 Unit name: Skippool Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 19  
 Location: 722m E  
 SSSI name: Wyre Estuary  
 Unit name: Wardleys Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:



Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 25  
 Location: 1152m SE  
 SSSI name: Wyre Estuary  
 Unit name: Nestleton Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Estuaries	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 26  
 Location: 1231m NW  
 SSSI name: Wyre Estuary  
 Unit name: Jameson Road Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
 Location: 1270m N  
 SSSI name: Wyre Estuary  
 Unit name: The Heads  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	20/12/2022

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 30  
 Location: 1382m SE  
 SSSI name: Wyre Estuary  
 Unit name: Bank House Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	-	-

ID: -  
 Location: 1455m SE  
 SSSI name: Wyre Estuary  
 Unit name: Wardley's Pool - Peg's Pool  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: C  
 Location: 1541m SE  
 SSSI name: Wyre Estuary  
 Unit name: Stanah Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009



ID: D  
 Location: 1647m SE  
 SSSI name: Wyre Estuary  
 Unit name: Wardley's Pool - Peg's Pool  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: D  
 Location: 1648m SE  
 SSSI name: Wyre Estuary  
 Unit name: Stanah Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
 Location: 1674m SE  
 SSSI name: Wyre Estuary  
 Unit name: Stanah Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
 Location: 1723m SE  
 SSSI name: Wyre Estuary  
 Unit name: Wardley's Pool - Peg's Pool  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
Location: 1729m SE  
SSSI name: Wyre Estuary  
Unit name: Wardley's Pool - Peg's Pool  
Broad habitat: Littoral Sediment  
Condition: Favourable  
Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
Location: 1841m SE  
SSSI name: Wyre Estuary  
Unit name: Wardley's Pool - Peg's Pool  
Broad habitat: Littoral Sediment  
Condition: Favourable  
Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
Location: 1853m SE  
SSSI name: Wyre Estuary  
Unit name: Wardley's Pool - Peg's Pool  
Broad habitat: Littoral Sediment  
Condition: Favourable  
Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009



ID: -  
Location: 1967m N  
SSSI name: Wyre Estuary  
Unit name: Barnaby Sands SSSI  
Broad habitat: Littoral Sediment  
Condition: Favourable  
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, <i>Limosa limosa islandica</i>	Favourable	20/12/2022
Aggregations of non-breeding birds - Teal, <i>Anas crecca</i>	Favourable	20/12/2022
Aggregations of non-breeding birds - Turnstone, <i>Arenaria interpres</i>	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

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



## 11 Visual and cultural designations

### 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

0

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.





*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**

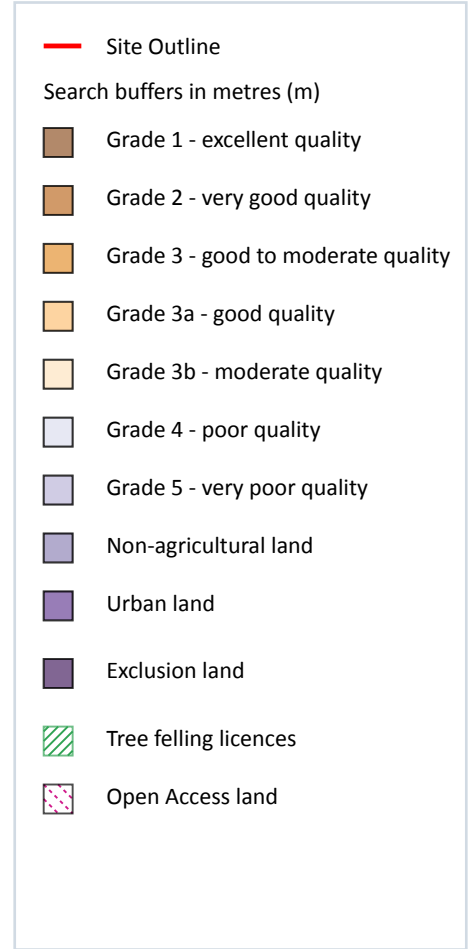
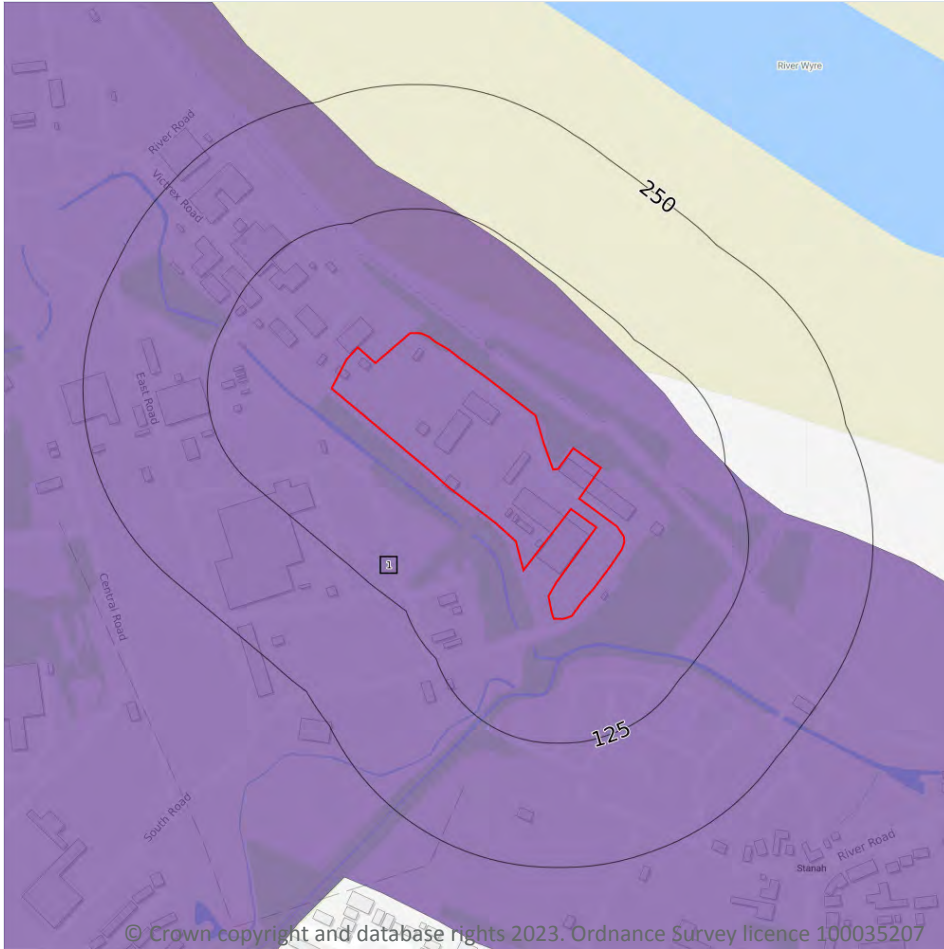
**0**

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



### 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 121 >](#)

ID	Location	Classification	Description
1	On site	Urban	-

*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

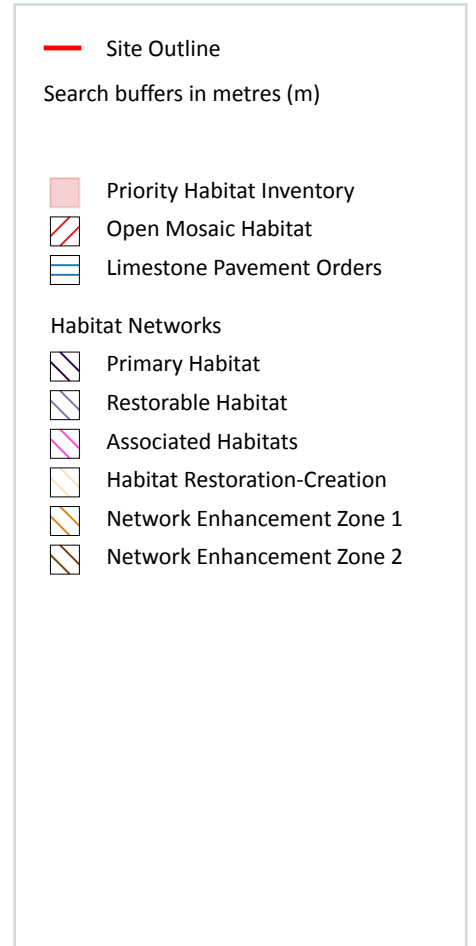
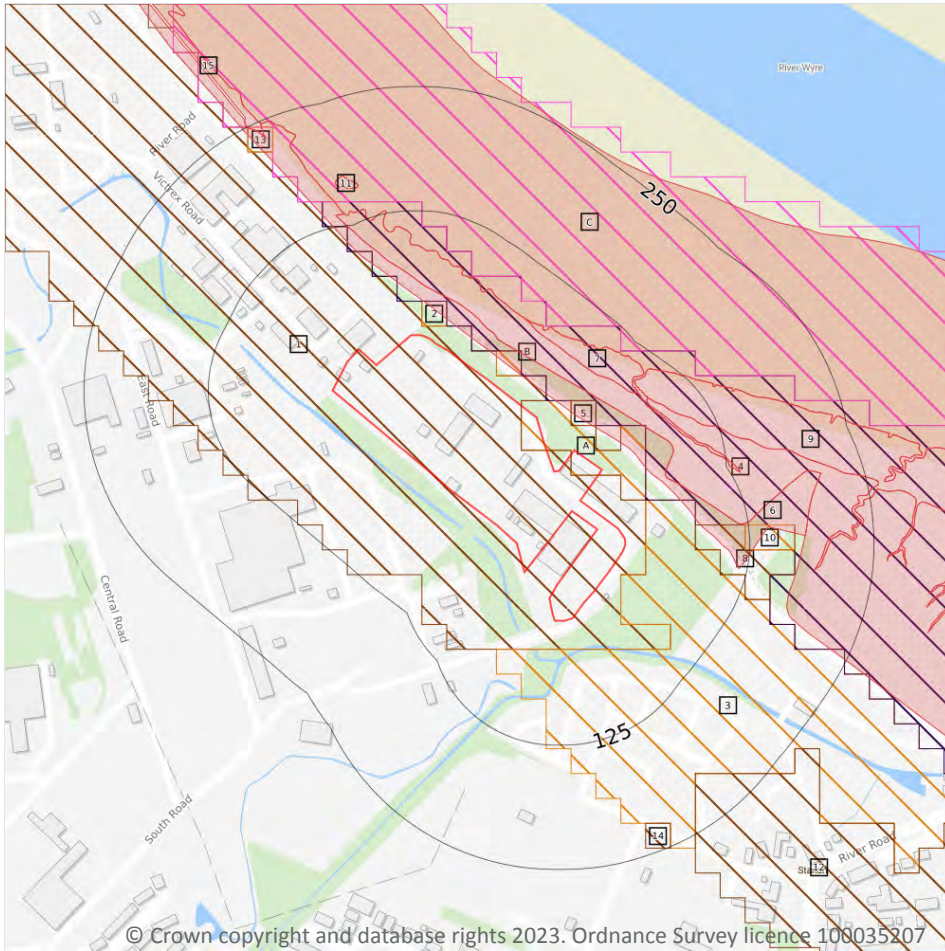
0

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



### 13.1 Priority Habitat Inventory

Records within 250m

7

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 123 >](#)

ID	Location	Main Habitat	Other habitats
B	24m N	No main habitat but additional habitats present	Additional: SALTM (INV 50%)
6	39m N	Coastal saltmarsh	Main habitat: SALTM (INV > 50%)
C	69m N	Mudflats	Main habitat: MUDFL (INV > 50%); Additional: SALTM (ENSIS L2)

ID	Location	Main Habitat	Other habitats
7	69m NE	Coastal saltmarsh	Main habitat: MUDFL (INV > 50%); SALTM (INV > 50%)
9	85m E	Coastal saltmarsh	Main habitat: MUDFL (INV > 50%); SALTM (INV > 50%)
11	158m NW	No main habitat but additional habitats present	Additional: SALTM (ENSIS L2)
15	233m NW	No main habitat but additional habitats present	Additional: SALTM (INV 50%, ENSIS L2)

This data is sourced from Natural England.

## 13.2 Habitat Networks

Records within 250m

14

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 123 >](#)

ID	Location	Type	Habitat
<b>1</b>	<b>On site</b>	<b>Network Enhancement Zone 2</b>	<b>Not specified</b>
<b>A</b>	<b>On site</b>	<b>Network Enhancement Zone 1</b>	<b>Not specified</b>
B	9m N	Network Enhancement Zone 1	Not specified
2	9m NW	Network Enhancement Zone 1	Not specified
3	11m SE	Network Enhancement Zone 1	Not specified
A	13m E	Network Enhancement Zone 2	Not specified
4	14m N	Primary Habitat	Saltmarsh
5	25m E	Network Enhancement Zone 2	Not specified
8	70m SE	Network Enhancement Zone 2	Not specified
C	75m N	Associated Habitats	Other associated habitats
10	120m E	Network Enhancement Zone 1	Not specified
12	199m SE	Network Enhancement Zone 2	Not specified
13	216m NW	Network Enhancement Zone 1	Not specified
14	219m SE	Network Enhancement Zone 2	Not specified

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

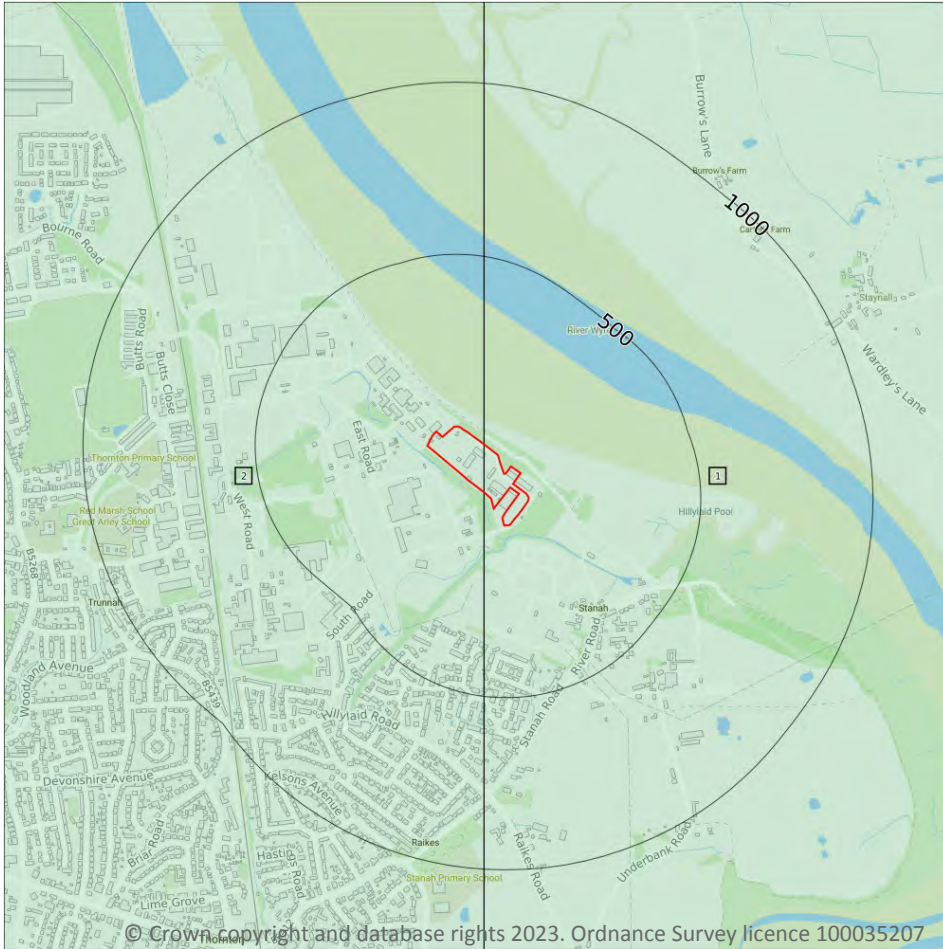
0

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.*



## 14 Geology 1:10,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

### 14.1 10k Availability

Records within 500m

2

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

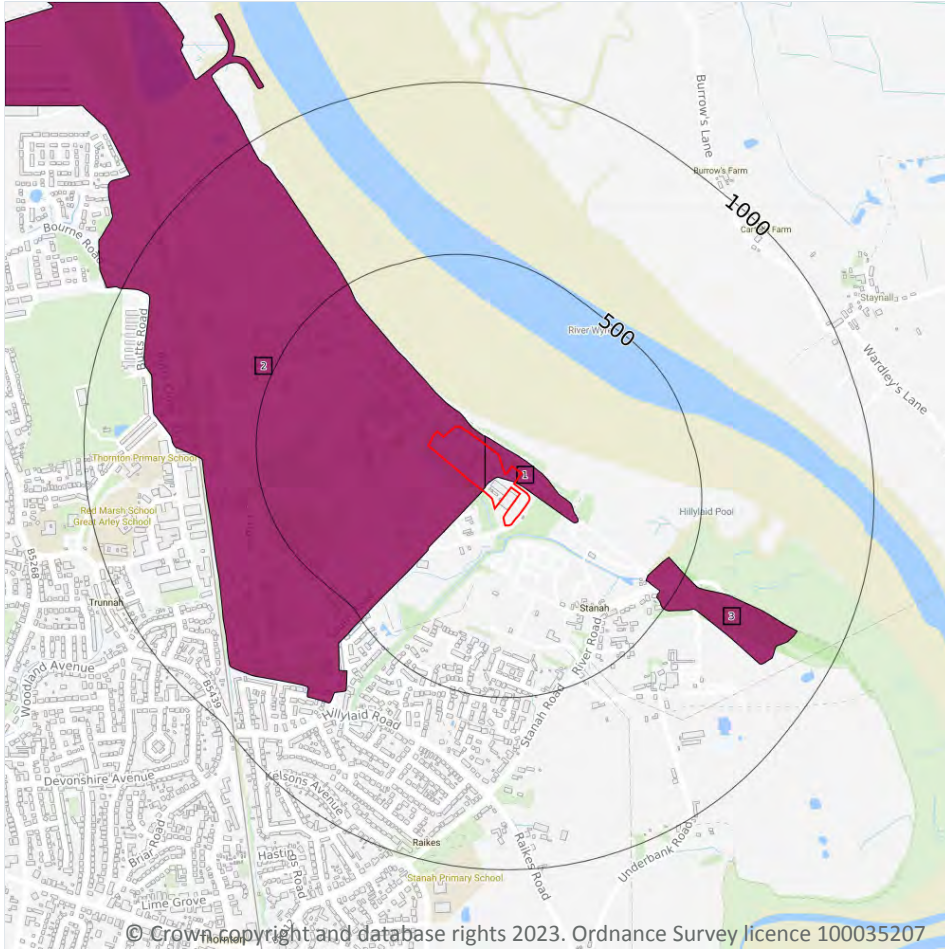
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 126 >](#)

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SD34SE
2	On site	Full	Full	Full	No coverage	SD34SW

This data is sourced from the British Geological Survey.



## 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

3

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 127 >](#)

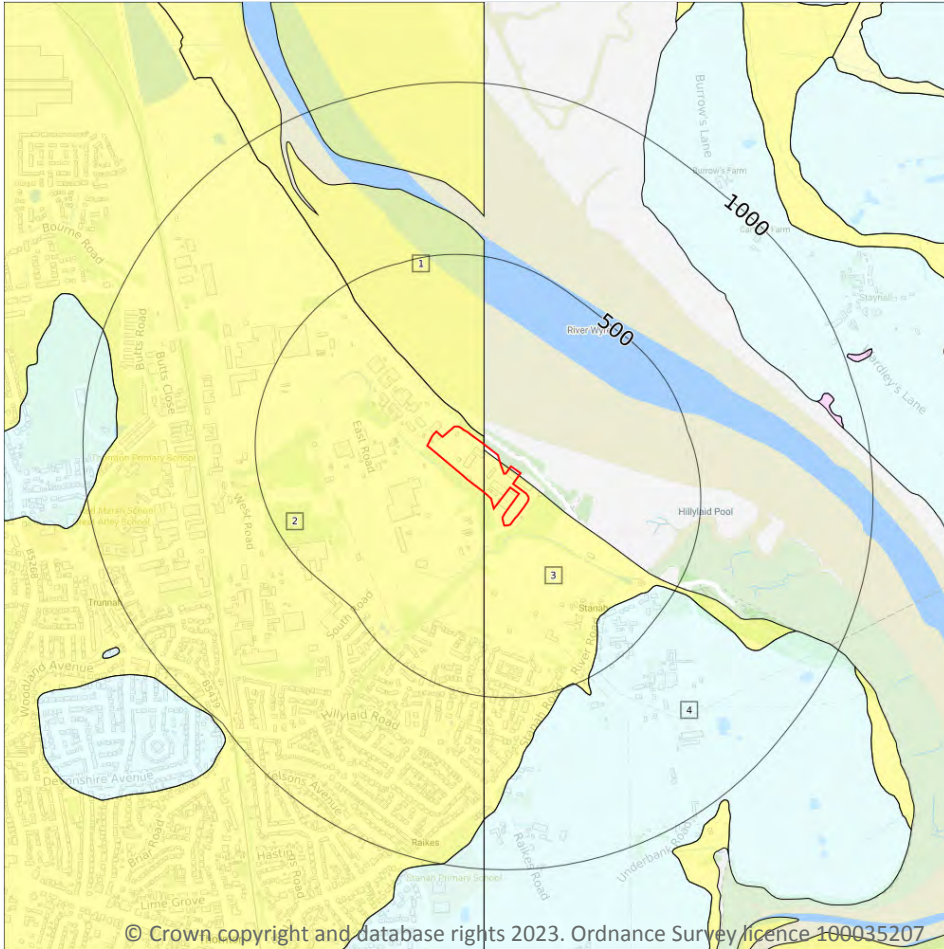
ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	407m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

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

4

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 128 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	TFD-XCZ	Tidal Flat Deposits - Clay And Silt	Clay And Silt
2	On site	TFD1-XCZ	Tidal Flat Deposits, 1 - Clay And Silt	Clay And Silt
3	On site	TFD1-XCZ	Tidal Flat Deposits, 1 - Clay And Silt	Clay And Silt
4	373m SE	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton



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

## 14.4 Landslip (10k)

Records within 500m

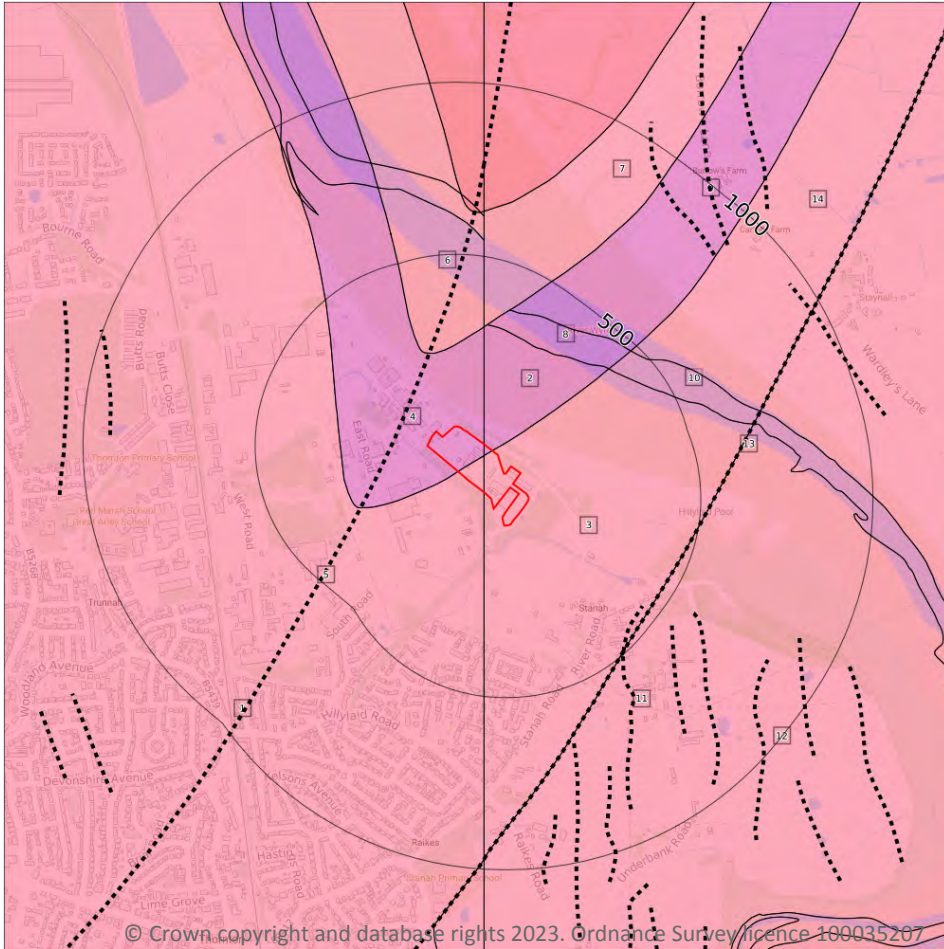
0

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.

*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

11

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 130](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age
2	On site	PRSA-MDHA	Preesall Halite Member - Mudstone And Halite-stone	Ladinian Age - Anisian Age
3	On site	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age



ID	Location	LEX Code	Description	Rock age
4	On site	PRSA-MDHA	Preesall Halite Member - Mudstone And Halite-stone	Ladinian Age - Anisian Age
6	221m N	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age
7	299m N	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age
8	307m N	PRSA-MDHA	Preesall Halite Member - Mudstone And Halite-stone	Ladinian Age - Anisian Age
9	370m N	PRSA-MDHA	Preesall Halite Member - Mudstone And Halite-stone	Ladinian Age - Anisian Age
10	397m NE	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age
12	466m SE	SNM-MDST	Singleton Mudstone Member - Mudstone	Anisian Age - Early Triassic Epoch
14	478m NE	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age

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

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

**Records within 500m**

**3**

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 130 >](#)

ID	Location	Category	Description
5	95m NW	FOLD_AXIS	Axial plane trace of major syncline
11	448m SE	LANDFORM	Drumlin, form-line at base of mound
13	466m SE	FAULT	Normal fault, inferred; crossmarks on downthrow side

*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.

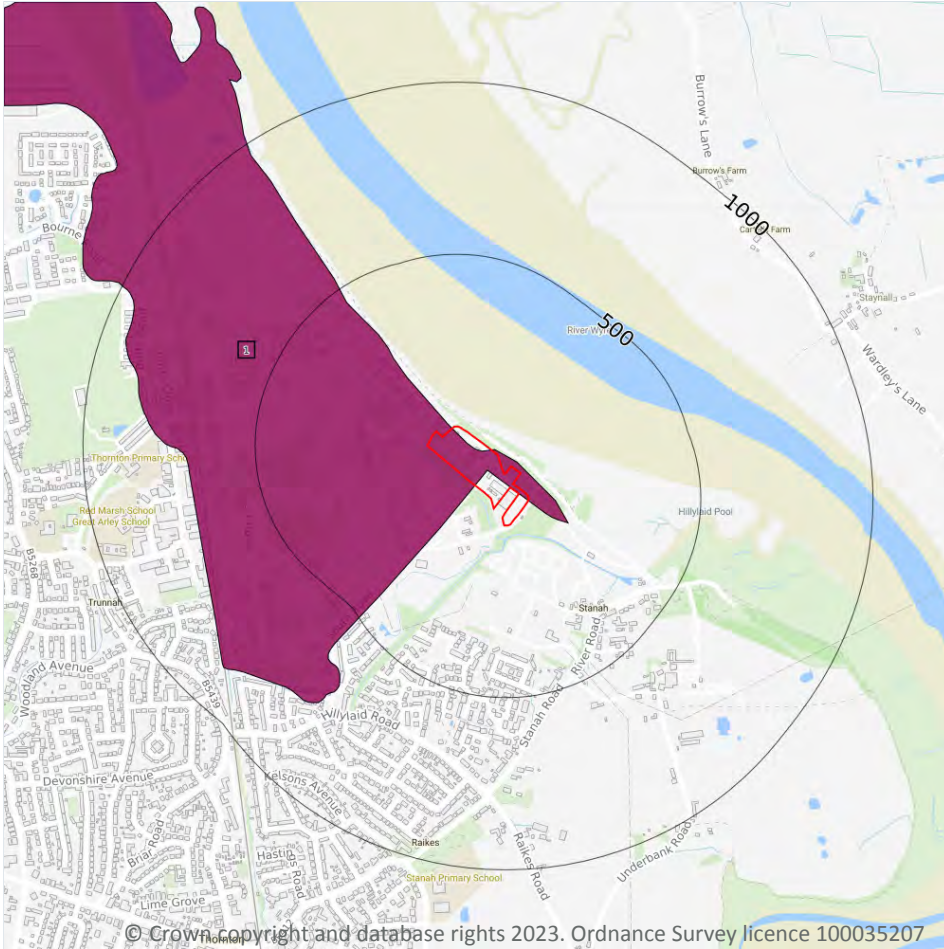
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 132](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	EW066_blackpool_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

1

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 133](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

### 15.3 Artificial ground permeability (50k)

**Records within 50m****2**

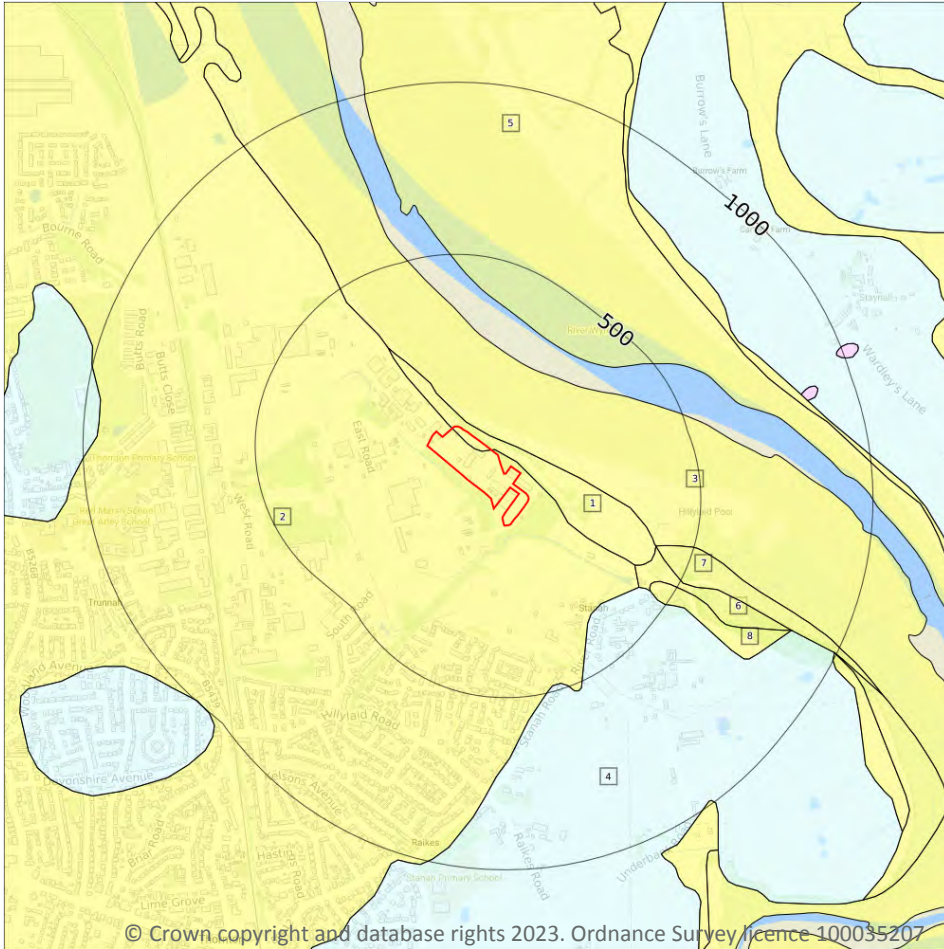
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low
On site	Mixed	Very High	Low

*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

8

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 135 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
2	On site	TFD1-XCZ	TIDAL FLAT DEPOSITS, 1	CLAY AND SILT
3	22m N	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
4	349m SE	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON





ID	Location	LEX Code	Description	Rock description
5	353m NE	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
6	362m SE	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
7	394m SE	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
8	431m SE	TFD1-XCZ	TIDAL FLAT DEPOSITS, 1	CLAY AND SILT

This data is sourced from the British Geological Survey.

## 15.5 Superficial permeability (50k)

<b>Records within 50m</b>	<b>4</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
On site	Mixed	Low	Very Low
On site	Mixed	Low	Very Low
On site	Intergranular	Low	Very Low
On site	Intergranular	Low	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)

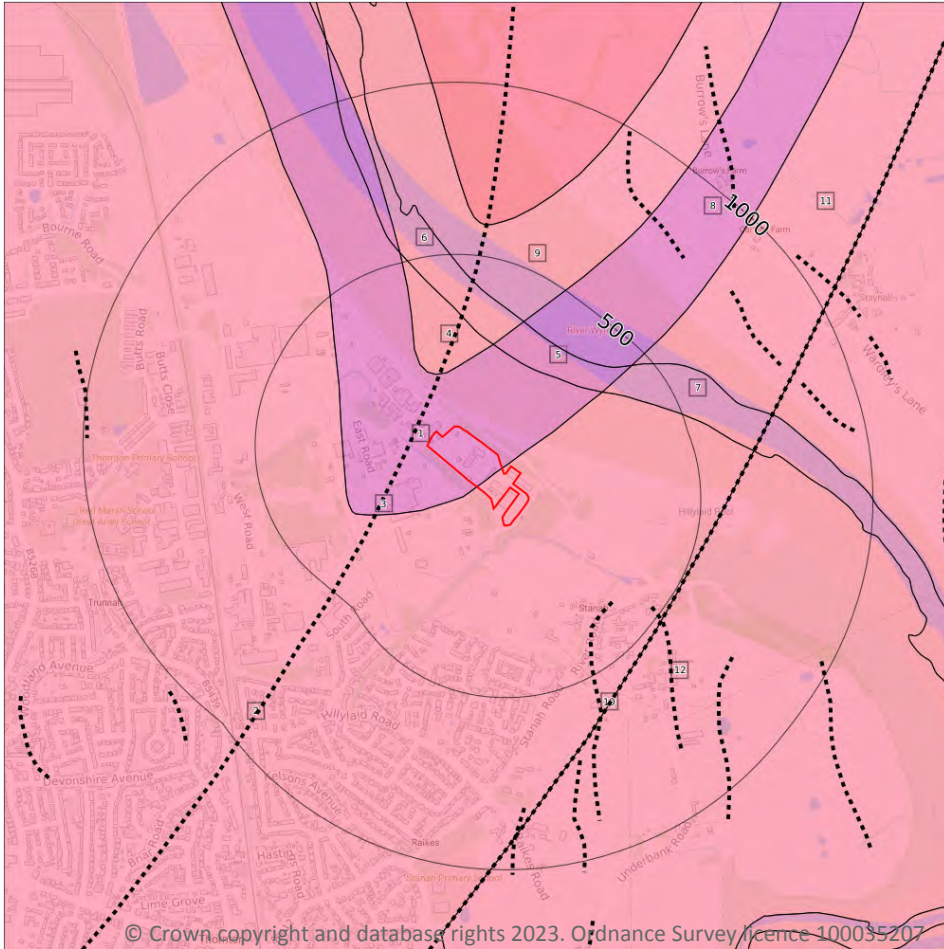
<b>Records within 50m</b>	<b>0</b>
---------------------------	----------

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

9

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 137](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	PRSA-MDHA	PREESALL HALITE MEMBER - MUDSTONE AND HALITE-STONE	ANISIAN
2	On site	KRM-MDST	KIRKHAM MUDSTONE MEMBER - MUDSTONE	ANISIAN
4	158m N	SIM-MDST	SIDMOUTH MUDSTONE FORMATION - MUDSTONE	OLENEKIAN



ID	Location	LEX Code	Description	Rock age
5	253m N	PRSA-MDHA	PREESALL HALITE MEMBER - MUDSTONE AND HALITE-STONE	ANISIAN
6	260m N	SIM-MDST	SIDMOUTH MUDSTONE FORMATION - MUDSTONE	OLENEKIAN
7	335m NE	KRM-MDST	KIRKHAM MUDSTONE MEMBER - MUDSTONE	ANISIAN
8	353m NE	PRSA-MDHA	PREESALL HALITE MEMBER - MUDSTONE AND HALITE-STONE	ANISIAN
9	358m N	SIM-MDST	SIDMOUTH MUDSTONE FORMATION - MUDSTONE	OLENEKIAN
11	450m NE	KRM-MDST	KIRKHAM MUDSTONE MEMBER - MUDSTONE	ANISIAN

This data is sourced from the British Geological Survey.

## 15.9 Bedrock permeability (50k)

Records within 50m

4

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	Low	Low
On site	Fracture	Low	Low
On site	Fracture	Low	Low
On site	Fracture	Low	Low

This data is sourced from the British Geological Survey.

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

Records within 500m

3

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 137 >](#)

ID	Location	Category	Description
3	50m NW	FOLD_AXIS	Axial plane trace of major syncline

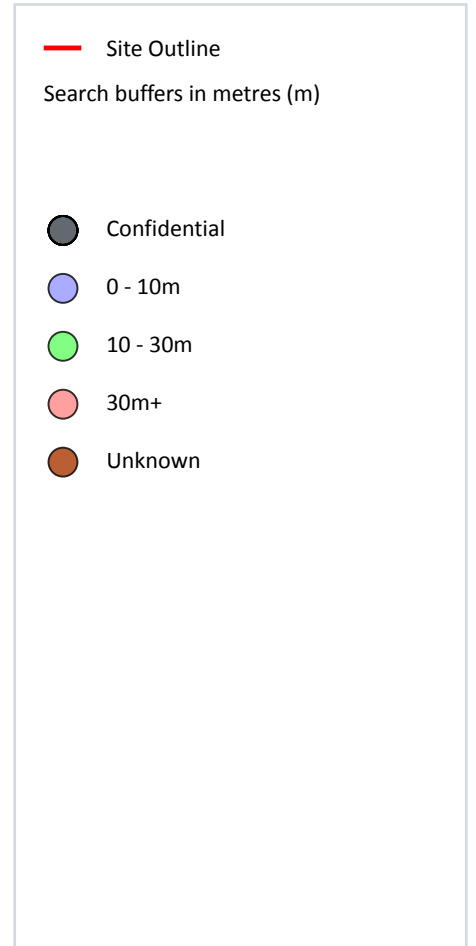
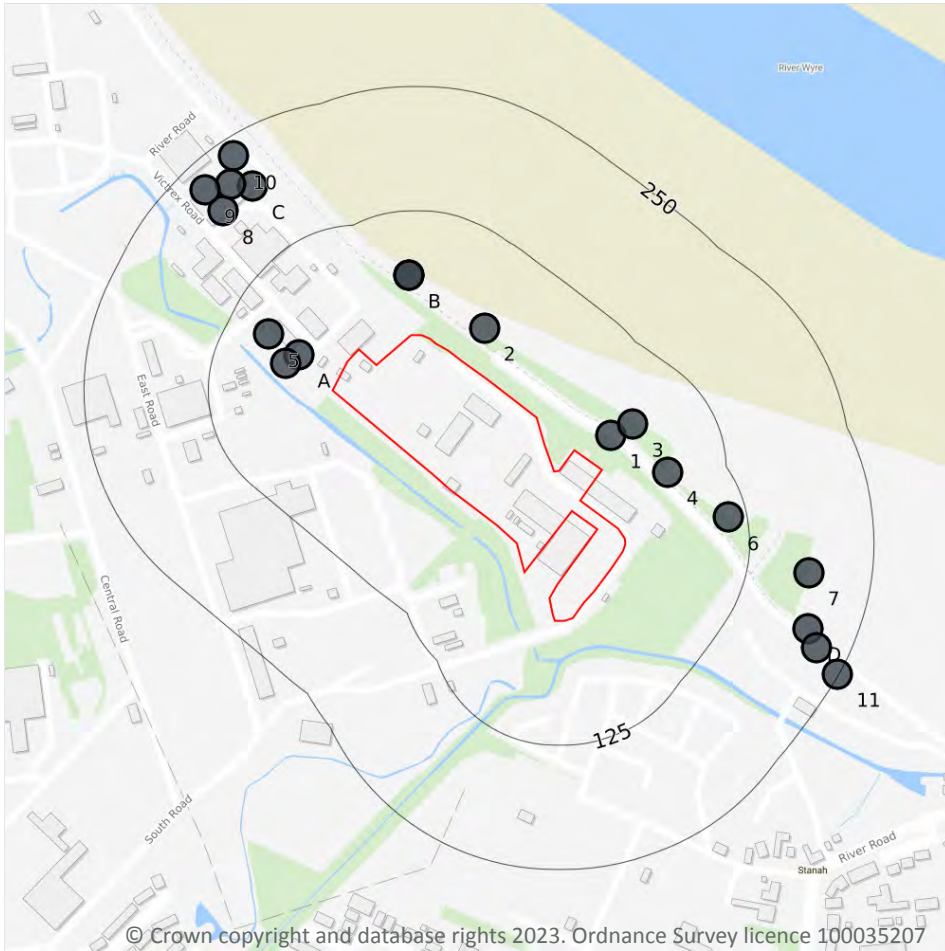


ID	Location	Category	Description
10	369m SE	LANDFORM	Drumlin, form line at base
12	471m SE	LANDFORM	Drumlin, form line at base

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



## 16 Boreholes



### 16.1 BGS Boreholes

Records within 250m

19

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.

Features are displayed on the Boreholes map on [page 140](#) >

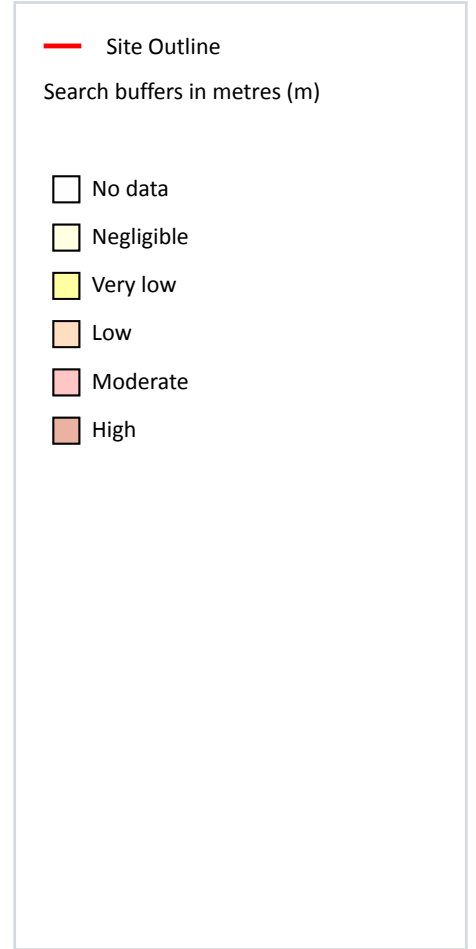
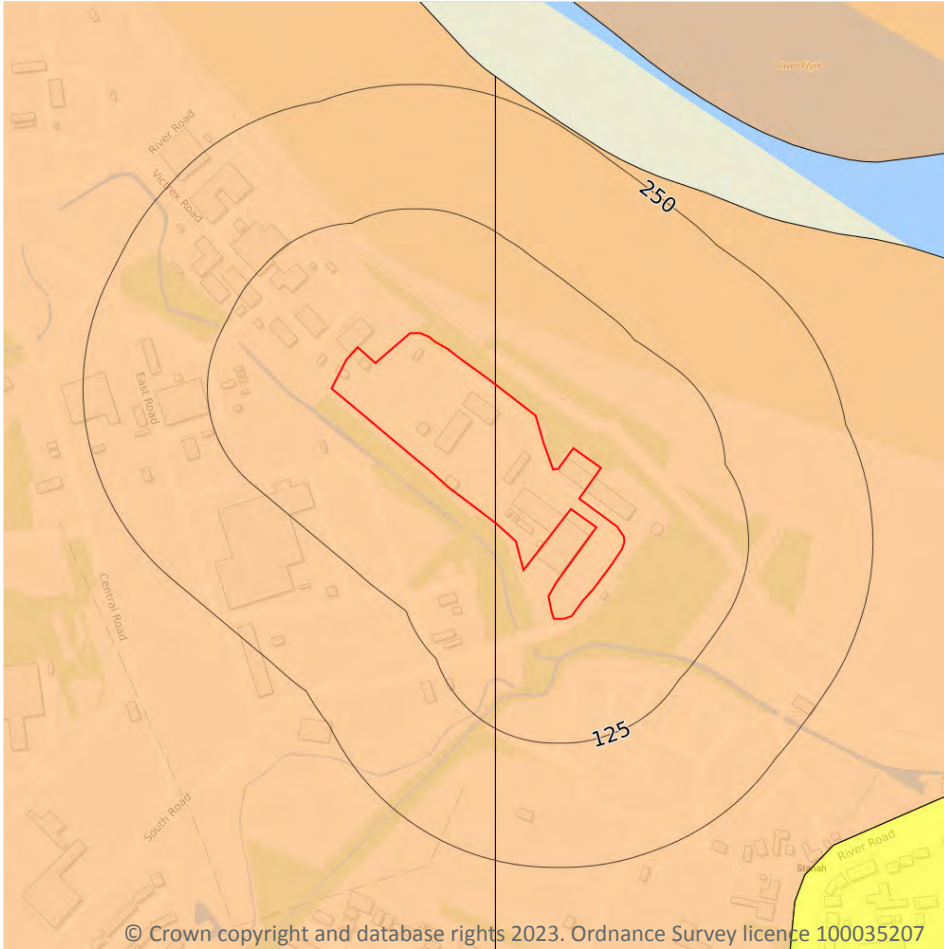
ID	Location	Grid reference	Name	Length	Confidential	Web link
1	33m E	335115 443440	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT 3	-	Y	N/A
2	40m N	334988 443548	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS5	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	47m NW	334801 443521	VICTREX PLC THORNTON CLEVELEYS LANCASHIRE B303	-	Y	N/A
A	55m NW	334788 443513	VICTREX PLC THORNTON CLEVELEYS LANCASHIRE B302	-	Y	N/A
3	56m E	335137 443452	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS7	-	Y	N/A
B	60m NW	334912 443601	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS4	-	Y	N/A
B	60m NW	334912 443601	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS3	-	Y	N/A
4	66m E	335172 443403	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS8	-	Y	N/A
5	83m NW	334771 443542	VICTREX PLC THORNTON CLEVELEYS LANCASHIRE B301	-	Y	N/A
6	106m E	335233 443358	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS9	-	Y	N/A
7	187m E	335314 443302	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS10	-	Y	N/A
8	195m NW	334725 443666	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M204	-	Y	N/A
C	196m NW	334755 443691	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M205	-	Y	N/A
D	201m SE	335313 443246	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS11	-	Y	N/A
C	210m NW	334733 443693	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M203	-	Y	N/A
D	218m SE	335322 443227	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS12	-	Y	N/A
9	223m NW	334707 443687	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M201	-	Y	N/A
10	231m NW	334736 443721	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M202	-	Y	N/A
11	249m SE	335343 443200	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT 4	-	Y	N/A

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



## 17 Natural ground subsidence - Shrink swell clays



### 17.1 Shrink swell clays

Records within 50m

1

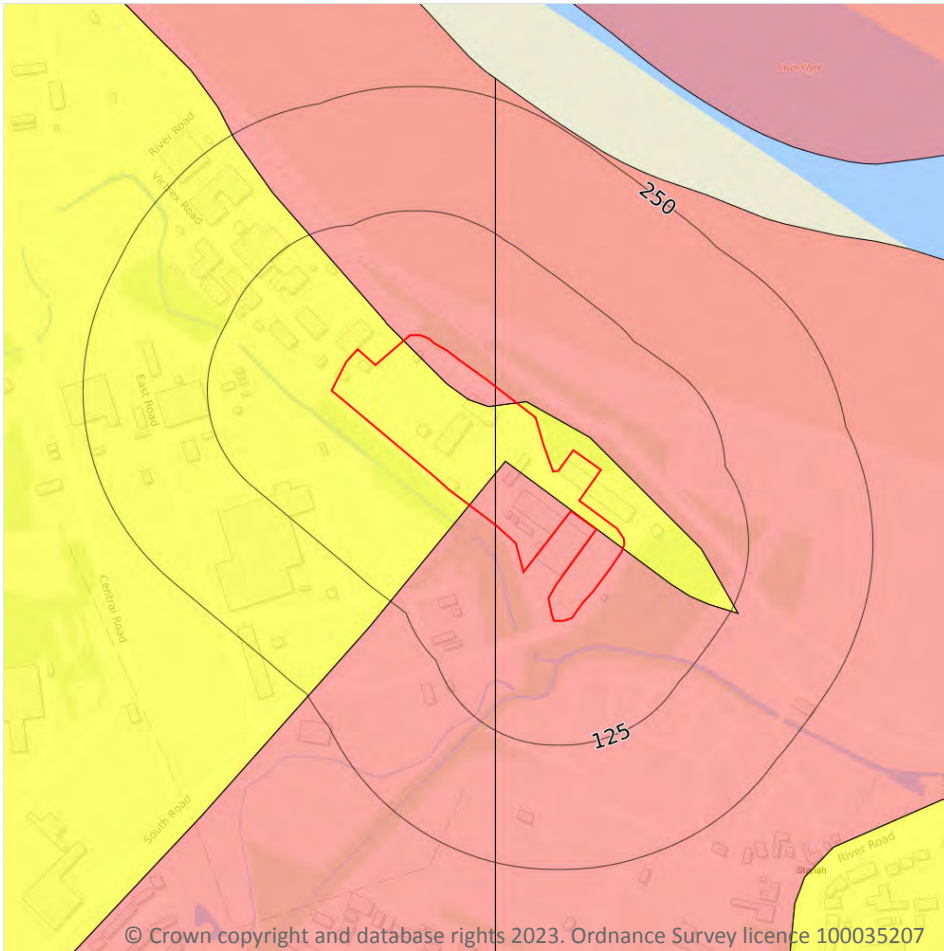
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 142](#) >

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.

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

## Natural ground subsidence - Running sands



### 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 143 >](#)

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.

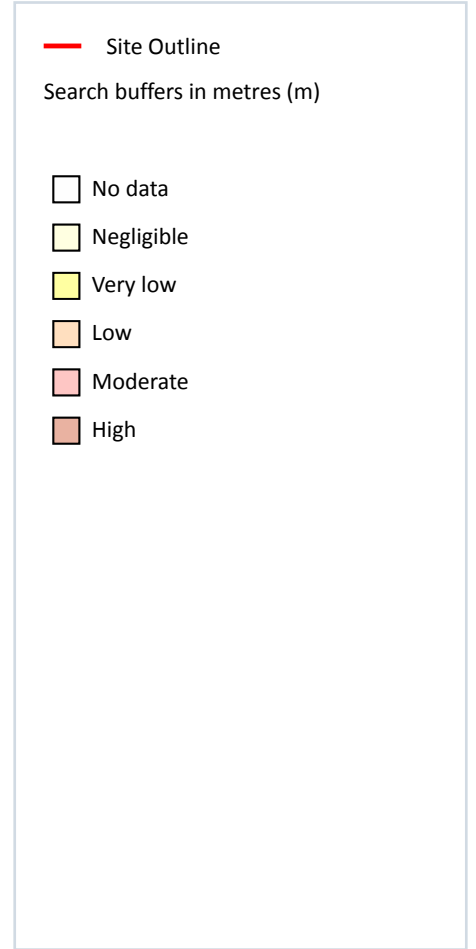
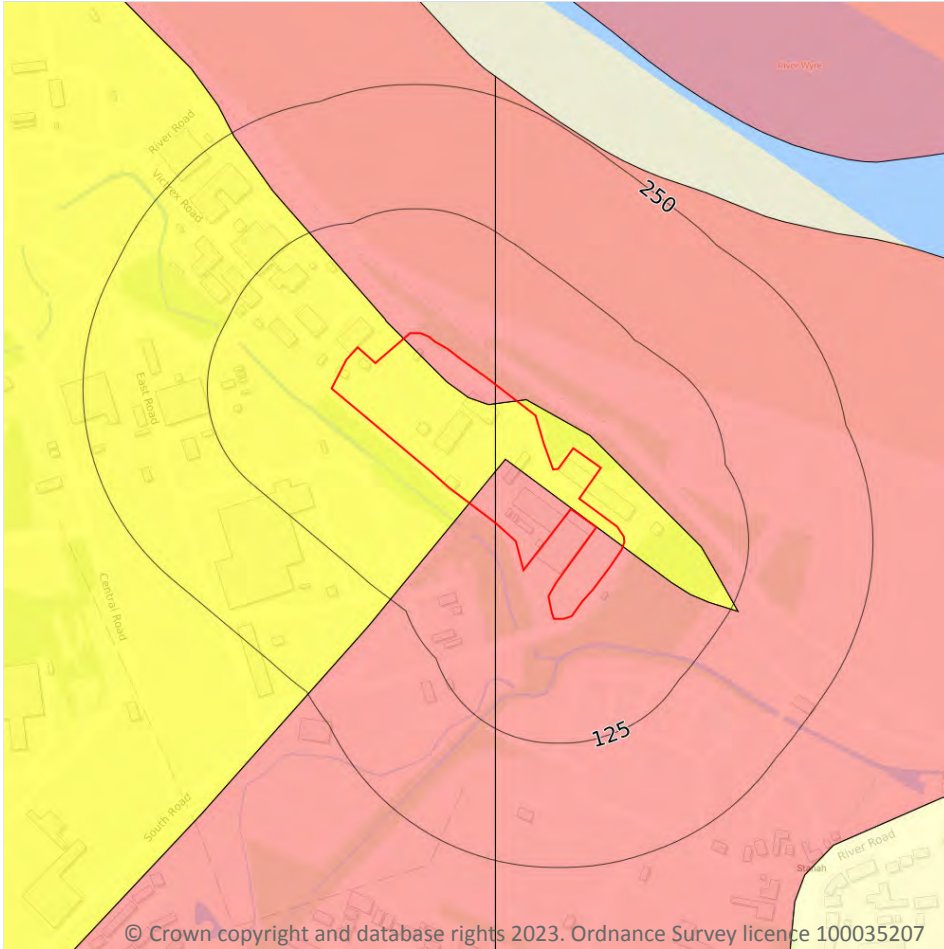


Location	Hazard rating	Details
On site	Moderate	Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.

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



## Natural ground subsidence - Compressible deposits



### 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 145 >](#)

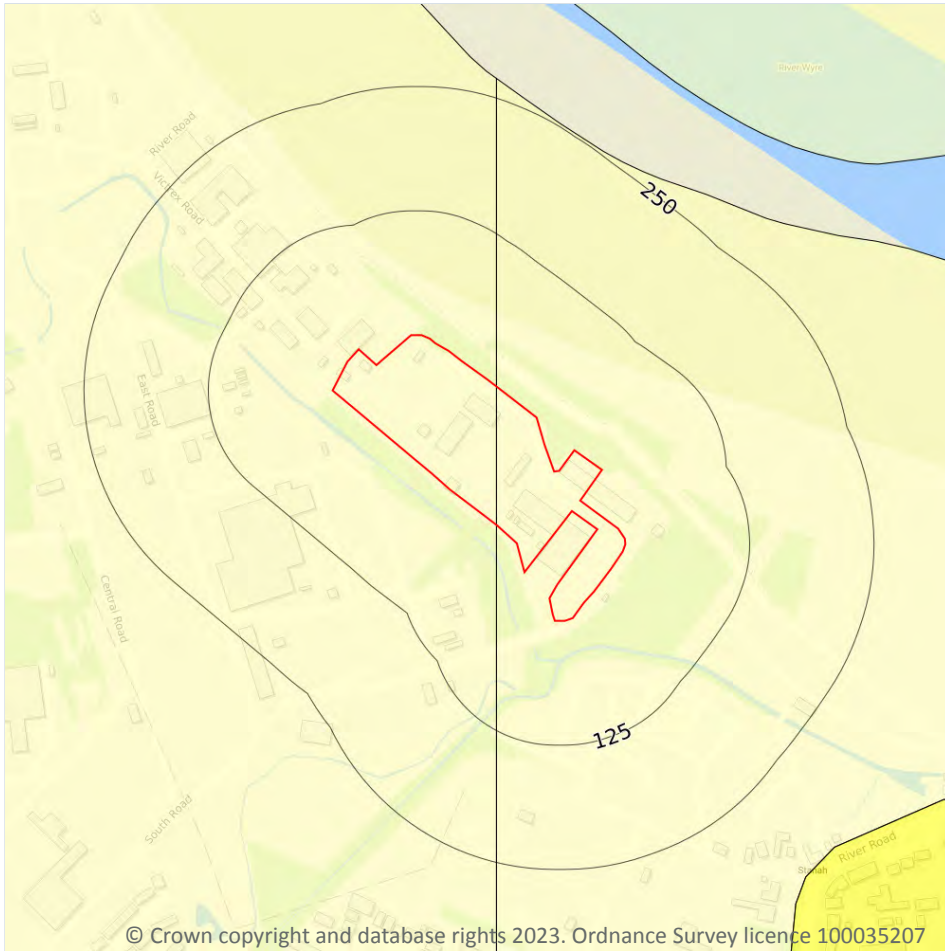
Location	Hazard rating	Details
On site	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

Location	Hazard rating	Details
On site	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

1

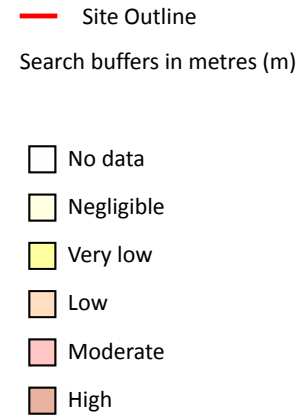
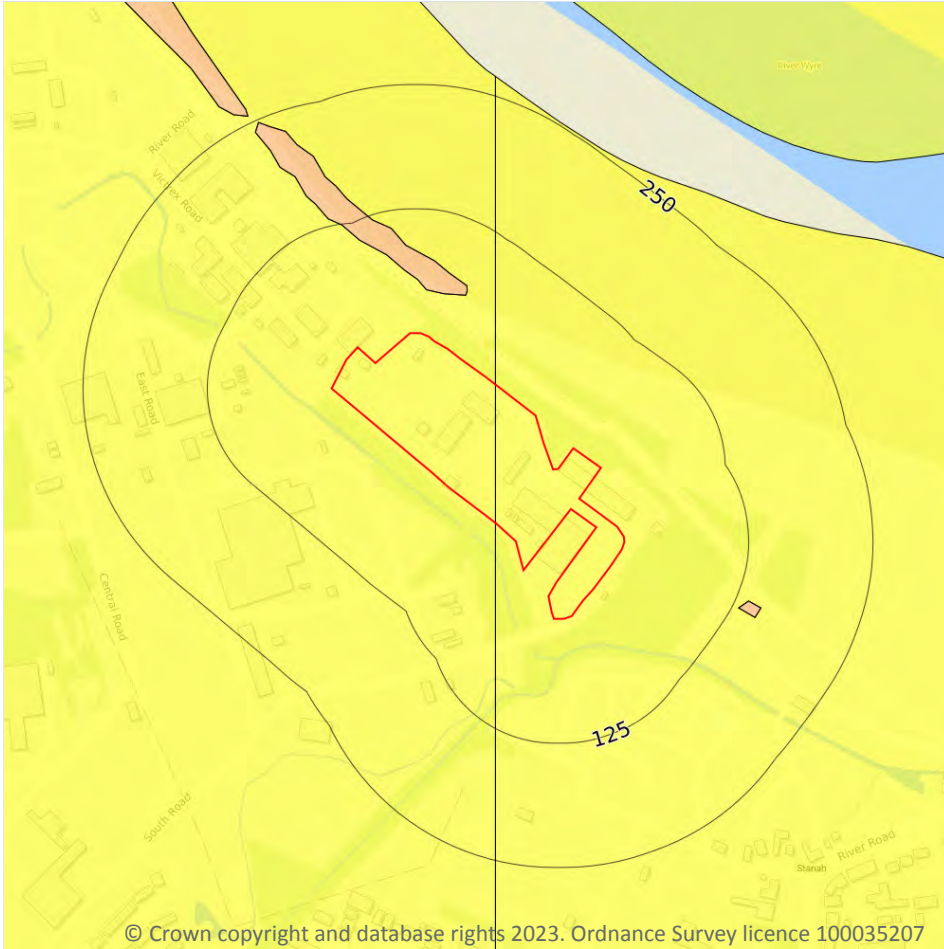
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 147](#) >

Location	Hazard rating	Details
On site	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



### 17.5 Landslides

Records within 50m

2

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 148](#) >

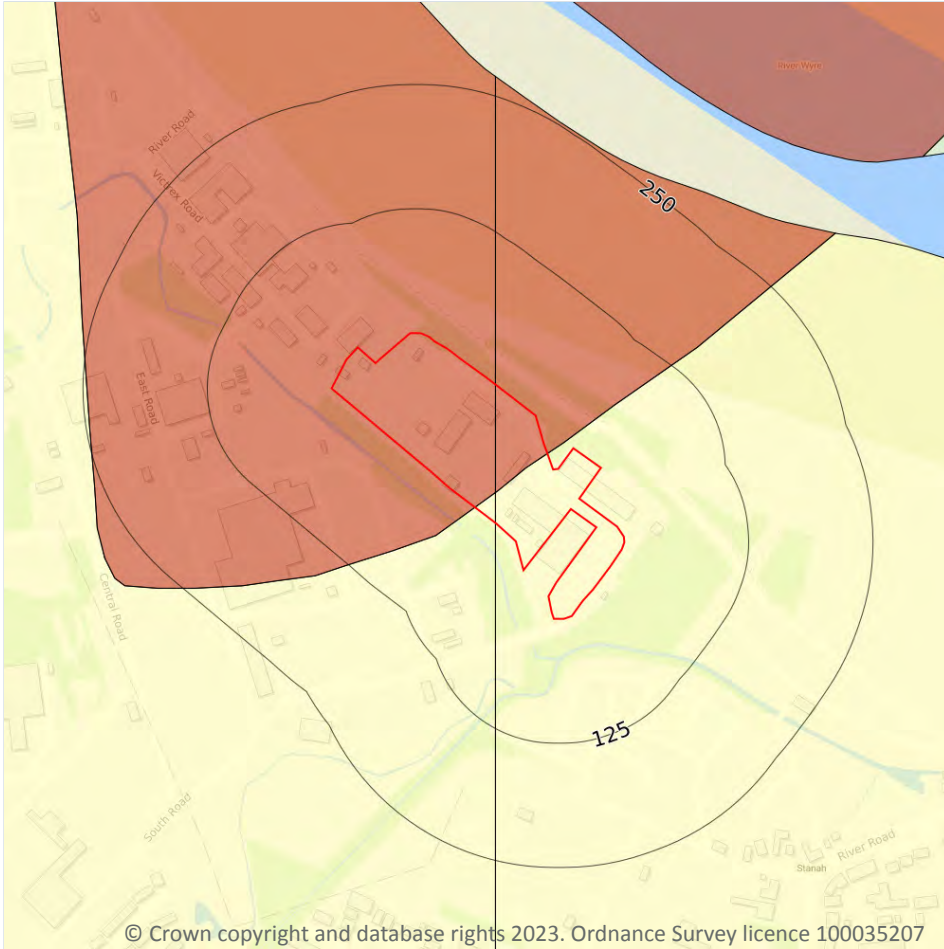
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

Location	Hazard rating	Details
44m N	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

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



## Natural ground subsidence - Ground dissolution of soluble rocks



— Site Outline  
Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

### 17.6 Ground dissolution of soluble rocks

Records within 50m

2

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 150](#) >

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.

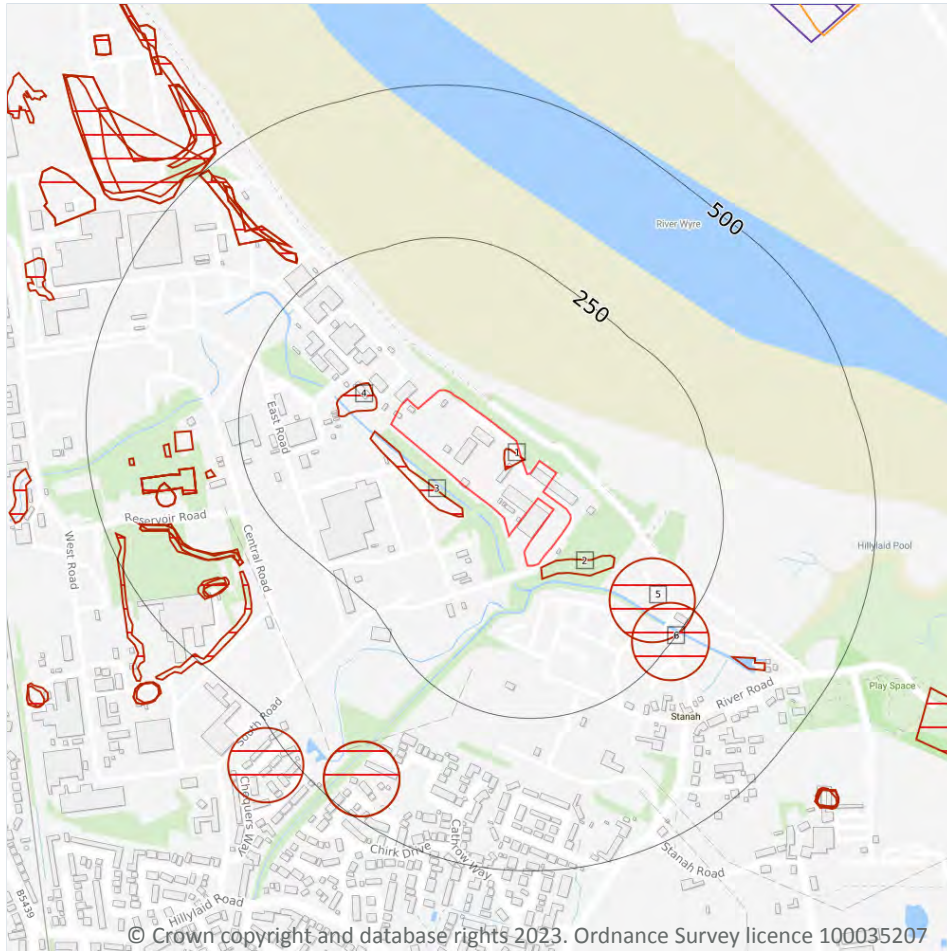
Location	Hazard rating	Details
On site	High	<b>Soluble rocks are present within the ground. Numerous dissolution features may be present. Potential for difficult ground conditions should be investigated. Potential for localised subsidence is at a level where it should be considered.</b>

*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

6

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 152 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Unspecified Pit	1968	1:10560
2	7m SE	Unspecified Heap	1985	1:10000
3	26m W	Refuse Heap	1967	1:10560
4	34m NW	Pond	1846	1:10560
5	114m SE	Pool	1985	1:10000
6	185m SE	Pool	1968	1:10560

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

## 18.3 Underground workings

Records within 1000m

0

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

*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

1

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).

Features are displayed on the Mining and ground workings map on [page 152 >](#)

ID	Location	Name	Commodity	Class	Likelihood
19	834m NE	Preesall Saltfield	Salt - brine and salt	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.

*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, Tith 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**

**0**

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

*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.

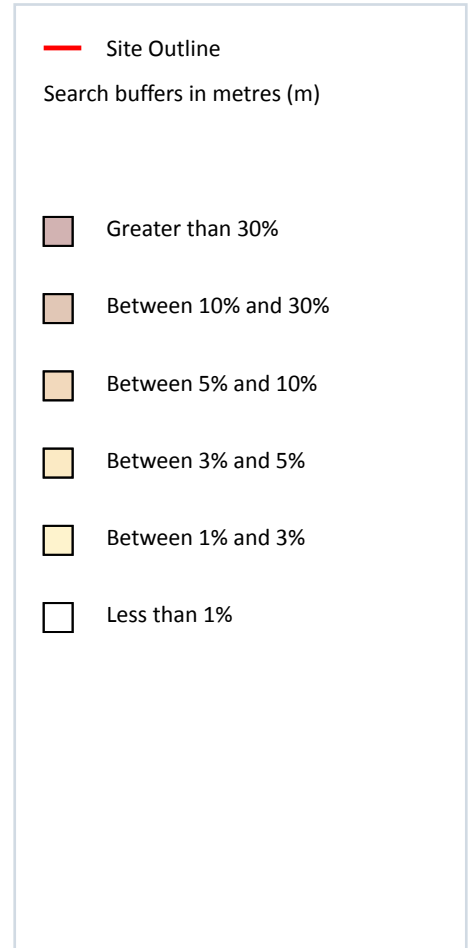
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over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



© Crown copyright and database rights 2023. Ordnance Survey licence 100035207

### 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 159 >](#)

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

13

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 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
9m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
15m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
22m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
28m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
40m NE	15 mg/kg	No data	100 mg/kg	60 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

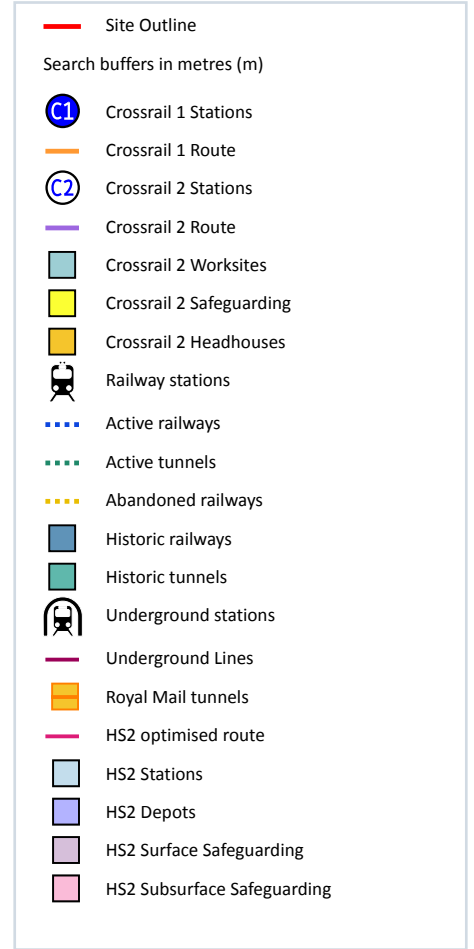
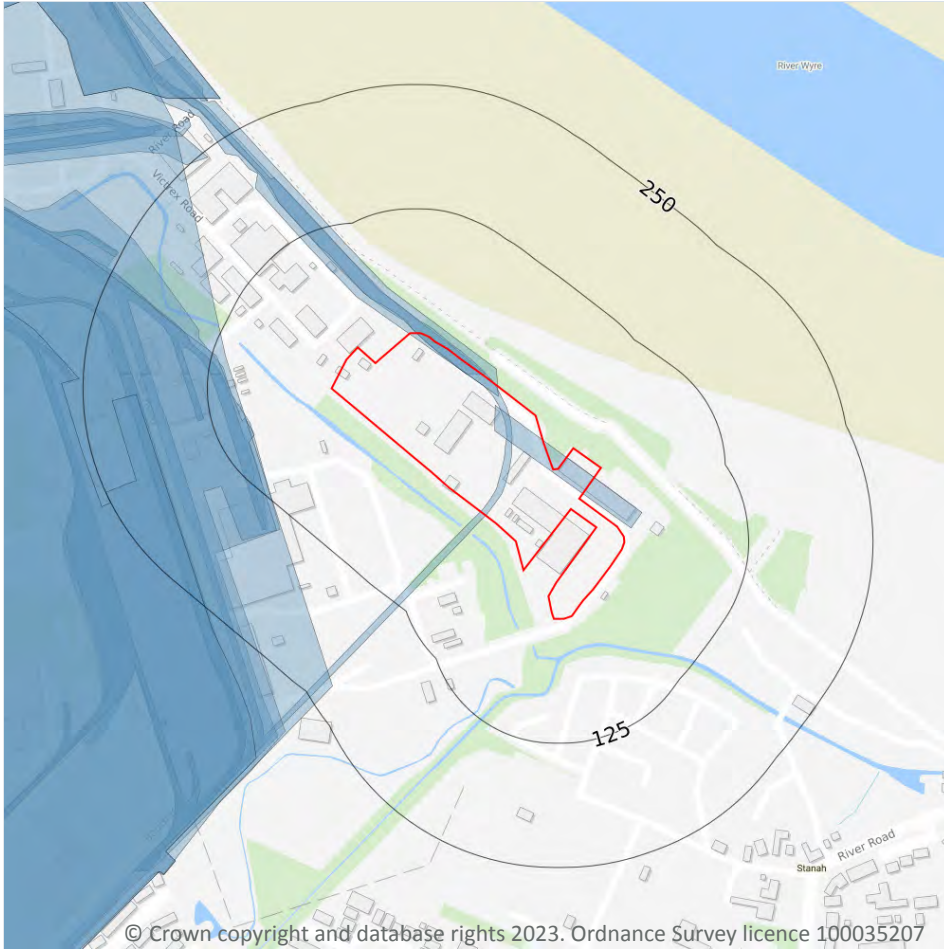
0

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



### 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**

**16**

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 163 >](#)

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1960	1250
On site	Railway Sidings	1965	2500
On site	Railway Sidings	1951	10560
On site	Railway Sidings	1973	10000
89m W	Railway Sidings	1973	10000
90m W	Railway Sidings	1951	10560
91m W	Railway Sidings	1967	10560
99m W	Railway Sidings	1960	1250
111m W	Railway Sidings	1960	1250
132m W	Railway Sidings	1960	1250
168m W	Railway Sidings	1960	1250
187m W	Railway Sidings	1977	1250
189m W	Railway Sidings	1981	10000
192m W	Railway Sidings	1980	1250
202m W	Railway Sidings	1960	1250
202m W	Railway Sidings	1979	1250

*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: [www.groundsure.com/terms-and-conditions-april-2023/](http://www.groundsure.com/terms-and-conditions-april-2023/) ↗.





## **APPENDIX C**

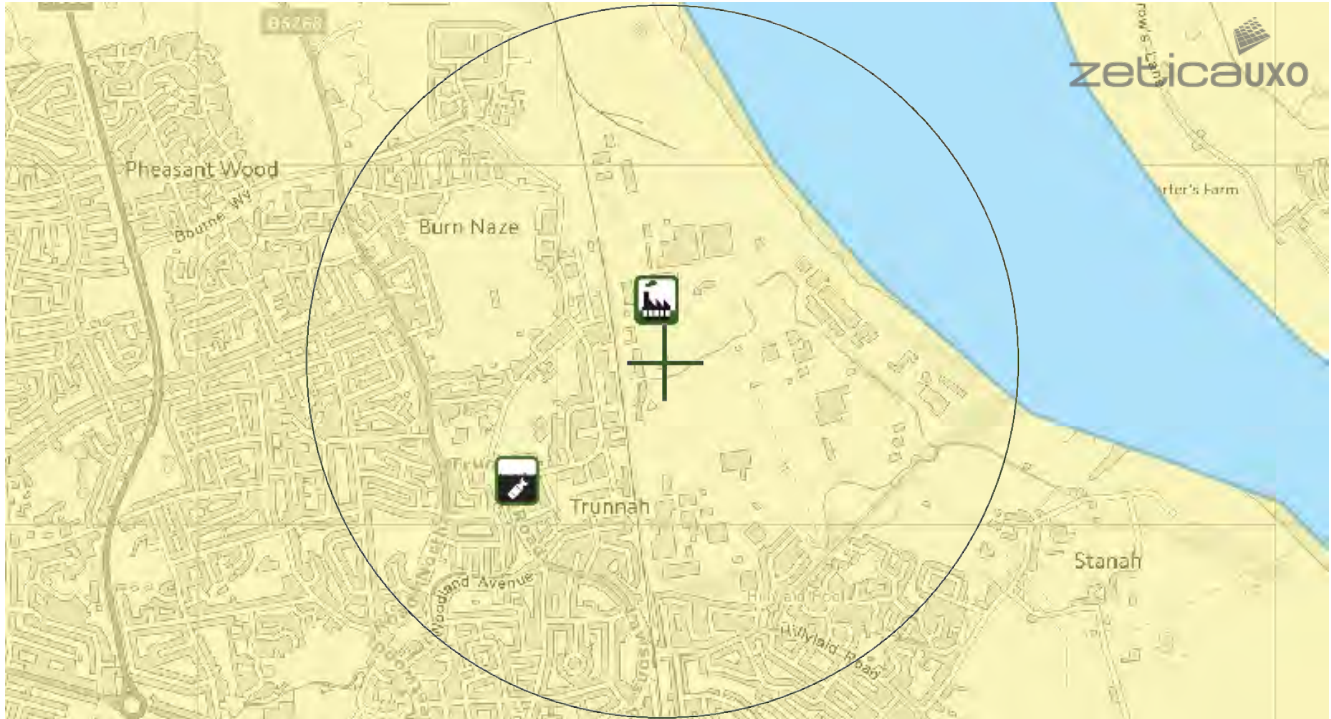
### **UXO Risk Screening Mapping**

# UNEXPLODED BOMB RISK MAP



## SITE LOCATION

Location: FY5 4QD,  
Map Centre: 334307,443454



## LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- military
- industry
- UXO find
- transport
- dock
- Luftwaffe targets
- utilities
- Bombing decoy
- other

### How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment\* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment\* is necessary.

### What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

**Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.**

### If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

### If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

\*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

334982.9920421878,443421.5484771532,

## Order Details

**Date:** 01/12/2023  
**Your ref:** R3217-Hillhouse\_IBA  
**Our Ref:** GS-A1G-516-6R9-KPQ

## Site Details

**Location:** 335053 443354  
**Area:** 3.04 ha  
**Authority:** [Wyre Council](#) ↗



**Summary of findings**

[p. 2 >](#)

**Aerial image**

[p. 9 >](#)

**OS MasterMap site plan**

[p.14 >](#)

[groundsure.com/insightuserguide](https://groundsure.com/insightuserguide) ↗

Contact us with any questions at:

[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="#">15 &gt;</a>	<a href="#">1.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	12	4	11	37	-
<a href="#">18 &gt;</a>	<a href="#">1.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	23	4	49	71	-
<a href="#">24 &gt;</a>	<a href="#">1.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	0	0	1	2	-
24	1.4	Historical petrol stations	0	0	0	0	-
24	1.5	Historical garages	0	0	0	0	-
25	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="#">26 &gt;</a>	<a href="#">2.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	18	6	21	69	-
<a href="#">31 &gt;</a>	<a href="#">2.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	32	8	79	147	-
<a href="#">40 &gt;</a>	<a href="#">2.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	0	0	1	3	-
41	2.4	Historical petrol stations	0	0	0	0	-
41	2.5	Historical garages	0	0	0	0	-
Page	Section	<a href="#">Waste and landfill &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
42	3.1	Active or recent landfill	0	0	0	0	-
42	3.2	Historical landfill (BGS records)	0	0	0	0	-
43	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
<a href="#">43 &gt;</a>	<a href="#">3.4 &gt;</a>	<a href="#">Historical landfill (EA/NRW records) &gt;</a>	0	0	0	1	-
<a href="#">43 &gt;</a>	<a href="#">3.5 &gt;</a>	<a href="#">Historical waste sites &gt;</a>	0	0	1	0	-
44	3.6	Licensed waste sites	0	0	0	0	-
<a href="#">44 &gt;</a>	<a href="#">3.7 &gt;</a>	<a href="#">Waste exemptions &gt;</a>	0	0	0	12	-
Page	Section	<a href="#">Current industrial land use &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">46 &gt;</a>	<a href="#">4.1 &gt;</a>	<a href="#">Recent industrial land uses &gt;</a>	38	5	17	-	-
50	4.2	Current or recent petrol stations	0	0	0	0	-
50	4.3	Electricity cables	0	0	0	0	-
50	4.4	Gas pipelines	0	0	0	0	-
50	4.5	Sites determined as Contaminated Land	0	0	0	0	-



51 >	4.6 >	<a href="#">Control of Major Accident Hazards (COMAH) &gt;</a>	1	0	0	3	-
51	4.7	Regulated explosive sites	0	0	0	0	-
51 >	4.8 >	<a href="#">Hazardous substance storage/usage &gt;</a>	0	1	0	4	-
52 >	4.9 >	<a href="#">Historical licensed industrial activities (IPC) &gt;</a>	0	0	0	4	-
53 >	4.10 >	<a href="#">Licensed industrial activities (Part A(1)) &gt;</a>	3	0	3	4	-
55 >	4.11 >	<a href="#">Licensed pollutant release (Part A(2)/B) &gt;</a>	0	0	3	0	-
56 >	4.12 >	<a href="#">Radioactive Substance Authorisations &gt;</a>	0	0	0	2	-
56 >	4.13 >	<a href="#">Licensed Discharges to controlled waters &gt;</a>	0	3	35	9	-
63 >	4.14 >	<a href="#">Pollutant release to surface waters (Red List) &gt;</a>	0	0	4	0	-
64	4.15	Pollutant release to public sewer	0	0	0	0	-
64 >	4.16 >	<a href="#">List 1 Dangerous Substances &gt;</a>	1	0	4	10	-
65 >	4.17 >	<a href="#">List 2 Dangerous Substances &gt;</a>	0	0	2	0	-
66 >	4.18 >	<a href="#">Pollution Incidents (EA/NRW) &gt;</a>	0	1	2	1	-
66 >	4.19 >	<a href="#">Pollution inventory substances &gt;</a>	0	0	0	5	-
68 >	4.20 >	<a href="#">Pollution inventory waste transfers &gt;</a>	0	0	0	1	-
73	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<a href="#">Hydrogeology &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
74 >	5.1 >	<a href="#">Superficial aquifer &gt;</a>	Identified (within 500m)				
76 >	5.2 >	<a href="#">Bedrock aquifer &gt;</a>	Identified (within 500m)				
78 >	5.3 >	<a href="#">Groundwater vulnerability &gt;</a>	Identified (within 50m)				
79 >	5.4 >	<a href="#">Groundwater vulnerability- soluble rock risk &gt;</a>	Identified (within 0m)				
80	5.5	Groundwater vulnerability- local information	None (within 0m)				
81	5.6	Groundwater abstractions	0	0	0	0	0
81	5.7	Surface water abstractions	0	0	0	0	0
81	5.8	Potable abstractions	0	0	0	0	0
81	5.9	Source Protection Zones	0	0	0	0	-
82	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<a href="#">Hydrology &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
83 >	6.1 >	<a href="#">Water Network (OS MasterMap) &gt;</a>	0	5	12	-	-



85 >	6.2 >	<a href="#">Surface water features &gt;</a>	0	3	4	-	-
85 >	6.3 >	<a href="#">WFD Surface water body catchments &gt;</a>	1	-	-	-	-
86 >	6.4 >	<a href="#">WFD Surface water bodies &gt;</a>	0	1	1	-	-
86	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	<a href="#">River and coastal flooding &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
87 >	7.1 >	<a href="#">Risk of flooding from rivers and the sea &gt;</a>	High (within 50m)				
88	7.2	Historical Flood Events	0	0	0	-	-
88 >	7.3 >	<a href="#">Flood Defences &gt;</a>	0	0	1	-	-
88 >	7.4 >	<a href="#">Areas Benefiting from Flood Defences &gt;</a>	1	0	0	-	-
89	7.5	Flood Storage Areas	0	0	0	-	-
90 >	7.6 >	<a href="#">Flood Zone 2 &gt;</a>	Identified (within 50m)				
91 >	7.7 >	<a href="#">Flood Zone 3 &gt;</a>	Identified (within 50m)				
Page	Section	<a href="#">Surface water flooding &gt;</a>					
92 >	8.1 >	<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>					
94 >	9.1 >	<a href="#">Groundwater flooding &gt;</a>	Negligible (within 50m)				
Page	Section	<a href="#">Environmental designations &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
95 >	10.1 >	<a href="#">Sites of Special Scientific Interest (SSSI) &gt;</a>	0	1	0	3	12
96 >	10.2 >	<a href="#">Conserved wetland sites (Ramsar sites) &gt;</a>	0	1	0	3	8
101	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
101 >	10.4 >	<a href="#">Special Protection Areas (SPA) &gt;</a>	0	2	0	4	12
106	10.5	National Nature Reserves (NNR)	0	0	0	0	0
106	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
106	10.7	Designated Ancient Woodland	0	0	0	0	0
106	10.8	Biosphere Reserves	0	0	0	0	0
107	10.9	Forest Parks	0	0	0	0	0
107 >	10.10 >	<a href="#">Marine Conservation Zones &gt;</a>	0	0	2	2	21
108 >	10.11 >	<a href="#">Green Belt &gt;</a>	0	0	0	0	2
108	10.12	Proposed Ramsar sites	0	0	0	0	0



109	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
109	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
109	10.15	Nitrate Sensitive Areas	0	0	0	0	0
109	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
<a href="#">110</a> >	<a href="#">10.17</a> >	<a href="#">SSSI Impact Risk Zones</a> >	2	-	-	-	-
<a href="#">111</a> >	<a href="#">10.18</a> >	<a href="#">SSSI Units</a> >	0	1	0	4	16
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
119	11.1	World Heritage Sites	0	0	0	-	-
119	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
119	11.3	National Parks	0	0	0	-	-
119	11.4	Listed Buildings	0	0	0	-	-
120	11.5	Conservation Areas	0	0	0	-	-
120	11.6	Scheduled Ancient Monuments	0	0	0	-	-
120	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	<a href="#">Agricultural designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">121</a> >	<a href="#">12.1</a> >	<a href="#">Agricultural Land Classification</a> >	Urban (within 250m)				
122	12.2	Open Access Land	0	0	0	-	-
122	12.3	Tree Felling Licences	0	0	0	-	-
122	12.4	Environmental Stewardship Schemes	0	0	0	-	-
122	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	<a href="#">Habitat designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">123</a> >	<a href="#">13.1</a> >	<a href="#">Priority Habitat Inventory</a> >	0	2	5	-	-
<a href="#">124</a> >	<a href="#">13.2</a> >	<a href="#">Habitat Networks</a> >	2	6	6	-	-
125	13.3	Open Mosaic Habitat	0	0	0	-	-
125	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	<a href="#">Geology 1:10,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">126</a> >	<a href="#">14.1</a> >	<a href="#">10k Availability</a> >	Identified (within 500m)				
<a href="#">127</a> >	<a href="#">14.2</a> >	<a href="#">Artificial and made ground (10k)</a> >	2	0	0	1	-
<a href="#">128</a> >	<a href="#">14.3</a> >	<a href="#">Superficial geology (10k)</a> >	3	0	0	1	-



129	14.4	Landslip (10k)	0	0	0	0	-
<a href="#">130</a> >	<a href="#">14.5</a> >	<a href="#">Bedrock geology (10k)</a> >	4	0	1	6	-
<a href="#">131</a> >	<a href="#">14.6</a> >	<a href="#">Bedrock faults and other linear features (10k)</a> >	0	0	1	2	-
Page	Section	<a href="#">Geology 1:50,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">132</a> >	<a href="#">15.1</a> >	<a href="#">50k Availability</a> >	Identified (within 500m)				
<a href="#">133</a> >	<a href="#">15.2</a> >	<a href="#">Artificial and made ground (50k)</a> >	1	0	0	0	-
<a href="#">134</a> >	<a href="#">15.3</a> >	<a href="#">Artificial ground permeability (50k)</a> >	2	0	-	-	-
<a href="#">135</a> >	<a href="#">15.4</a> >	<a href="#">Superficial geology (50k)</a> >	2	1	0	5	-
<a href="#">136</a> >	<a href="#">15.5</a> >	<a href="#">Superficial permeability (50k)</a> >	Identified (within 50m)				
136	15.6	Landslip (50k)	0	0	0	0	-
136	15.7	Landslip permeability (50k)	None (within 50m)				
<a href="#">137</a> >	<a href="#">15.8</a> >	<a href="#">Bedrock geology (50k)</a> >	2	0	1	6	-
<a href="#">138</a> >	<a href="#">15.9</a> >	<a href="#">Bedrock permeability (50k)</a> >	Identified (within 50m)				
<a href="#">138</a> >	<a href="#">15.10</a> >	<a href="#">Bedrock faults and other linear features (50k)</a> >	0	1	0	2	-
Page	Section	<a href="#">Boreholes</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">140</a> >	<a href="#">16.1</a> >	<a href="#">BGS Boreholes</a> >	0	3	16	-	-
Page	Section	<a href="#">Natural ground subsidence</a> >					
<a href="#">142</a> >	<a href="#">17.1</a> >	<a href="#">Shrink swell clays</a> >	Low (within 50m)				
<a href="#">143</a> >	<a href="#">17.2</a> >	<a href="#">Running sands</a> >	Moderate (within 50m)				
<a href="#">145</a> >	<a href="#">17.3</a> >	<a href="#">Compressible deposits</a> >	Moderate (within 50m)				
<a href="#">147</a> >	<a href="#">17.4</a> >	<a href="#">Collapsible deposits</a> >	Negligible (within 50m)				
<a href="#">148</a> >	<a href="#">17.5</a> >	<a href="#">Landslides</a> >	Low (within 50m)				
<a href="#">150</a> >	<a href="#">17.6</a> >	<a href="#">Ground dissolution of soluble rocks</a> >	High (within 50m)				
Page	Section	<a href="#">Mining and ground workings</a> >	On site	0-50m	50-250m	250-500m	500-2000m
152	18.1	BritPits	0	0	0	0	-
<a href="#">153</a> >	<a href="#">18.2</a> >	<a href="#">Surface ground workings</a> >	1	3	2	-	-
153	18.3	Underground workings	0	0	0	0	0
153	18.4	Underground mining extents	0	0	0	0	-
154	18.5	Historical Mineral Planning Areas	0	0	0	0	-





<a href="#">154</a> >	<a href="#">18.6</a> >	<a href="#">Non-coal mining</a> >	0	0	0	0	1
154	18.7	JPB mining areas	None (within 0m)				
154	18.8	The Coal Authority non-coal mining	0	0	0	0	-
155	18.9	Researched mining	0	0	0	0	-
155	18.10	Mining record office plans	0	0	0	0	-
155	18.11	BGS mine plans	0	0	0	0	-
155	18.12	Coal mining	None (within 0m)				
156	18.13	Brine areas	None (within 0m)				
156	18.14	Gypsum areas	None (within 0m)				
156	18.15	Tin mining	None (within 0m)				
156	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
157	19.1	Natural cavities	0	0	0	0	-
157	19.2	Mining cavities	0	0	0	0	0
157	19.3	Reported recent incidents	0	0	0	0	-
157	19.4	Historical incidents	0	0	0	0	-
158	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
<a href="#">159</a> >	<a href="#">20.1</a> >	<a href="#">Radon</a> >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">161</a> >	<a href="#">21.1</a> >	<a href="#">BGS Estimated Background Soil Chemistry</a> >	8	5	-	-	-
162	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
162	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
163	22.1	Underground railways (London)	0	0	0	-	-
163	22.2	Underground railways (Non-London)	0	0	0	-	-
164	22.3	Railway tunnels	0	0	0	-	-
<a href="#">164</a> >	<a href="#">22.4</a> >	<a href="#">Historical railway and tunnel features</a> >	4	0	12	-	-
165	22.5	Royal Mail tunnels	0	0	0	-	-



165	22.6	Historical railways	0	0	0	-	-
165	22.7	Railways	0	0	0	-	-
165	22.8	Crossrail 1	0	0	0	0	-
165	22.9	Crossrail 2	0	0	0	0	-
166	22.10	HS2	0	0	0	0	-

## Recent aerial photograph



Capture Date: 10/08/2022

Site Area: 3.04ha



## Recent site history - 2019 aerial photograph



Capture Date: 22/04/2019

Site Area: 3.04ha



## Recent site history - 2018 aerial photograph



Capture Date: 05/09/2018

Site Area: 3.04ha



## Recent site history - 2013 aerial photograph



Capture Date: 19/07/2013

Site Area: 3.04ha



## Recent site history - 2000 aerial photograph



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

Capture Date: 05/04/2000

Site Area: 3.04ha



## OS MasterMap site plan

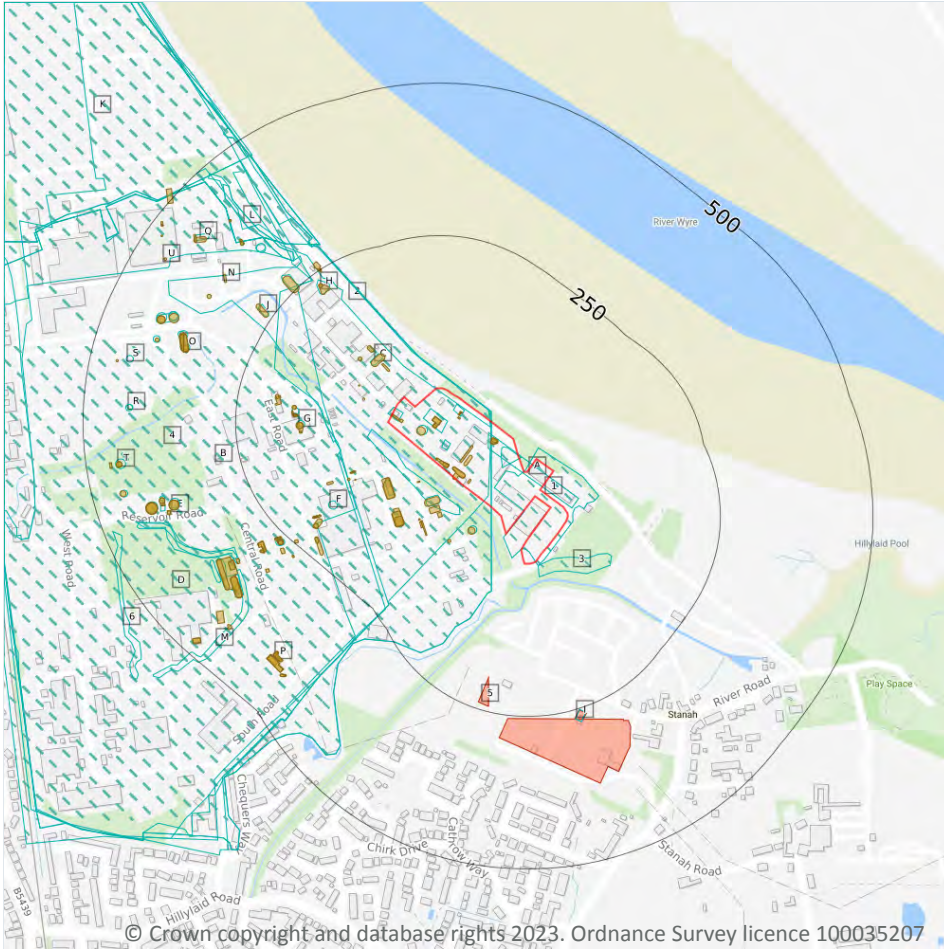


Site Area: 3.04ha





# 1 Past land use



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

## 1.1 Historical industrial land uses

**Records within 500m** **64**

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 15 >](#)

ID	Location	Land use	Dates present	Group ID
1	On site	Unspecified Works	1985	678573

ID	Location	Land use	Dates present	Group ID
2	On site	Railway Sidings	1973	714213
A	On site	Railway Sidings	1951	641435
A	On site	Unspecified Pit	1968	688600
A	On site	Unspecified Tanks	1981 - 1992	714651
A	On site	Unspecified Tanks	1981 - 1992	726363
A	On site	Unspecified Tanks	1981 - 1992	727213
A	On site	Unspecified Tanks	1981 - 1992	787313
A	On site	Unspecified Tanks	1981 - 1992	788022
B	On site	Unspecified Works	1967	716375
B	On site	Unspecified Works	1973 - 1981	729518
B	On site	Unspecified Works	1992	746126
3	7m SE	Unspecified Heap	1985	649452
A	26m W	Refuse Heap	1967	676879
A	39m SW	Unspecified Tanks	1981 - 1992	751240
A	41m S	Unspecified Tank	1981 - 1992	694819
C	71m NW	Unspecified Tanks	1967 - 1973	763973
A	72m W	Unspecified Tanks	1981 - 1992	749014
D	89m W	Railway Sidings	1973 - 1981	697482
4	90m W	Railway Sidings	1951 - 1967	698470
E	90m W	Chemical Works	1951	682676
A	104m SW	Unspecified Tanks	1981 - 1992	742475
G	137m W	Unspecified Tank	1981 - 1992	702019
G	147m W	Unspecified Tank	1967 - 1973	771286
F	155m W	Unspecified Tank	1967 - 1973	707907
H	214m NW	Unspecified Tanks	1967 - 1973	713245
H	250m NW	Unspecified Tanks	1967 - 1973	752240
I	252m S	Electricity Substation	1985	686415
J	256m NW	Unspecified Tanks	1967 - 1992	789517



ID	Location	Land use	Dates present	Group ID
F	258m W	Unspecified Tank	1967 - 1973	770548
F	260m W	Unspecified Tank	1992	742152
K	286m NW	Railway Sidings	1938	738290
K	286m NW	Ammonia Soda Works	1930 - 1938	757831
K	286m NW	Railway Sidings	1930	775128
L	288m NW	Unspecified Ground Workings	1973	734208
L	288m NW	Unspecified Ground Workings	1981 - 1992	777538
L	317m NW	Unspecified Heap	1930 - 1938	748322
D	325m W	Unspecified Ground Workings	1967	696442
D	330m W	Unspecified Ground Workings	1981 - 1992	755081
L	331m NW	Unspecified Tank	1967 - 1973	767586
L	333m NW	Unspecified Tank	1981 - 1992	728267
M	342m SW	Unspecified Ground Workings	1967	646142
O	347m W	Unspecified Tank	1967 - 1992	788469
F	350m SW	Unspecified Tanks	1967 - 1992	738506
O	358m NW	Unspecified Tank	1967 - 1973	713686
O	364m NW	Unspecified Tank	1951	775226
F	366m W	Unspecified Tanks	1951	666073
E	366m W	Unspecified Tank	1967 - 1992	712875
O	382m NW	Unspecified Tanks	1973	666069
O	385m NW	Unspecified Tank	1981 - 1992	730697
O	385m NW	Unspecified Tank	1967	764137
E	386m W	Unspecified Tank	1967 - 1973	787334
E	390m W	Unspecified Tanks	1992	666070
O	397m W	Unspecified Tank	1967	673314
O	401m NW	Unspecified Tank	1981 - 1992	744362
E	402m W	Unspecified Tank	1967 - 1992	703668
Q	412m NW	Unspecified Tanks	1967 - 1973	716149



ID	Location	Land use	Dates present	Group ID
R	419m W	Unspecified Tank	1967 - 1973	695680
R	420m W	Unspecified Tank	1992	714437
S	430m W	Chimney	1967	684453
T	435m W	Unspecified Tank	1973 - 1992	736039
T	442m W	Unspecified Tank	1973 - 1992	789844
K	468m NW	Ammonia Soda Works	1951	694922
6	474m W	Unspecified Ground Workings	1967	646140

This data is sourced from Ordnance Survey / Groundsure.

## 1.2 Historical tanks

**Records within 500m**

**147**

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 15 >](#)

ID	Location	Land use	Dates present	Group ID
A	On site	Tanks	1994	86567
A	On site	Tanks	1980 - 1994	99134
A	On site	Unspecified Tank	1994	80288
A	On site	Unspecified Tank	1980	80289
A	On site	Tanks	1994	86563
A	On site	Tanks	1994	86564
A	On site	Tanks	1994	86565
A	On site	Tanks	1980	88930
A	On site	Tanks	1994	89508
A	On site	Tanks	1980	89643
A	On site	Tanks	1994	92041



ID	Location	Land use	Dates present	Group ID
A	On site	Tanks	1980	92721
A	On site	Tanks	1980	93895
A	On site	Tanks	1985	95270
A	On site	Tanks	1994	95834
A	On site	Tanks	1980	96668
A	On site	Tanks	1981	97055
A	On site	Tanks	1980	99749
A	On site	Tanks	1994	100649
A	On site	Tanks	1994	100650
A	On site	Tanks	1993	101492
A	On site	Tanks	1980	103158
A	On site	Unspecified Tank	1980 - 1994	103198
A	41m W	Tanks	1980	102351
A	41m SW	Tanks	1977 - 1980	92354
A	45m S	Unspecified Tank	1980	90572
C	49m NW	Tanks	1994	86566
A	50m SW	Tanks	1977 - 1980	94479
C	51m NW	Unspecified Tank	1979 - 1980	94507
A	57m SW	Tanks	1977 - 1980	90051
C	68m NW	Tanks	1960 - 1965	90731
C	69m NW	Unspecified Tank	1979 - 1980	100067
A	69m W	Tanks	1980	96585
A	70m W	Tanks	1977	98882
A	83m S	Tanks	1977	86562
A	87m SW	Tanks	1994	86544
A	87m SW	Tanks	1980	96990
A	89m SW	Tanks	1977	95055
A	90m SW	Tanks	1977	86543



ID	Location	Land use	Dates present	Group ID
C	90m NW	Tanks	1960 - 1965	93872
C	93m NW	Unspecified Tank	1960 - 1965	102763
F	95m W	Tanks	1977 - 1980	95228
F	97m W	Tanks	1994	90739
A	97m SW	Tanks	1980	89983
A	100m SW	Tanks	1977	96705
A	104m SW	Tanks	1980	96959
F	106m W	Unspecified Tank	1980	98563
F	111m W	Unspecified Tank	1994	80294
F	133m W	Tanks	1960 - 1965	103233
G	139m W	Tanks	1980	100167
G	140m W	Tanks	1977 - 1994	92825
G	143m W	Tanks	1977 - 1994	99625
G	148m W	Tanks	1980	89956
G	150m W	Tanks	1994	93995
G	150m W	Tanks	1977	95514
G	152m W	Tanks	1994	86568
G	153m W	Unspecified Tank	1979 - 1980	98472
G	154m W	Tanks	1977	88586
G	156m W	Tanks	1994	88592
G	178m W	Tanks	1994	86569
G	180m W	Unspecified Tank	1960 - 1980	99937
F	188m W	Tanks	1977 - 1980	89996
F	188m W	Unspecified Tank	1994	80295
F	192m W	Tanks	1977 - 1980	99186
F	192m W	Unspecified Tank	1965	80296
F	192m W	Tanks	1960 - 1994	91300
F	202m W	Tanks	1980	103149



ID	Location	Land use	Dates present	Group ID
H	213m NW	Tanks	1960 - 1965	93633
F	218m SW	Tanks	1980	90577
F	220m SW	Tanks	1977	92597
H	225m NW	Unspecified Tank	1960	80293
F	242m SW	Tanks	1980	88758
H	246m NW	Tanks	1960 - 1965	89560
H	247m NW	Tanks	1980 - 1994	98695
H	249m NW	Tanks	1994	92131
H	249m NW	Unspecified Tank	1979	80292
J	257m NW	Tanks	1960 - 1980	88781
F	257m W	Tanks	1980 - 1994	91556
F	258m W	Tanks	1977	100647
F	260m W	Unspecified Tank	1960 - 1965	97351
F	261m W	Tanks	1977	92412
F	266m SW	Unspecified Tank	1980 - 1994	99961
F	268m SW	Tanks	1980 - 1994	90810
F	283m W	Tanks	1994	94929
F	283m W	Tanks	1980	103965
F	310m SW	Tanks	1977 - 1994	101142
F	331m W	Unspecified Tank	1980 - 1994	98265
F	340m W	Tanks	1980	101155
F	340m W	Tanks	1994	91209
N	345m NW	Tanks	1979 - 1980	100955
O	347m W	Unspecified Tank	1979 - 1980	95275
O	348m W	Tanks	1965	94446
O	349m W	Tanks	1960	99935
N	352m NW	Unspecified Tank	1960 - 1965	100206
O	355m W	Tanks	1979 - 1988	91743



ID	Location	Land use	Dates present	Group ID
O	355m W	Tanks	1960 - 1970	95408
F	355m W	Tanks	1960 - 1994	102711
F	356m SW	Tanks	1960 - 1965	98181
F	356m SW	Tanks	1977 - 1994	92291
L	363m NW	Unspecified Tank	1960	80290
L	363m NW	Tanks	1965	86571
E	368m W	Unspecified Tank	1965 - 1994	100691
E	368m W	Unspecified Tank	1960 - 1970	103049
L	369m NW	Unspecified Tank	1960	80291
O	382m NW	Unspecified Tank	1960 - 1979	94434
E	385m W	Unspecified Tank	1970 - 1994	101042
E	385m W	Unspecified Tank	1980	92009
E	387m W	Tanks	1965	91157
E	388m W	Unspecified Tank	1960 - 1970	103029
E	390m W	Tanks	1960	92812
O	399m W	Unspecified Tank	1960 - 1965	100721
O	402m NW	Unspecified Tank	1970 - 1988	98470
O	402m NW	Unspecified Tank	1994	89580
E	403m W	Unspecified Tank	1980	93861
E	403m W	Unspecified Tank	1960 - 1970	89220
E	403m W	Unspecified Tank	1965 - 1994	95240
L	404m NW	Unspecified Tank	1960 - 1965	103004
P	404m SW	Tanks	1960 - 1980	94012
P	404m SW	Tanks	1994	88832
P	404m SW	Tanks	1977 - 1980	98026
M	411m SW	Tanks	1977 - 1994	98310
Q	413m NW	Tanks	1960 - 1965	92304
P	415m SW	Tanks	1980	94570





ID	Location	Land use	Dates present	Group ID
P	415m SW	Tanks	1980	97142
P	415m SW	Tanks	1977 - 1994	103558
M	420m SW	Tanks	1977 - 1994	89512
Q	423m NW	Tanks	1979 - 1980	91088
P	424m SW	Unspecified Tank	1980	80297
P	425m SW	Tanks	1980 - 1994	101604
P	426m SW	Tanks	1977	103087
T	441m W	Unspecified Tank	1980	100036
T	442m W	Unspecified Tank	1970 - 1994	100893
T	445m W	Unspecified Tank	1970 - 1994	94746
U	447m NW	Unspecified Tank	1960 - 1988	91577
S	454m W	Unspecified Tank	1970 - 1979	96836
T	458m W	Unspecified Tank	1970 - 1994	93389
M	469m SW	Tanks	1980	101687
M	469m SW	Tanks	1994	89072
U	473m NW	Unspecified Tank	1979 - 1988	91597
U	483m NW	Unspecified Tank	1988	94390
U	483m NW	Unspecified Tank	1983	95988
U	483m NW	Unspecified Tank	1983	96108
U	483m NW	Unspecified Tank	1979	98515
U	483m NW	Unspecified Tank	1994	101933
U	483m NW	Tanks	1960 - 1965	88863
U	483m NW	Unspecified Tank	1970	98917
U	494m NW	Tanks	1970	86572

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



### 1.3 Historical energy features

**Records within 500m****3**

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 15 >](#)

ID	Location	Land use	Dates present	Group ID
5	196m S	Electricity Substation	1994	44439
I	252m S	Electricity Substation	1985 - 1993	58711
I	254m S	Electricity Substation	1993	47082

*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****0**

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'.

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



## 1.6 Historical military land

Records within 500m

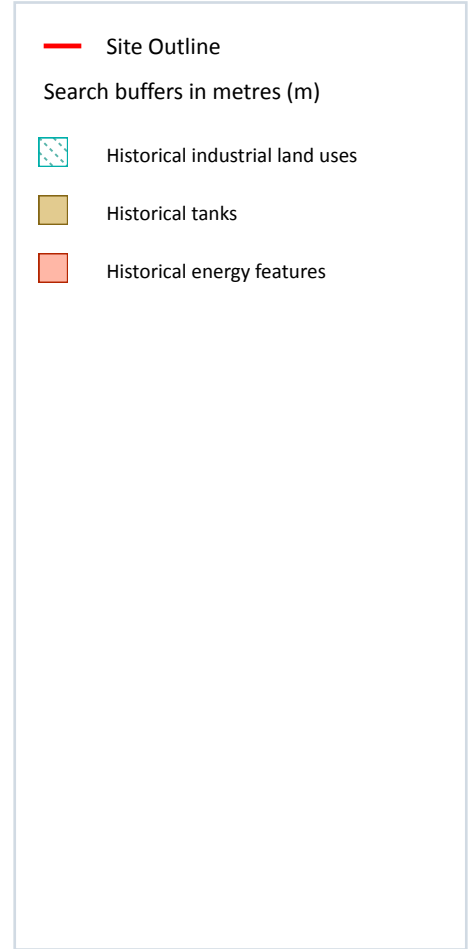
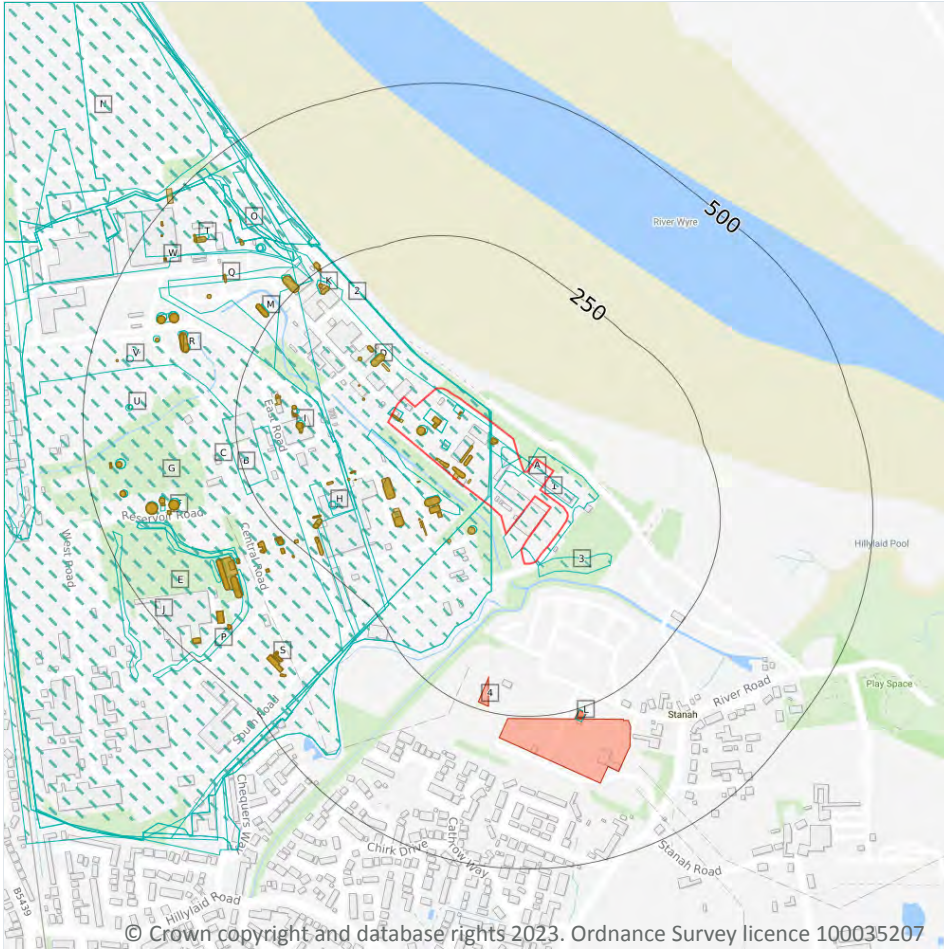
0

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.*



## 2 Past land use - un-grouped



### 2.1 Historical industrial land uses

Records within 500m

114

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 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 26 >](#)

ID	Location	Land Use	Date	Group ID
1	On site	Unspecified Works	1985	678573
2	On site	Railway Sidings	1973	714213
A	On site	Railway Sidings	1951	641435

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Pit	1968	688600
A	On site	Unspecified Tanks	1992	714651
A	On site	Unspecified Tanks	1992	726363
A	On site	Unspecified Tanks	1992	788022
A	On site	Unspecified Tanks	1992	727213
A	On site	Unspecified Tanks	1992	787313
A	On site	Unspecified Tanks	1981	727213
A	On site	Unspecified Tanks	1981	714651
A	On site	Unspecified Tanks	1981	726363
A	On site	Unspecified Tanks	1981	787313
A	On site	Unspecified Tanks	1981	788022
B	On site	Unspecified Works	1992	746126
B	On site	Unspecified Works	1981	729518
C	On site	Unspecified Works	1967	716375
C	On site	Unspecified Works	1973	729518
3	7m SE	Unspecified Heap	1985	649452
A	26m W	Refuse Heap	1967	676879
A	39m SW	Unspecified Tanks	1992	751240
A	39m SW	Unspecified Tanks	1981	751240
A	41m S	Unspecified Tank	1992	694819
A	41m S	Unspecified Tank	1981	694819
D	71m NW	Unspecified Tanks	1967	763973
D	71m NW	Unspecified Tanks	1973	763973
A	72m W	Unspecified Tanks	1992	749014
A	72m W	Unspecified Tanks	1981	749014
E	89m W	Railway Sidings	1973	697482
F	90m W	Chemical Works	1951	682676
G	90m W	Railway Sidings	1951	698470



ID	Location	Land Use	Date	Group ID
G	91m W	Railway Sidings	1967	698470
A	104m SW	Unspecified Tanks	1992	742475
A	104m SW	Unspecified Tanks	1981	742475
I	137m W	Unspecified Tank	1992	702019
I	137m W	Unspecified Tank	1981	702019
I	147m W	Unspecified Tank	1973	771286
I	149m W	Unspecified Tank	1967	771286
H	155m W	Unspecified Tank	1973	707907
H	157m W	Unspecified Tank	1967	707907
J	189m W	Railway Sidings	1981	697482
K	214m NW	Unspecified Tanks	1967	713245
K	214m NW	Unspecified Tanks	1973	713245
K	250m NW	Unspecified Tanks	1967	752240
K	250m NW	Unspecified Tanks	1973	752240
L	252m S	Electricity Substation	1985	686415
M	256m NW	Unspecified Tanks	1992	789517
M	256m NW	Unspecified Tanks	1981	789517
M	256m NW	Unspecified Tanks	1967	789517
M	256m NW	Unspecified Tanks	1973	789517
H	258m W	Unspecified Tank	1973	770548
H	259m W	Unspecified Tank	1967	770548
H	260m W	Unspecified Tank	1992	742152
N	286m NW	Ammonia Soda Works	1938	757831
N	286m NW	Railway Sidings	1938	738290
N	286m NW	Ammonia Soda Works	1930	757831
N	286m NW	Railway Sidings	1930	775128
O	288m NW	Unspecified Ground Workings	1992	777538
O	288m NW	Unspecified Ground Workings	1981	777538



ID	Location	Land Use	Date	Group ID
O	288m NW	Unspecified Ground Workings	1973	734208
O	317m NW	Unspecified Heap	1938	748322
O	317m NW	Unspecified Heap	1930	748322
E	325m W	Unspecified Ground Workings	1967	696442
E	330m W	Unspecified Ground Workings	1992	755081
E	330m W	Unspecified Ground Workings	1981	755081
O	331m NW	Unspecified Tank	1973	767586
O	333m NW	Unspecified Tank	1981	728267
O	334m NW	Unspecified Tank	1992	728267
O	336m NW	Unspecified Tank	1967	767586
P	342m SW	Unspecified Ground Workings	1967	646142
R	347m W	Unspecified Tank	1992	788469
R	347m W	Unspecified Tank	1981	788469
R	347m W	Unspecified Tank	1967	788469
R	347m W	Unspecified Tank	1973	788469
H	350m SW	Unspecified Tanks	1992	738506
H	350m SW	Unspecified Tanks	1981	738506
H	354m W	Unspecified Tanks	1967	738506
H	354m W	Unspecified Tanks	1973	738506
R	358m NW	Unspecified Tank	1967	713686
R	358m NW	Unspecified Tank	1973	713686
R	364m NW	Unspecified Tank	1951	775226
H	366m W	Unspecified Tanks	1951	666073
F	366m W	Unspecified Tank	1992	712875
F	366m W	Unspecified Tank	1981	712875
F	366m W	Unspecified Tank	1967	712875
F	366m W	Unspecified Tank	1973	712875
R	382m NW	Unspecified Tanks	1973	666069



ID	Location	Land Use	Date	Group ID
R	385m NW	Unspecified Tank	1992	730697
R	385m NW	Unspecified Tank	1981	730697
R	385m NW	Unspecified Tank	1967	764137
F	386m W	Unspecified Tank	1967	787334
F	386m W	Unspecified Tank	1973	787334
F	390m W	Unspecified Tanks	1992	666070
R	397m W	Unspecified Tank	1967	673314
R	401m NW	Unspecified Tank	1992	744362
R	401m NW	Unspecified Tank	1981	744362
F	402m W	Unspecified Tank	1992	703668
F	402m W	Unspecified Tank	1981	703668
F	402m W	Unspecified Tank	1967	703668
F	402m W	Unspecified Tank	1973	703668
T	412m NW	Unspecified Tanks	1967	716149
T	412m NW	Unspecified Tanks	1973	716149
U	419m W	Unspecified Tank	1973	695680
U	420m W	Unspecified Tank	1992	714437
U	420m W	Unspecified Tank	1967	695680
V	430m W	Chimney	1967	684453
G	435m W	Unspecified Tank	1992	736039
G	435m W	Unspecified Tank	1981	736039
G	435m W	Unspecified Tank	1973	736039
G	442m W	Unspecified Tank	1992	789844
G	442m W	Unspecified Tank	1981	789844
G	442m W	Unspecified Tank	1973	789844
N	468m NW	Ammonia Soda Works	1951	694922
J	474m W	Unspecified Ground Workings	1967	646140

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





## 2.2 Historical tanks

Records within 500m

266

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 26 >](#)

ID	Location	Land Use	Date	Group ID
A	On site	Tanks	1994	86564
A	On site	Tanks	1985	95270
A	On site	Tanks	1981	97055
A	On site	Tanks	1980	99749
A	On site	Unspecified Tank	1980	103198
A	On site	Tanks	1980	93895
A	On site	Tanks	1980	89643
A	On site	Tanks	1980	103158
A	On site	Tanks	1980	99134
A	On site	Tanks	1980	92721
A	On site	Tanks	1980	96668
A	On site	Tanks	1980	93895
A	On site	Tanks	1980	89643
A	On site	Tanks	1980	92721
A	On site	Tanks	1980	99134
A	On site	Tanks	1980	88930
A	On site	Tanks	1980	96668
A	On site	Tanks	1980	103158
A	On site	Unspecified Tank	1980	103198
A	On site	Unspecified Tank	1980	80289
A	On site	Tanks	1993	101492
A	On site	Unspecified Tank	1994	80288
A	On site	Tanks	1994	100650



ID	Location	Land Use	Date	Group ID
A	On site	Tanks	1994	99134
A	On site	Tanks	1994	86563
A	On site	Tanks	1994	86565
A	On site	Tanks	1994	89508
A	On site	Tanks	1994	86567
A	On site	Unspecified Tank	1994	103198
A	On site	Tanks	1994	92041
A	On site	Tanks	1994	95834
A	On site	Tanks	1994	100649
A	41m W	Tanks	1980	102351
A	41m W	Tanks	1980	102351
A	41m SW	Tanks	1980	92354
A	41m SW	Tanks	1980	92354
A	42m SW	Tanks	1977	92354
A	45m S	Unspecified Tank	1980	90572
A	45m S	Unspecified Tank	1980	90572
D	49m NW	Tanks	1994	86566
A	50m SW	Tanks	1980	94479
A	50m SW	Tanks	1980	94479
A	51m SW	Tanks	1977	94479
D	51m NW	Unspecified Tank	1979	94507
D	51m NW	Unspecified Tank	1980	94507
A	57m SW	Tanks	1980	90051
A	57m SW	Tanks	1980	90051
A	57m SW	Tanks	1977	90051
D	68m NW	Tanks	1965	90731
D	68m NW	Tanks	1960	90731
D	69m NW	Unspecified Tank	1979	100067



ID	Location	Land Use	Date	Group ID
D	69m NW	Unspecified Tank	1980	100067
A	69m W	Tanks	1980	96585
A	69m W	Tanks	1980	96585
A	70m W	Tanks	1977	98882
A	83m S	Tanks	1977	86562
A	87m SW	Tanks	1994	86544
A	87m SW	Tanks	1980	96990
A	87m SW	Tanks	1980	96990
A	89m SW	Tanks	1977	95055
A	90m SW	Tanks	1977	86543
D	90m NW	Tanks	1965	93872
D	91m NW	Tanks	1960	93872
D	93m NW	Unspecified Tank	1965	102763
D	93m NW	Unspecified Tank	1960	102763
H	95m W	Tanks	1980	95228
H	95m W	Tanks	1980	95228
H	97m W	Tanks	1977	95228
H	97m W	Tanks	1994	90739
A	97m SW	Tanks	1980	89983
A	100m SW	Tanks	1977	96705
A	104m SW	Tanks	1980	96959
H	106m W	Unspecified Tank	1980	98563
H	106m W	Unspecified Tank	1980	98563
H	111m W	Unspecified Tank	1994	80294
H	133m W	Tanks	1965	103233
H	133m W	Tanks	1960	103233
I	139m W	Tanks	1980	100167
I	139m W	Tanks	1980	100167



ID	Location	Land Use	Date	Group ID
I	140m W	Tanks	1994	92825
I	140m W	Tanks	1977	92825
I	143m W	Tanks	1977	99625
I	143m W	Tanks	1994	99625
I	148m W	Tanks	1980	89956
I	148m W	Tanks	1980	89956
I	150m W	Tanks	1994	93995
I	150m W	Tanks	1977	95514
I	152m W	Tanks	1994	86568
I	153m W	Unspecified Tank	1979	98472
I	153m W	Unspecified Tank	1980	98472
I	154m W	Tanks	1977	88586
I	156m W	Tanks	1994	88592
I	178m W	Tanks	1994	86569
I	180m W	Unspecified Tank	1980	99937
I	185m W	Unspecified Tank	1965	99937
I	185m W	Unspecified Tank	1960	99937
H	188m W	Tanks	1980	89996
H	188m W	Tanks	1980	89996
H	188m W	Unspecified Tank	1994	80295
H	189m W	Tanks	1977	89996
H	192m W	Tanks	1980	99186
H	192m W	Unspecified Tank	1965	80296
H	192m W	Tanks	1994	91300
H	192m W	Tanks	1960	91300
H	193m W	Tanks	1977	99186
H	202m W	Tanks	1980	103149
K	213m NW	Tanks	1965	93633



ID	Location	Land Use	Date	Group ID
K	214m NW	Tanks	1960	93633
H	218m SW	Tanks	1980	90577
H	218m SW	Tanks	1980	90577
H	220m SW	Tanks	1977	92597
K	225m NW	Unspecified Tank	1960	80293
H	242m SW	Tanks	1980	88758
H	242m SW	Tanks	1980	88758
K	246m NW	Tanks	1965	89560
K	246m NW	Tanks	1960	89560
K	247m NW	Tanks	1980	98695
K	249m NW	Tanks	1994	92131
K	249m NW	Unspecified Tank	1979	80292
K	252m NW	Tanks	1994	98695
M	257m NW	Tanks	1960	88781
H	257m W	Tanks	1994	91556
H	257m W	Tanks	1980	91556
H	257m W	Tanks	1980	91556
M	257m NW	Tanks	1965	88781
M	257m NW	Tanks	1979	88781
M	257m NW	Tanks	1980	88781
H	258m W	Tanks	1977	100647
H	260m W	Unspecified Tank	1965	97351
H	261m W	Unspecified Tank	1960	97351
H	261m W	Tanks	1977	92412
H	266m SW	Unspecified Tank	1980	99961
H	266m SW	Unspecified Tank	1980	99961
H	267m SW	Unspecified Tank	1994	99961
H	268m SW	Tanks	1980	90810



ID	Location	Land Use	Date	Group ID
H	268m SW	Tanks	1980	90810
H	269m SW	Tanks	1994	90810
H	283m W	Tanks	1994	94929
H	283m W	Tanks	1980	103965
H	283m W	Tanks	1980	103965
H	310m SW	Tanks	1980	101142
H	310m SW	Tanks	1980	101142
H	310m SW	Tanks	1994	101142
H	311m SW	Tanks	1977	101142
H	331m W	Unspecified Tank	1980	98265
H	331m W	Unspecified Tank	1980	98265
H	332m W	Unspecified Tank	1994	98265
H	340m W	Tanks	1980	101155
H	340m W	Tanks	1980	101155
H	340m W	Tanks	1994	91209
Q	345m NW	Tanks	1979	100955
Q	345m NW	Tanks	1980	100955
R	347m W	Unspecified Tank	1979	95275
R	347m W	Unspecified Tank	1980	95275
R	348m W	Tanks	1965	94446
R	349m W	Tanks	1960	99935
Q	352m NW	Unspecified Tank	1960	100206
Q	352m NW	Unspecified Tank	1965	100206
R	355m W	Tanks	1979	91743
R	355m W	Tanks	1983	91743
R	355m W	Tanks	1983	91743
R	355m W	Tanks	1988	91743
R	355m W	Tanks	1960	95408



ID	Location	Land Use	Date	Group ID
R	355m W	Tanks	1970	95408
H	355m W	Tanks	1965	102711
H	356m W	Tanks	1994	102711
H	356m SW	Tanks	1965	98181
H	356m W	Tanks	1960	102711
H	356m W	Tanks	1977	102711
H	356m SW	Tanks	1994	92291
H	356m SW	Tanks	1960	98181
H	356m SW	Tanks	1977	92291
O	363m NW	Unspecified Tank	1960	80290
O	363m NW	Tanks	1965	86571
F	368m W	Unspecified Tank	1994	100691
F	368m W	Unspecified Tank	1960	103049
F	368m W	Unspecified Tank	1970	103049
F	368m W	Unspecified Tank	1965	100691
F	369m W	Unspecified Tank	1980	100691
O	369m NW	Unspecified Tank	1960	80291
R	382m NW	Unspecified Tank	1979	94434
R	383m NW	Unspecified Tank	1960	94434
R	383m NW	Unspecified Tank	1970	94434
R	383m NW	Unspecified Tank	1965	94434
F	385m W	Unspecified Tank	1994	101042
F	385m W	Unspecified Tank	1970	101042
F	385m W	Unspecified Tank	1980	92009
F	387m W	Tanks	1965	91157
F	388m W	Unspecified Tank	1960	103029
F	388m W	Unspecified Tank	1970	103029
F	390m W	Tanks	1960	92812



ID	Location	Land Use	Date	Group ID
R	399m W	Unspecified Tank	1960	100721
R	399m W	Unspecified Tank	1965	100721
R	402m NW	Unspecified Tank	1979	98470
R	402m NW	Unspecified Tank	1983	98470
R	402m NW	Unspecified Tank	1983	98470
R	402m NW	Unspecified Tank	1988	98470
R	402m NW	Unspecified Tank	1994	89580
R	402m NW	Unspecified Tank	1970	98470
F	403m W	Unspecified Tank	1980	93861
F	403m W	Unspecified Tank	1960	89220
F	403m W	Unspecified Tank	1970	89220
F	403m W	Unspecified Tank	1994	95240
F	403m W	Unspecified Tank	1965	95240
O	404m NW	Unspecified Tank	1960	103004
S	404m SW	Tanks	1980	94012
S	404m SW	Tanks	1994	88832
S	404m SW	Tanks	1980	98026
O	405m NW	Unspecified Tank	1965	103004
S	405m SW	Tanks	1977	98026
S	409m SW	Tanks	1965	94012
S	410m SW	Tanks	1960	94012
P	411m SW	Tanks	1980	98310
P	411m SW	Tanks	1980	98310
P	411m SW	Tanks	1994	98310
P	412m SW	Tanks	1977	98310
T	413m NW	Tanks	1960	92304
T	413m NW	Tanks	1965	92304
S	415m SW	Tanks	1980	94570





ID	Location	Land Use	Date	Group ID
S	415m SW	Tanks	1980	97142
S	415m SW	Tanks	1994	103558
S	416m SW	Tanks	1977	103558
P	420m SW	Tanks	1980	89512
P	420m SW	Tanks	1980	89512
P	421m SW	Tanks	1994	89512
P	421m SW	Tanks	1977	89512
T	423m NW	Tanks	1979	91088
T	423m NW	Tanks	1980	91088
S	424m SW	Unspecified Tank	1980	80297
S	425m SW	Tanks	1980	101604
S	426m SW	Tanks	1994	101604
S	426m SW	Tanks	1977	103087
G	441m W	Unspecified Tank	1980	100036
G	442m W	Unspecified Tank	1970	100893
G	442m W	Unspecified Tank	1994	100893
G	445m W	Unspecified Tank	1980	94746
G	446m W	Unspecified Tank	1994	94746
G	446m W	Unspecified Tank	1970	94746
W	447m NW	Unspecified Tank	1960	91577
W	447m NW	Unspecified Tank	1970	91577
W	447m NW	Unspecified Tank	1979	91577
W	447m NW	Unspecified Tank	1983	91577
W	447m NW	Unspecified Tank	1983	91577
W	447m NW	Unspecified Tank	1988	91577
W	448m NW	Unspecified Tank	1965	91577
V	454m W	Unspecified Tank	1979	96836
V	454m W	Unspecified Tank	1970	96836



ID	Location	Land Use	Date	Group ID
G	458m W	Unspecified Tank	1980	93389
G	459m W	Unspecified Tank	1970	93389
G	459m W	Unspecified Tank	1994	93389
P	469m SW	Tanks	1980	101687
P	469m SW	Tanks	1980	101687
P	469m SW	Tanks	1994	89072
W	473m NW	Unspecified Tank	1979	91597
W	473m NW	Unspecified Tank	1983	91597
W	473m NW	Unspecified Tank	1983	91597
W	473m NW	Unspecified Tank	1988	91597
W	483m NW	Unspecified Tank	1979	98515
W	483m NW	Unspecified Tank	1983	96108
W	483m NW	Unspecified Tank	1983	95988
W	483m NW	Unspecified Tank	1988	94390
W	483m NW	Unspecified Tank	1994	101933
W	483m NW	Tanks	1960	88863
W	483m NW	Unspecified Tank	1970	98917
W	484m NW	Tanks	1965	88863
W	494m NW	Tanks	1970	86572

This data is sourced from Ordnance Survey / Groundsure.

## 2.3 Historical energy features

### Records within 500m

4

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 26 >](#)

ID	Location	Land Use	Date	Group ID
4	196m S	Electricity Substation	1994	44439



ID	Location	Land Use	Date	Group ID
L	252m S	Electricity Substation	1993	58711
L	253m S	Electricity Substation	1985	58711
L	254m S	Electricity Substation	1993	47082

*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**

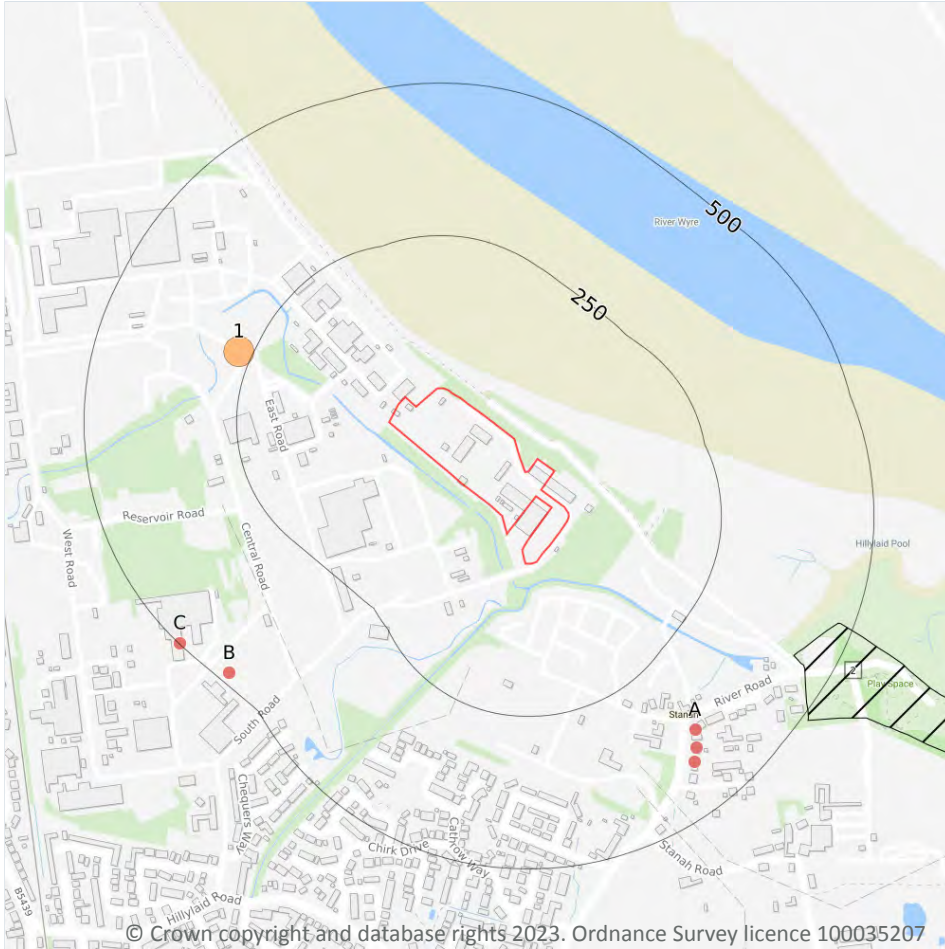
**0**

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'.

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



## 3 Waste and landfill



### 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

1

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.

Features are displayed on the Waste and landfill map on [page 42 >](#)

ID	Location	Details		
2	431m SE	Site Address: Stanah House Farm, River Road, Thornton, Lancashire Licence Holder Address: -	Waste Licence: - Site Reference: K1/02/019 Waste Type: Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: Wyre Borough Council First Recorded 31/12/1960 Last Recorded: 31/12/1970

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

### 3.5 Historical waste sites

Records within 500m

1

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

Features are displayed on the Waste and landfill map on [page 42 >](#)

ID	Location	Address	Further Details	Date
1	247m NW	Site Address: Hillhouse International Works, East Road, Thornton Cleveleys, Lancashire, FY5, N.WEST	Type of Site: Advanced Thermal Treatment Facility Planning application reference: SCR/2023/0004 Description: Scheme comprises screening opinion request for a proposed small-scale advanced thermal treatment facility. Data source: Historic Planning Application Data Type: Point	01/03/2023

*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

12

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 42 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
A	378m SE	STANNAH PUMPING STATION, RIVER ROAD, OFF STANNAH ROAD, THORNTON CLEVELEYS, FY5 5LR	WEX156853	Storing waste exemption	Not on a Farm	Storage of waste in a secure place
A	378m SE	STANNAH PUMPING STATION, RIVER ROAD, OFF STANNAH ROAD, THORNTON CLEVELEYS, FY5 5LR	WEX156853	Storing waste exemption	Not on a Farm	Storage of waste in secure containers
A	402m SE	16, RIVER ROAD, THORNTON-CLEVELEYS, FY5 5LR	WEX099791	Using waste exemption	Not on a farm	Use of depolluted end-of-life vehicles for vehicle parts
A	402m SE	16, RIVER ROAD, THORNTON-CLEVELEYS, FY5 5LR	WEX242409	Using waste exemption	Not on a farm	Use of depolluted end-of-life vehicles for vehicle parts
A	418m SE	STANNAH PUMPING STATION, RIVER ROAD, OFF STANNAH ROAD, THORNTON CLEVELEYS, FY5 5LR	WEX294951	Storing waste exemption	Not on a Farm	Storage of waste in secure containers
A	418m SE	STANNAH PUMPING STATION, RIVER ROAD, OFF STANNAH ROAD, THORNTON CLEVELEYS, FY5 5LR	WEX294951	Storing waste exemption	Not on a Farm	Storage of waste in a secure place

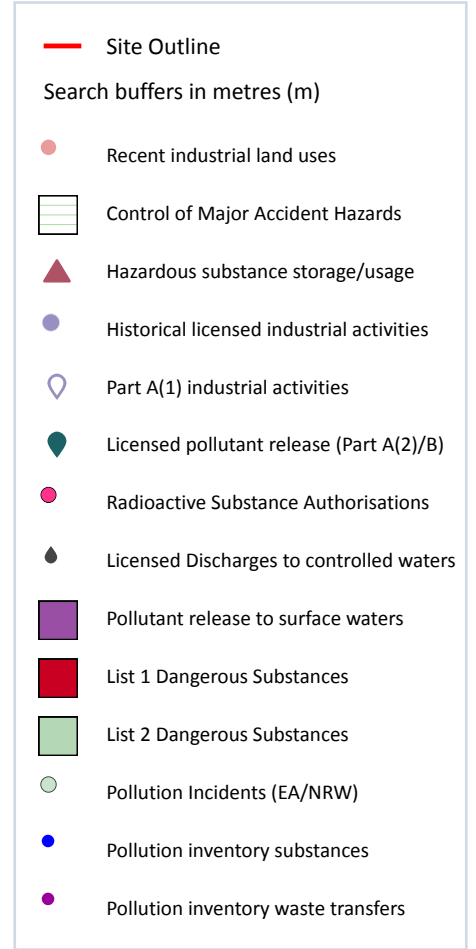
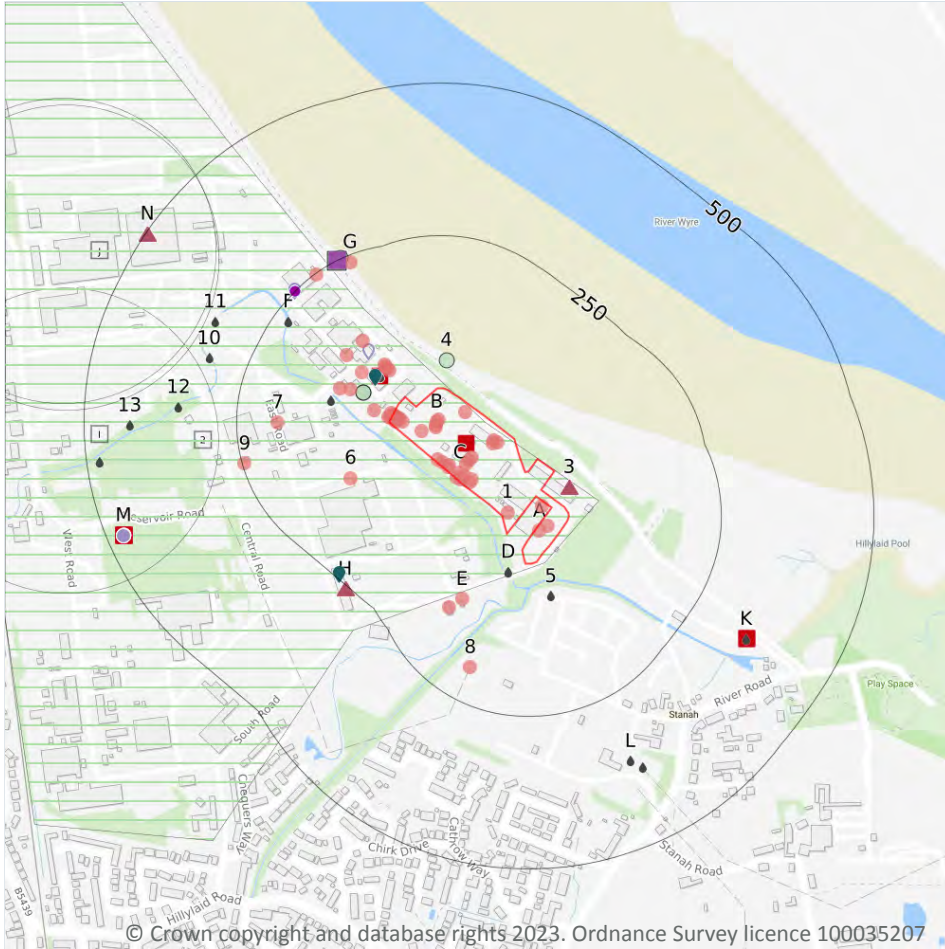


ID	Location	Site	Reference	Category	Sub-Category	Description
B	484m SW	Hillhouse Industrial Site Fleetwood Road North THORNTON-CLEVELEYS Lancashire FY5 4QD	EPR/KF0309N U/A001	Treating waste exemption	Non- Agricultural Waste Only	Dewatering using flocculants
B	484m SW	Hillhouse Industrial Site Fleetwood Road North THORNTON-CLEVELEYS Lancashire FY5 4QD	EPR/KF0309N U/A001	Using waste exemption	Non- Agricultural Waste Only	Use of waste in construction
B	484m SW	Hillhouse Industrial Site Fleetwood Road North THORNTON-CLEVELEYS Lancashire FY5 4QD	EPR/KF0309N U/A001	Using waste exemption	Non- Agricultural Waste Only	Use of waste to manufacture finished goods
C	499m SW	HILLHOUSE BUSINESS PARK FLEETWOOD ROAD NORTH LANCASHIRE FY5 4QD	EPR/EH0110R H/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in secure containers
C	499m SW	HILLHOUSE BUSINESS PARK FLEETWOOD ROAD NORTH LANCASHIRE FY5 4QD	EPR/EH0110R H/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place
C	499m SW	HILLHOUSE BUSINESS PARK FLEETWOOD ROAD NORTH LANCASHIRE FY5 4QD	EPR/EH0110R H/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of sludge

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



## 4 Current industrial land use



### 4.1 Recent industrial land uses

Records within 250m

60

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 46](#) >

ID	Location	Company	Address	Activity	Category
1	On site	Works	Lancashire, FY5	Unspecified Works Or Factories	Industrial Features
A	On site	Chimney	Lancashire, FY5	Chimneys	Industrial Features
A	On site	Business Park	Lancashire, FY5	Business Parks and Industrial Estates	Industrial Features





ID	Location	Company	Address	Activity	Category
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features



ID	Location	Company	Address	Activity	Category
B	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
C	On site	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	2m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features



ID	Location	Company	Address	Activity	Category
B	3m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	6m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
A	8m SE	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
B	32m NW	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
B	50m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	55m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	59m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	64m NW	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	80m NW	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
B	82m NW	Chimney	Lancashire, FY5	Chimneys	Industrial Features
B	97m NW	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
6	111m W	Tank	Lancashire, FY5	Tanks (Generic)	Industrial Features
B	116m NW	Works	Lancashire, FY5	Unspecified Works Or Factories	Industrial Features
B	118m NW	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
E	119m S	Mast	Lancashire, FY5	Telecommunications Features	Infrastructure and Facilities
E	144m S	Electricity Sub Station	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
7	183m W	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
8	192m S	Pylon	Lancashire, FY5	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
G	239m NW	Outfall	Lancashire, FY5	Waste Storage, Processing and Disposal	Infrastructure and Facilities
9	246m W	Electricity Sub Stations	Lancashire, FY5	Electrical Features	Infrastructure and Facilities
G	247m NW	Electricity Sub Station	Lancashire, FY5	Electrical Features	Infrastructure and Facilities

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

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

Open, closed, under development and obsolete petrol stations.

*This data is sourced from Experian.*

## 4.3 Electricity cables

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

High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*

## 4.4 Gas pipelines

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

High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*

## 4.5 Sites determined as Contaminated Land

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

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

4

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Company	Address	Operational status	Tier
2	On site	<b>Victrex Manufacturing Limited</b>	<b>Victrex Manufacturing Limited, Thornton Cleveleys, Hillhouse International, Thornton Cleveleys, Lancashire, FY5 4QD</b>	<b>Current COMAH Site</b>	<b>COMAH Lower Tier Operator</b>
I	280m W	Victrex Manufacturing Limited	Victrex Manufacturing Limited, Thornton Cleveleys, Hillhouse International, Thornton Cleveleys, Lancashire, FY5 4QD	Current COMAH Site	COMAH Lower Tier Operator
J	343m NW	AGC Chemicals Europe Limited	AGC Chemicals Europe Limited, Hillhouse, PO Box 4, York House, Hillhouse International, Thornton Cleveleys, Lancashire, FY5 4QD	Current COMAH Site	COMAH Lower Tier Operator
J	353m NW	Victrex Manufacturing Limited	Victrex Manufacturing Limited, Thornton Cleveleys, Hillhouse International, Thornton Cleveleys, Lancashire, FY5 4QD	Current COMAH Site	COMAH Lower Tier Operator

*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

5

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)



ID	Location	Details	
3	30m E	Application reference number: No Details Application status: Approved Application date: No Details Address: Vinnolit Hillhouse Limited, Vinnolit Hillhouse, Bourne Road, Thornton Cleveleys, Blackpool, Wyre Borough Council, England, FY5 4QD	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details
H	255m SW	Application reference number: DHSC 2 5792/45882 Application status: Historical Consent Application date: 19/10/1992 Address: Vinnolit pka European Vinyls Corporation (UK) Ltd, PVC 9 Hillhouse International, Thornton Cleveleys, Lancs, FY5 4QD	Details: Vinyl Chloride (250 tonnes) Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
H	255m SW	Application reference number: 04/01410/HAZ Application status: Historical Consent Application date: 22/11/2004 Address: Zeneca Resins, PVC 9 Plant, Hillhouse International Site, Fleetwood Road, North Thornton-Cleveleys, FY5 4QD	Details: Vinyl Chloride Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
N	497m NW	Application reference number: 13/00555/HAZ Application status: Historical Consent Application date: 26/07/2013 Address: Victrex Manufacturing Ltd, Hillhouse International, Fleetwood Road North, Thornton Cleveleys, Lancashire, FY5 4QD	Details: Hazardous Substances Consent application for removal of condition imposed on previous application 11/00338/HAZ associated with the manufacture of polyaryletherketone polymers Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
N	497m NW	Application reference number: 11/00338/HAZ Application status: Approved Application date: 09/05/2011 Address: Victrex Manufacturing Limited, Hillhouse Technology Centre, Thornton Cleveleys, Blackpool, Wyre Borough Council, England, FY5 4QD	Details: Application for Hazardous Substances Consent associated with the manufacture of Polyaryletherketone polymers Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

**Records within 500m**

**4**

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)



ID	Location	Details	
M	473m W	Operator: Astrazeneca UK Ltd Address: Zeneca Resins Ltd, Hillhouse International, Thornton-cleveleys, Lancashire, FY5 4ZR Process: Manufacture And Use Of Organic Chemicals Permit Number: AK4125	Original Permit Number: IPCAIRAPP Date Approved: 31-3-1995 Effective Date: 1-5-1995 Status: Superseded By Variation
M	473m W	Operator: Imperial Chemical Industries Plc Address: PO Box 4, York House, Hillhouse International, Thornton-cleveleys, Blackpool, FY5 4QD Process: Gasification And Associated Processes Permit Number: AM4720	Original Permit Number: IPCAIRAPP Date Approved: 12-4-1995 Effective Date: 1-5-1995 Status: Superseded By Variation
M	473m W	Operator: Imperial Chemical Industries Plc Address: PO Box 4, York House, Hillhouse International, Thornton-cleveleys, Blackpool, FY5 4QD Process: Gasification And Associated Processes Permit Number: AU3626	Original Permit Number: IPCMINVAR Date Approved: 21-12-1995 Effective Date: 29-12-1995 Status: Revoked
M	473m W	Operator: Astrazeneca UK Ltd Address: Zeneca Resins Ltd, Hillhouse International, Thornton-cleveleys, Lancashire, FY5 4ZR Process: Manufacture And Use Of Organic Chemicals Permit Number: BC6560	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked

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

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

Records within 500m

10

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

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Details	
C	On site	Operator: INEOS VINYLs UK LIMITED Installation Name: PVC9 Plant Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS Permit Number: BU5534IQ Original Permit Number: BU5534IQ	EPR Reference: EPR/BU5534IQ Issue Date: 22/01/2007 Effective Date: 22/01/2007 Last date noted as effective: 08/11/2023 Status: Superseded



ID	Location	Details	
C	On site	<b>Operator: VINNOLIT HILLHOUSE LIMITED</b> <b>Installation Name: Vinnolit Hillhouse Ltd - EPR/TP3833GG</b> <b>Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS</b> <b>Permit Number: TP3833GG</b> <b>Original Permit Number: TP3833GG</b>	<b>EPR Reference: EPR/TP3833GG</b> <b>Issue Date: 04/11/2021</b> <b>Effective Date: 04/11/2021</b> <b>Last date noted as effective: 08/11/2023</b> <b>Status: Surrendered</b>
C	On site	<b>Operator: Vinnolit Hillhouse Ltd</b> <b>Installation Name: Vinnolit Hillhouse Ltd - EPR/TP3833GG</b> <b>Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS</b> <b>Permit Number: EP3109MW</b> <b>Original Permit Number: TP3833GG</b>	<b>EPR Reference: -</b> <b>Issue Date: -</b> <b>Effective Date: 04/11/2021</b> <b>Last date noted as effective: 21/03/2023</b> <b>Status: Surrender Effective</b>
B	95m NW	<b>Operator: Victrex Manufacturing Limited</b> <b>Installation Name: Victrex Polymer Production Hillhouse EPR/BU5640IA</b> <b>Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS</b> <b>Permit Number: BU5640IA</b> <b>Original Permit Number: BU5640IA</b>	<b>EPR Reference: EA/EPR/BU5640IA/V002</b> <b>Issue Date: 03/11/2006</b> <b>Effective Date: 03/11/2006</b> <b>Last date noted as effective: 21/03/2023</b> <b>Status: Superseded</b>
B	95m NW	<b>Operator: Victrex Manufacturing Limited</b> <b>Installation Name: Victrex Polymer Production Hillhouse EPR/BU5640IA</b> <b>Process: ORGANIC CHEMICALS; HYDROCARBONS EG AROMATICS</b> <b>Permit Number: BU5640IA</b> <b>Original Permit Number: BU5640IA</b>	<b>EPR Reference: EA/EPR/BU5640IA/V002</b> <b>Issue Date: 03/11/2006</b> <b>Effective Date: 03/11/2006</b> <b>Last date noted as effective: 21/03/2023</b> <b>Status: Superseded</b>
B	95m NW	<b>Operator: Victrex Manufacturing Limited</b> <b>Installation Name: Victrex Polymer Production Hillhouse EPR/BU5640IA</b> <b>Process: RECOVERY OF WASTE; BY DISTILLATION OF OIL/ORGANIC SOLVENT</b> <b>Permit Number: BU5640IA</b> <b>Original Permit Number: BU5640IA</b>	<b>EPR Reference: EA/EPR/BU5640IA/V002</b> <b>Issue Date: 03/11/2006</b> <b>Effective Date: 03/11/2006</b> <b>Last date noted as effective: 21/03/2023</b> <b>Status: Superseded</b>
G	251m NW	<b>Operator: VICTREX MANUFACTURING LIMITED</b> <b>Installation Name: Hillhouse International- Victrex Manufacturing Limited EPR/BU5640IA</b> <b>Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS</b> <b>Permit Number: BU5640IA</b> <b>Original Permit Number: BU5640IA</b>	<b>EPR Reference: EPR/BU5640IA</b> <b>Issue Date: 21/11/2016</b> <b>Effective Date: 21/11/2016</b> <b>Last date noted as effective: 08/11/2023</b> <b>Status: Effective</b>





ID	Location	Details	
G	251m NW	Operator: VICTREX MANUFACTURING LIMITED Installation Name: Hillhouse International- Victrex Manufacturing Limited Process: ASSOCIATED PROCESS Permit Number: BU5640IA Original Permit Number: BU5640IA	EPR Reference: EPR/BU5640IA Issue Date: 21/11/2016 Effective Date: 21/11/2016 Last date noted as effective: 08/11/2023 Status: Effective
G	251m NW	Operator: Victrex Manufacturing Limited Installation Name: Hillhouse International- Victrex Manufacturing Limited Process: ASSOCIATED PROCESS Permit Number: QP3338DB Original Permit Number: BU5640IA	EPR Reference: - Issue Date: 21/11/2016 Effective Date: 21/11/2016 Last date noted as effective: 21/03/2023 Status: Effective
G	251m NW	Operator: Victrex Manufacturing Limited Installation Name: Hillhouse International- Victrex Manufacturing Limited Process: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS Permit Number: QP3338DB Original Permit Number: BU5640IA	EPR Reference: - Issue Date: 21/11/2016 Effective Date: 21/11/2016 Last date noted as effective: 21/03/2023 Status: Effective

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

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

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

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Address	Details	
B	59m NW	BOC Ltd, Hillhouse International Limited, Thornton Cleveleys, FY5 4QD	Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
B	59m NW	Victrex Manufacturing Ltd, Hillhouse International, Po Box 4, Thornton-Cleveleys, Lancashire, FY5 4QD	Process: Chemical & Acid Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

ID	Location	Address	Details	
H	244m SW	Ineos Vinyls, Hillhouse International, Po Box 4. Thornton-Cleveleys, Lancashire, FY5 4QD	Process: Chemical & Acid Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

<b>Records within 500m</b>	<b>2</b>
----------------------------	----------

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

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Address	Details	
M	473m W	Ici Chemicals And Polymers Ltd, Hillhouse Site, Thornton-cleveleys, Lancashire, FY5 4QD	Operator: Ici Chemicals And Polymers Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AC9076 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled
M	473m W	Ici Chemicals And Polymers Ltd, Hillhouse Site, Thornton-cleveleys, Lancashire, FY5 4QD	Operator: Ici Chemicals And Polymers Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AC9084 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled

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

## 4.13 Licensed Discharges to controlled waters

<b>Records within 500m</b>	<b>47</b>
----------------------------	-----------

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

Features are displayed on the Current industrial land use map on [page 46 >](#)



ID	Location	Address	Details	
D	31m S	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: 017290086 Permit Version: 2 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/09/1993 Revocation Date: 03/06/1996
D	31m S	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: 017290086 Permit Version: 3 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 04/06/1996 Revocation Date: 23/07/1996
D	31m S	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: 017290086 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 18/08/1979 Revocation Date: 06/09/1993
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 10 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/06/1996 Revocation Date: 02/09/1996
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 10 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/06/1996 Revocation Date: 02/09/1996
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 6 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/06/1993 Revocation Date: 08/02/1994
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 9 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/03/1996 Revocation Date: 06/06/1996
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 8 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/06/1995 Revocation Date: 06/03/1996



ID	Location	Address	Details	
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 11 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 03/09/1996 Revocation Date: 20/01/1999
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 8 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/06/1995 Revocation Date: 06/03/1996
B	53m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 017290033 Permit Version: 12 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 21/01/1999 Effective Date: 21/01/1999 Revocation Date: 17/03/2004
B	53m NW	ROYLES BROOK OUTFALL NO 47, HILLHOUSE INTERNATIONAL, THORTON CLEVELEYS, FLEETWOOD, LANCASHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 017290385 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: SURRENDERED UNDER EPR 2010 Issue date: 21/01/1999 Effective Date: 21/01/1999 Revocation Date: 31/08/2017
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 9 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/03/1996 Revocation Date: 06/06/1996
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 7 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1994 Revocation Date: 26/06/1995
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 7 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1994 Revocation Date: 26/06/1995
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 6 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/06/1993 Revocation Date: 08/02/1994



ID	Location	Address	Details	
B	53m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 017290033 Permit Version: 11 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 03/09/1996 Revocation Date: 20/01/1999
5	61m SE	INGOL GOLF CENTRE SWO, TENTERTON HALL, INGOL, PRESTON, LANCASHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 017190205 Permit Version: 1 Receiving Water: TRIB SAVICK BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 13/08/1986 Revocation Date: 01/11/1994
B	101m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
F	225m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 8 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/06/1995 Revocation Date: 06/03/1996
F	225m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 7 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1994 Revocation Date: 26/06/1995
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 2 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1982 Revocation Date: 08/09/1983
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 1 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1980 Revocation Date: 31/12/1981



ID	Location	Address	Details	
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 5 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1993 Revocation Date: 07/06/1993
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 3 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/09/1983 Revocation Date: 17/01/1988
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 017290034 Permit Version: 1 Receiving Water: RIVER WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 18/08/1979 Revocation Date: 07/06/1993
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 6 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/06/1993 Revocation Date: 08/02/1994
G	249m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE & TRADE COMBINED - UNSPECIFIED Permit Number: 017290033 Permit Version: 12 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 21/01/1999 Effective Date: 21/01/1999 Revocation Date: 17/03/2004
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 017290034 Permit Version: 2 Receiving Water: RIVER WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/06/1993 Revocation Date: 03/08/1993
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 7 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 09/02/1994 Revocation Date: 26/06/1995



ID	Location	Address	Details	
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 4 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 18/01/1988 Revocation Date: 08/02/1993
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 9 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/03/1996 Revocation Date: 06/06/1996
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 10 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 07/06/1996 Revocation Date: 02/09/1996
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 11 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 03/09/1996 Revocation Date: 20/01/1999
G	249m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 017290033 Permit Version: 8 Receiving Water: WYRE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 27/06/1995 Revocation Date: 06/03/1996
G	249m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE & TRADE COMBINED - UNSPECIFIED Permit Number: 017290033 Permit Version: 13 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 18/03/2004 Effective Date: 18/03/2004 Revocation Date: 30/07/2008
G	249m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: 017290033 Permit Version: 12 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 21/01/1999 Effective Date: 21/01/1999 Revocation Date: 17/03/2004



ID	Location	Address	Details	
G	249m NW	HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: 017290033 Permit Version: 14 Receiving Water: WYRE ESTUARY	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 31/07/2008 Effective Date: 31/07/2008 Revocation Date: -
10	313m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
11	329m NW	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
12	346m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
K	351m SE	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290100 Permit Version: 1 Receiving Water: HILLYLAID POOL- OLD COURSE	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
L	360m SE	PRESTON DOCK ESTATE, PRESTON, LANCASHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 017190217 Permit Version: 1 Receiving Water: RIVER RIBBLE	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/12/1986 Revocation Date: 01/07/1991
L	378m SE	PRESTON DOCK ESTATE, PRESTON, LANCASHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 017190217 Permit Version: 1 Receiving Water: RIVER RIBBLE	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 08/12/1986 Revocation Date: 01/07/1991





ID	Location	Address	Details	
13	425m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
I	478m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991
I	479m W	MAIN OUTFALL, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 017290099 Permit Version: 1 Receiving Water: ROYLES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 17/09/1983 Revocation Date: 22/03/1991

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

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

Records within 500m

4

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

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Address	Details	
G	249m NW	THORNTON FACILITIES MANAGEMENT LTD, ICI HILLHOUSE, THORNTON, BLACKPOOL, LANCASHIRE	Permit Number: 017290033 Permit Version: 12 Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Sewage disposal works - other	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Catchment: - Approval Date: 21/01/1999
G	249m NW	THORNTON FACILITIES MANAGEMENT LTD, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Permit Number: 017290033 Permit Version: 13 Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Basic Ind. Chemicals Inorganic	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Catchment: - Approval Date: 18/03/2004



ID	Location	Address	Details	
G	249m NW	THORNTON FACILITIES MANAGEMENT LTD, ICI HILLHOUSE, THORNTON, BLACKPOOL, LANCASHIRE	Permit Number: 017290033 Permit Version: 12 Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Sewage disposal works - other	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Catchment: - Approval Date: 21/01/1999
G	249m NW	THORNTON FACILITIES MANAGEMENT LTD, HILLHOUSE INT. BUSINESS CENTRE, THORNTON CLEVELEYS, LANCASHIRE, FY5 4QD	Permit Number: 017290033 Permit Version: 13 Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Basic Ind. Chemicals Organic	Effluent Type: SEWAGE & TRADE COMBINED - UNSPECIFIED Catchment: - Approval Date: 18/03/2004

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

## 4.15 Pollutant release to public sewer

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

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

<b>Records within 500m</b>	<b>15</b>
----------------------------	-----------

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
<b>C</b>	<b>On site</b>	<b>Ineos Vinyls Uk Limited, Pvc9 Plant, Fy5 4qd</b>	<b>Active</b>	<b>Wyre Estuary</b>	<b>Mercury (other)</b>
B	53m NW	Ici Hillhouse No 47	Active	Wyre Estuary	Mercury (other)
G	250m NW	Ici Hillhouse Main Outfall	Active	-	-
G	250m NW	Ici Hillhouse Main Outfall	Active	-	-
G	250m NW	Ici Hillhouse Main Outfall	Not Active	Wyre Estuary	Mercury (other)
K	351m SE	Ici Mdi Lagoon	Active	-	-



ID	Location	Name	Status	Receiving Water	Authorised Substances
K	351m SE	Ici Mdi Lagoon	Active	-	-
K	351m SE	Ici Mdi Lagoon	Active	Wyre Estuary	Carbon tetrachloride, Chloroform
M	473m W	Asahi Glass Fluoropolymers Uk, Hillhouse International	Not Active	Trd_notcons	Mercury (other)
M	473m W	European Vinyls Corporation (uk) Ltd - Treatment Plant	Not Active	Wyre Estuary, River Wyre	Carbon tetrachloride, Chloroform, 1,2-dichloroethane
M	473m W	European Vinyls Corporation (uk) Ltd - Treatment Plant	Not Active	Wyre Estuary, River Wyre	Carbon tetrachloride, Chloroform, 1,2-dichloroethane
M	473m W	Ici Chemical & Polymers	Not Active	Wyre Estuary, River Wyre	Mercury (other)
M	473m W	Asahi Glass Fluoropolymers Uk, Hillhouse International	Not Active	Trd_notcons	-
M	473m W	European Vinyls Corporation (uk) Ltd	Not Active	Wyre Estuary, River Wyre	1,2-dichloroethane
M	473m W	Ici Chemical & Polymers	Not Active	Wyre Estuary, River Wyre	-

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

## 4.17 List 2 Dangerous Substances

**Records within 500m**

**2**

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
G	250m NW	I.c.i. Chemicals & Polymers Ltd, Hillhouse Sewage/trade	Active	Wyre Estuary	Copper
G	250m NW	Ici Chemicals & Polymers, Hillhouse Main Outfall	Active	Wyre Estuary	Copper

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



## 4.18 Pollution Incidents (EA/NRW)

Records within 500m

4

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 46](#) >

ID	Location	Details	
4	46m N	Incident Date: 01/01/2005 Incident Identification: 285281 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	59m NW	Incident Date: 28/08/2018 Incident Identification: 1647147 Pollutant: Inorganic Chemicals/Products Pollutant Description: Alkalis	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
B	59m NW	Incident Date: 28/08/2018 Incident Identification: 1647147 Pollutant: Inorganic Chemicals/Products Pollutant Description: Acids	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
G	252m NW	Incident Date: 14/09/2003 Incident Identification: 189693 Pollutant: Contaminated Water Pollutant Description: Chemically Contaminated Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) 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

5

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.

Features are displayed on the Current industrial land use map on [page 46](#) >

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:



Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Fluorides - as F	2000kg	226769kg

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Fluorides - as F	2000kg	156685kg

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Particulate matter - PM2.5	1000kg	Below Reporting Threshold
Air	Particulate matter - total	10000kg	Below Reporting Threshold
Controlled Waters	Mercury	0.1kg	Below Reporting Threshold
Air	Sulphur oxides (SO2 and SO3) as SO2	100000kg	Below Reporting Threshold
Controlled Waters	Cadmium	1kg	Below Reporting Threshold
Wastewater	Total organic carbon (TOC)	50000kg	Below Reporting Threshold
Air	Carbon monoxide	100000kg	Below Reporting Threshold
Air	Nitrogen oxides (NO and NO2) as NO2	100000kg	Below Reporting Threshold
Air	Fluorine and inorganic fluorine compounds - as HF	1000kg	Below Reporting Threshold
Air	Non-methane volatile organic compounds (NMVOCs)	10000kg	Below Reporting Threshold
Air	Particulate matter - PM10	1000kg	Below Reporting Threshold
Controlled Waters	Phosphorus - as total P	5000kg	Below Reporting Threshold



ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Carbon dioxide	10000000kg	22808000kg

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Total organic carbon (TOC)	50000kg	50451kg

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

## 4.20 Pollution inventory waste transfers

<b>Records within 500m</b>	<b>1</b>
----------------------------	----------

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.

Features are displayed on the Current industrial land use map on [page 46 >](#)

ID: G, Location: 251m NW, Permit: BU5640IA  
 Operator: Victrex Manufacturing Limited  
 Activity: ORGANIC CHEMICALS; PLASTIC MATERIALS EG POLYMERS  
 Address: Victrex Technology Centre Hillhouse Industrial Site Fleetwood Road North Lancashire FY5 4QD  
 Sector: Chemicals, Sub-sector: Chemicals  
 Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D10	Incineration on Land	57.5	absolute value	07 02 13	waste plastic	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	118	absolute value	07 02 13	waste plastic	No
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	64.7	absolute value	15 01 01	paper and cardboard packaging	No
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	10.3	absolute value	15 01 03	wooden packaging	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	15.9	absolute value	15 01 06	mixed packaging	No
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	8.4	absolute value	16 03 04	inorganic wastes other than those mentioned in 16 03 03	No
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	1241.2	absolute value	16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	10.2	absolute value	17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	No



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	116.6	absolute value	20 01 38	wood other than that mentioned in 20 01 37	No
R4	Recycling/reclamation of metals and metal compounds	49.5	absolute value	20 01 40	metals	No
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	37.9	absolute value	20 03 01	mixed municipal waste	No
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	620	absolute value	20 03 04	septic tank sludge	No
D10	Incineration on Land	5.74	absolute value	07 02 04	other organic solvents, washing liquids and mother liquors	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	11	absolute value	07 02 04	other organic solvents, washing liquids and mother liquors	Yes
D10	Incineration on Land	136.4	absolute value	07 02 08	other still bottoms and reaction residues	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	93.4	absolute value	07 02 08	other still bottoms and reaction residues	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	4.5	absolute value	07 04 04	other organic solvents, washing liquids and mother liquors	Yes





Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R9	Oil e-refining or other reuses of oil	7.6	absolute value	13 03 07	mineral-based non-chlorinated insulating and heat transmission oils	Yes
D10	Incineration on Land	12.4	absolute value	13 03 08	synthetic insulating and heat transmission oils	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	4	absolute value	13 03 08	synthetic insulating and heat transmission oils	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	14.3	absolute value	13 03 08	synthetic insulating and heat transmission oils	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	187.8	absolute value	13 03 08	synthetic insulating and heat transmission oils	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	177.7	absolute value	13 05 03	interceptor sludges	Yes
D10	Incineration on Land	32.1	absolute value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	4.3	absolute value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	8.9	absolute value	15 01 10	packaging containing residues of or contaminated by dangerous substances	Yes



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D10	Incineration on Land	4.9	absolute value	15 02 02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	Yes
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.3	absolute value	15 02 02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.2	absolute value	16 02 13	discarded equipment containing hazardous components (2) other than those mentioned in 16 02 09 to 16 02 12	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbers D1 to D12 (eg evaporation, drying, calcination, etc.)	0.2	absolute value	16 05 06	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	Yes
D10	Incineration on Land	15.2	absolute value	16 05 07	discarded inorganic chemicals consisting of or containing dangerous substances	Yes
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	3.2	absolute value	16 05 07	discarded inorganic chemicals consisting of or containing dangerous substances	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbers D1 to D12 (eg evaporation, drying, calcination, etc.)	0.5	absolute value	16 05 07	discarded inorganic chemicals consisting of or containing dangerous substances	Yes
D10	Incineration on Land	51.7	absolute value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	Yes



Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	14.8	absolute value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	Yes
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 (eg evaporation, drying, calcination, etc.)	8.3	absolute value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	Yes

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

## 4.21 Pollution inventory radioactive waste

**Records within 500m**

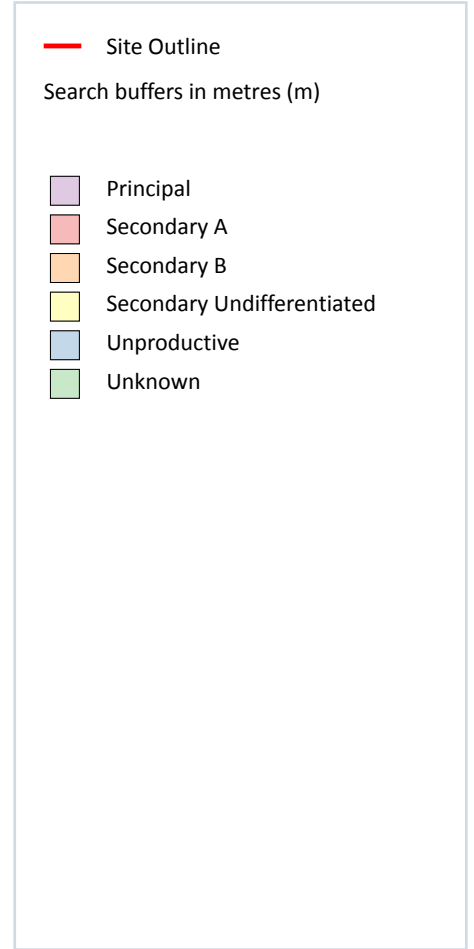
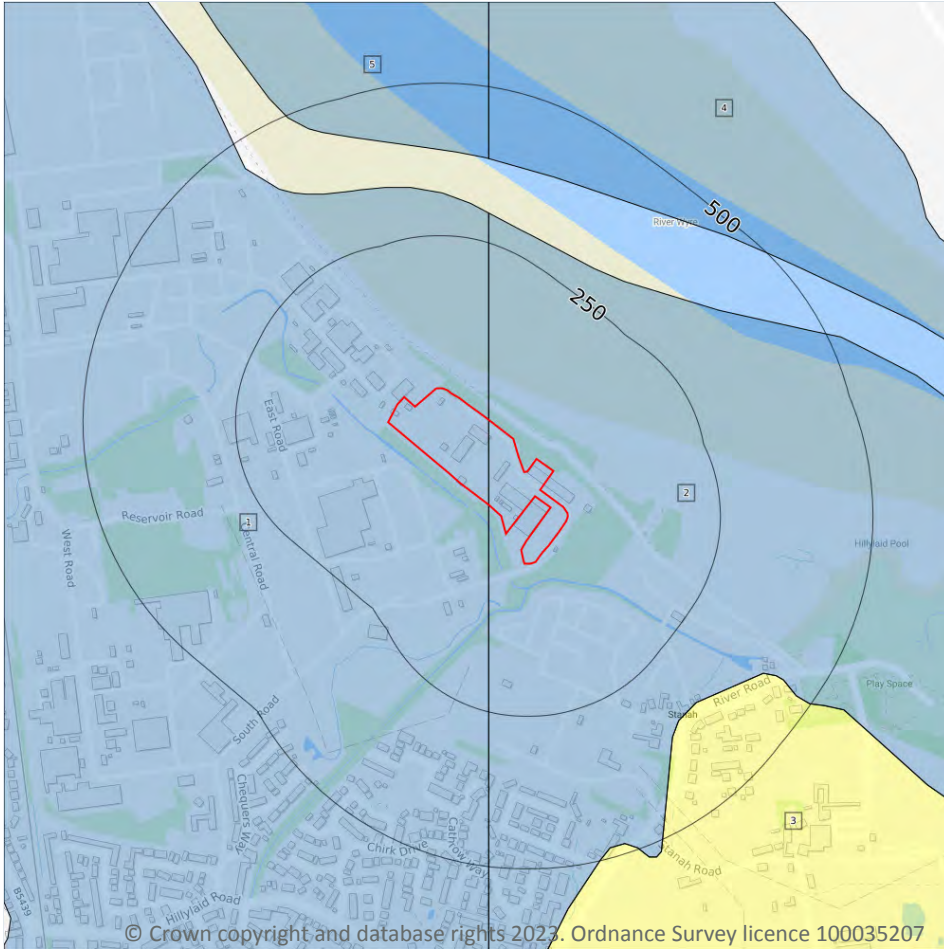
**0**

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



### 5.1 Superficial aquifer

Records within 500m

5

Aquifer status of groundwater held within superficial geology.

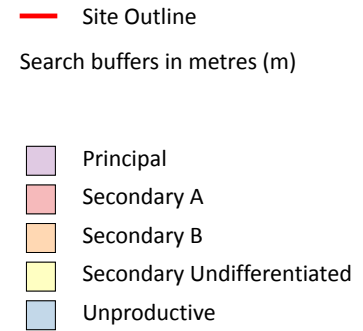
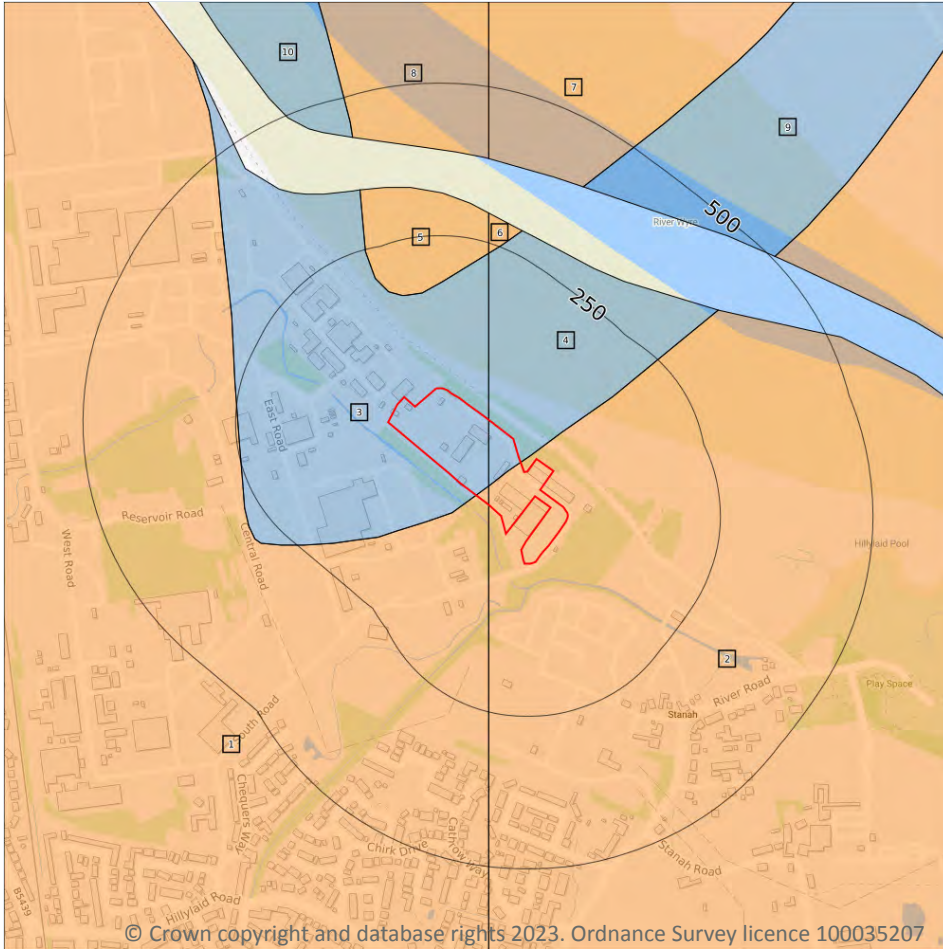
Features are displayed on the Hydrogeology map on [page 74 >](#)

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

ID	Location	Designation	Description
3	349m SE	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
4	383m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
5	384m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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

## Bedrock aquifer



### 5.2 Bedrock aquifer

Records within 500m

10

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 76](#) >

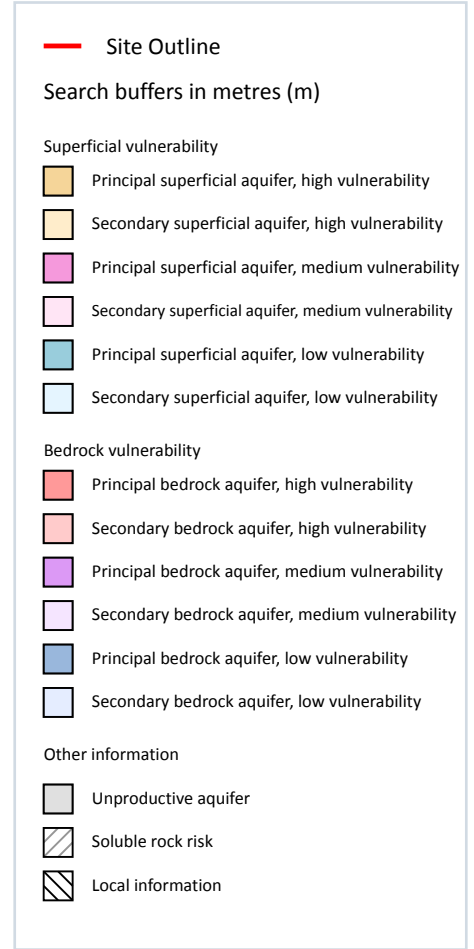
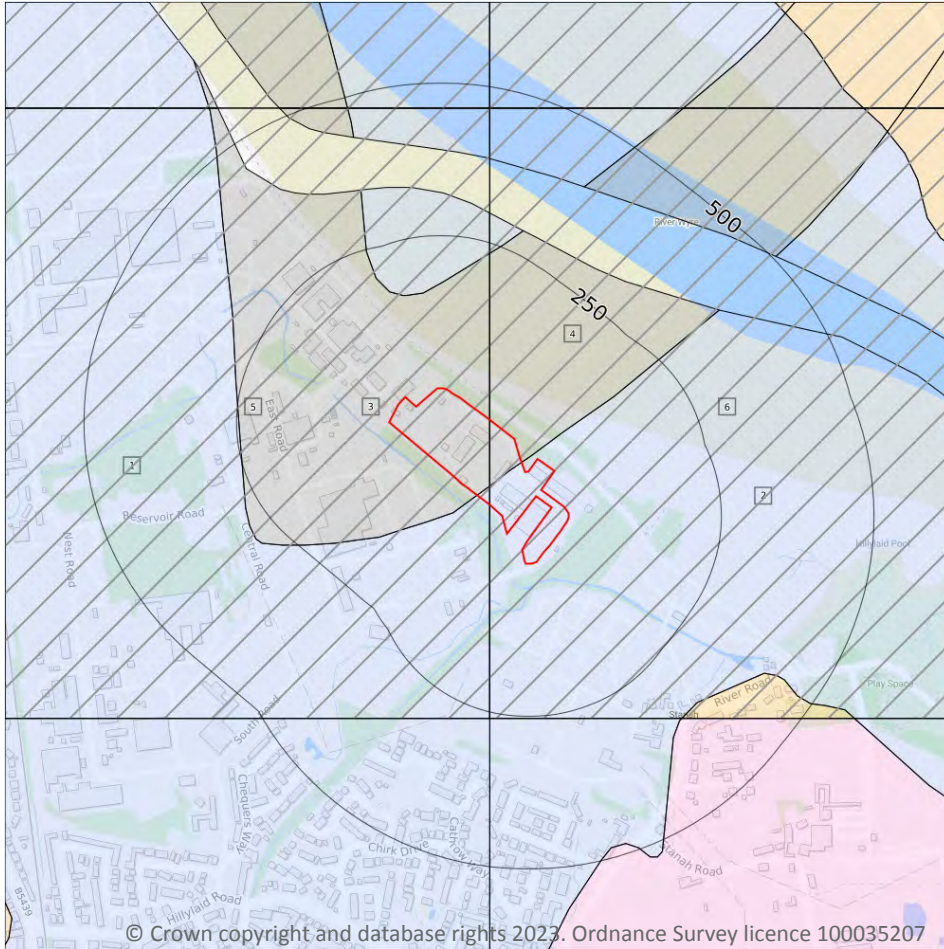
ID	Location	Designation	Description
1	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
2	On site	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

ID	Location	Designation	Description
3	On site	Unproductive	<b>These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow</b>
4	On site	Unproductive	<b>These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow</b>
5	158m N	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
6	234m N	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
7	383m N	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
8	384m N	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
9	401m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
10	434m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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



## Groundwater vulnerability



### 5.3 Groundwater vulnerability

Records within 50m

4

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 78 >](#)





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	<b>Summary Classification:</b> Secondary bedrock aquifer - Low Vulnerability <b>Combined classification:</b> Productive Bedrock Aquifer, Unproductive Superficial Aquifer	<b>Leaching class:</b> High <b>Infiltration value:</b> >70% <b>Dilution value:</b> 300-550mm/year	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Thickness:</b> >10m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> High	<b>Vulnerability:</b> Low <b>Aquifer type:</b> Secondary <b>Flow mechanism:</b> Well connected fractures
2	On site	<b>Summary Classification:</b> Secondary bedrock aquifer - Low Vulnerability <b>Combined classification:</b> Productive Bedrock Aquifer, Unproductive Superficial Aquifer	<b>Leaching class:</b> High <b>Infiltration value:</b> >70% <b>Dilution value:</b> 300-550mm/year	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Thickness:</b> >10m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Low <b>Aquifer type:</b> Secondary <b>Flow mechanism:</b> Well connected fractures
3	On site	<b>Summary Classification:</b> Unproductive aquifer (may have productive aquifer beneath) <b>Combined classification:</b> Unproductive Bedrock Aquifer, Unproductive Superficial Aquifer	<b>Leaching class:</b> High <b>Infiltration value:</b> >70% <b>Dilution value:</b> 300-550mm/year	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Thickness:</b> >10m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> High	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures
4	On site	<b>Summary Classification:</b> Unproductive aquifer (may have productive aquifer beneath) <b>Combined classification:</b> Unproductive Bedrock Aquifer, Unproductive Superficial Aquifer	<b>Leaching class:</b> High <b>Infiltration value:</b> >70% <b>Dilution value:</b> 300-550mm/year	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Thickness:</b> >10m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well 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

### Records on site

2

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
5	Very significant soluble rocks are likely to be present with a high possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, especially in adverse conditions such as concentrated surface or subsurface water flow.	28.999999999999996%



ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
6	<b>Very significant soluble rocks are likely to be present with a high possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, especially in adverse conditions such as concentrated surface or subsurface water flow.</b>	<b>23.0%</b>

*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

### 5.6 Groundwater abstractions

Records within 2000m

0

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.

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

### 5.7 Surface water abstractions

Records within 2000m

0

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.

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

### 5.8 Potable abstractions

Records within 2000m

0

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.

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

### 5.9 Source Protection Zones

Records within 500m

0

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

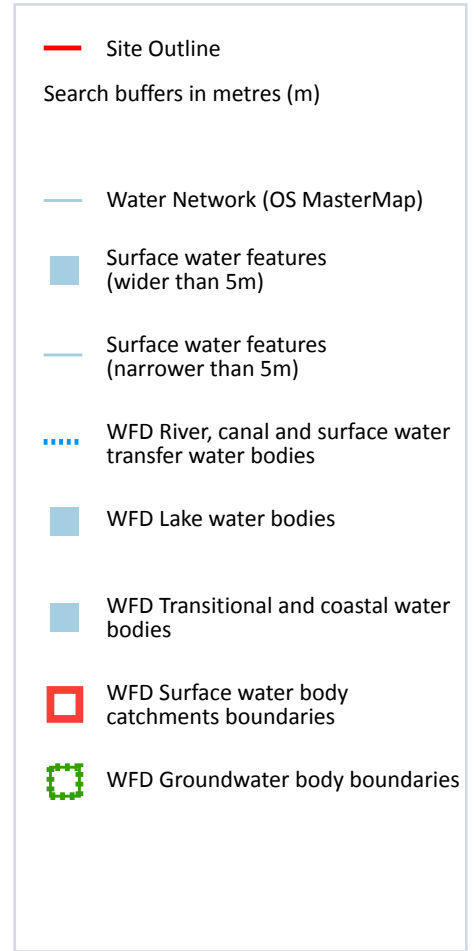
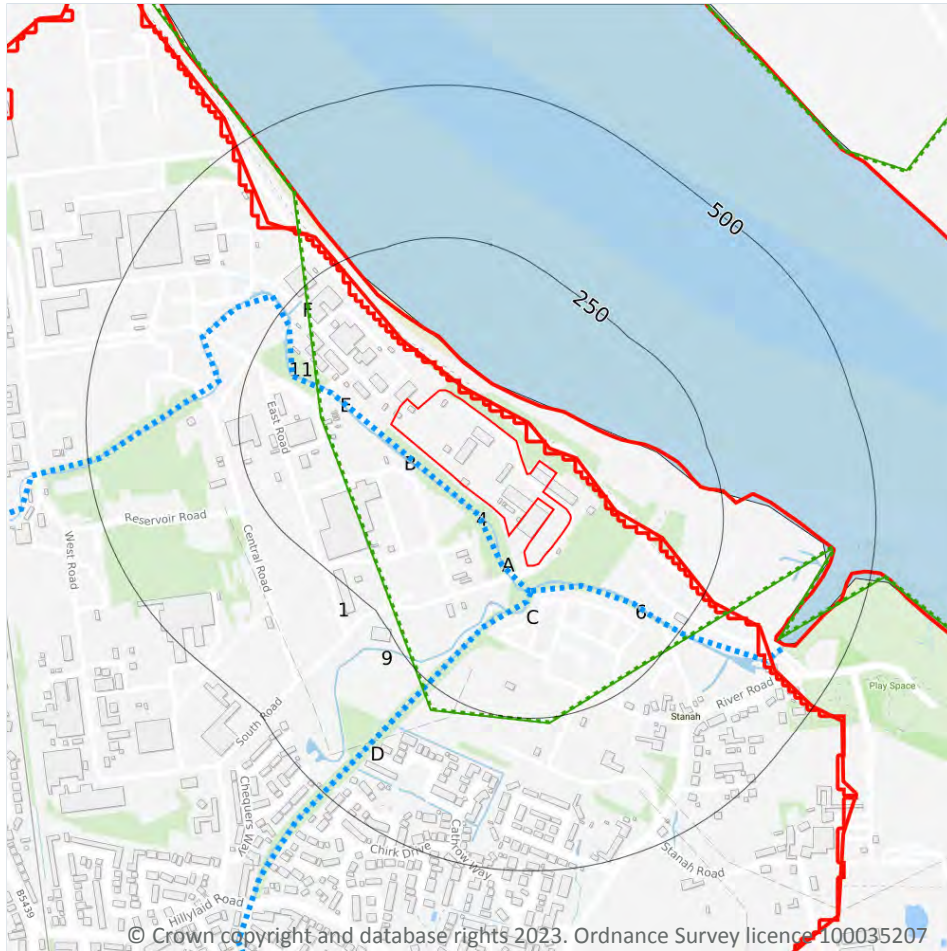
0

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



### 6.1 Water Network (OS MasterMap)

Records within 250m

17

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 83](#) >

ID	Location	Type of water feature	Ground level	Permanence	Name
A	21m S	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
B	23m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	23m S	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
6	33m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
C	41m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
9	80m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
C	80m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
C	82m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
D	83m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Hillylaid Pool
E	96m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	98m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	103m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
11	128m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	236m NW	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
F	236m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	236m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	237m NW	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

### Records within 250m

7

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 83 >](#)

This data is sourced from the Ordnance Survey.

## 6.3 WFD Surface water body catchments

### Records on site

1

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 83 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Hillylaid Pool - Main Dyke	GB112072066160	Fleetwood Peninsula Trib	Wyre

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



## 6.4 WFD Surface water bodies

<b>Records identified</b>	<b>2</b>
---------------------------	----------

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 83](#) >

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
3	21m SW	River	Hillylaid Pool - Main Dyke	<a href="#">GB112072066160</a> ↗	Moderate	Fail	Moderate	2019
7	51m N	Transi	WYRE	<a href="#">GB531207212200</a> ↗	Poor	Fail	Poor	2019

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

## 6.5 WFD Groundwater bodies

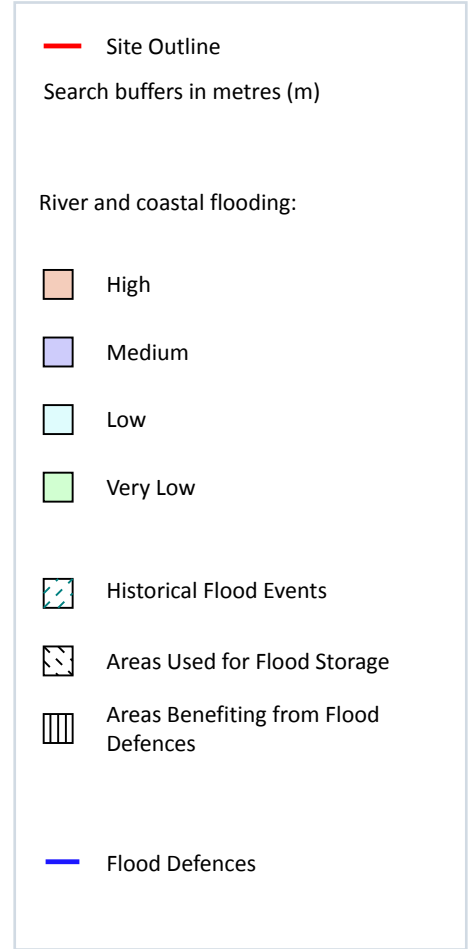
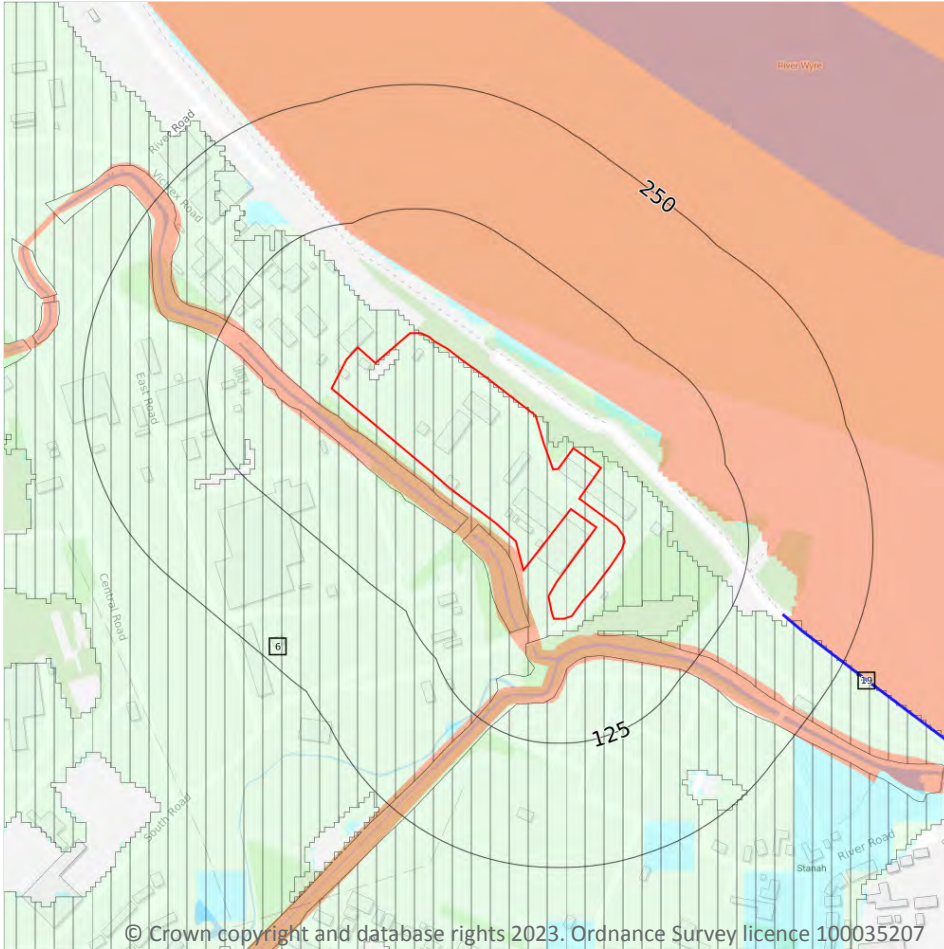
<b>Records on site</b>	<b>0</b>
------------------------	----------

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.

*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

24

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).

Features are displayed on the River and coastal flooding map on [page 87 >](#)

Distance	Flood risk category
<b>On site</b>	<b>High</b>
0 - 50m	High

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

## 7.2 Historical Flood Events

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

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

<b>Records within 250m</b>	<b>1</b>
----------------------------	----------

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.

Features are displayed on the River and coastal flooding map on [page 87 >](#)

ID	Location	Update
19	174m SE	08/11/2022

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

## 7.4 Areas Benefiting from Flood Defences

<b>Records within 250m</b>	<b>1</b>
----------------------------	----------

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.

Features are displayed on the River and coastal flooding map on [page 87 >](#)

ID	Location	
6	On site	Area benefiting from flood defences



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

## 7.5 Flood Storage Areas

**Records within 250m**

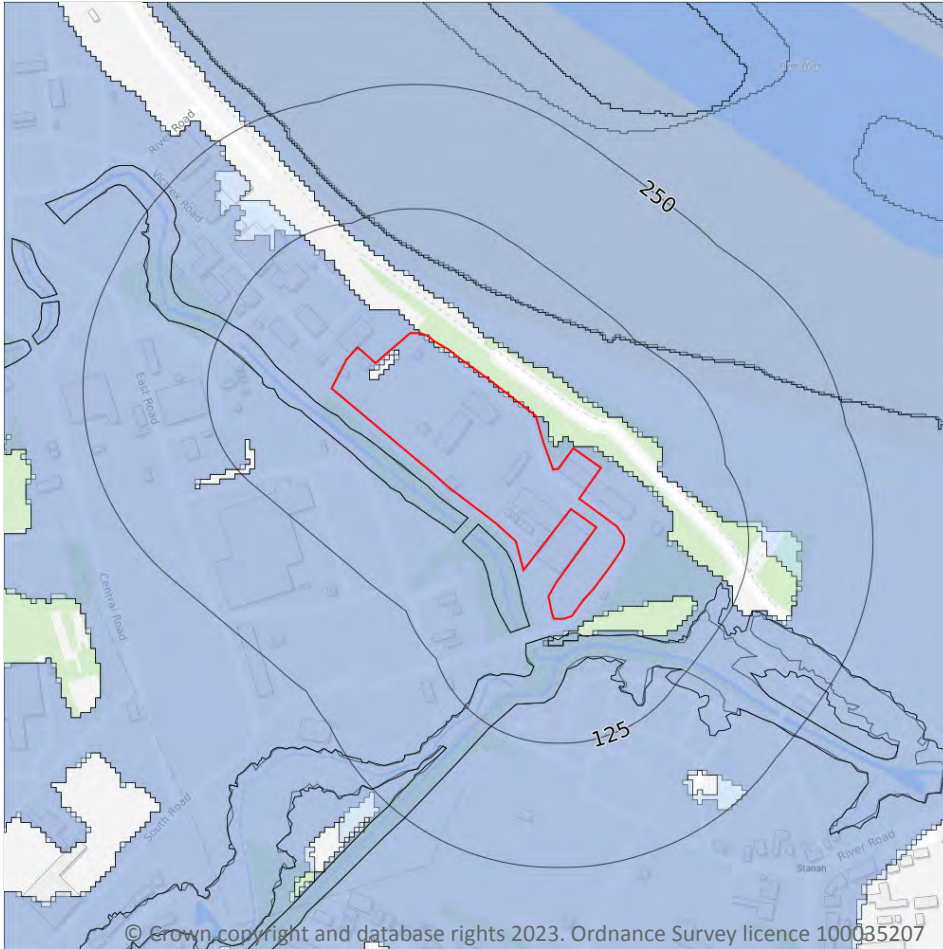
**0**

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



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

### 7.6 Flood Zone 2

**Records within 50m**

**1**

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.

Features are displayed on the River and coastal flooding map on [page 87](#) >

Location	Type
On site	Zone 2 - (Fluvial /Tidal Models)

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

## 7.7 Flood Zone 3

Records within 50m

1

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.

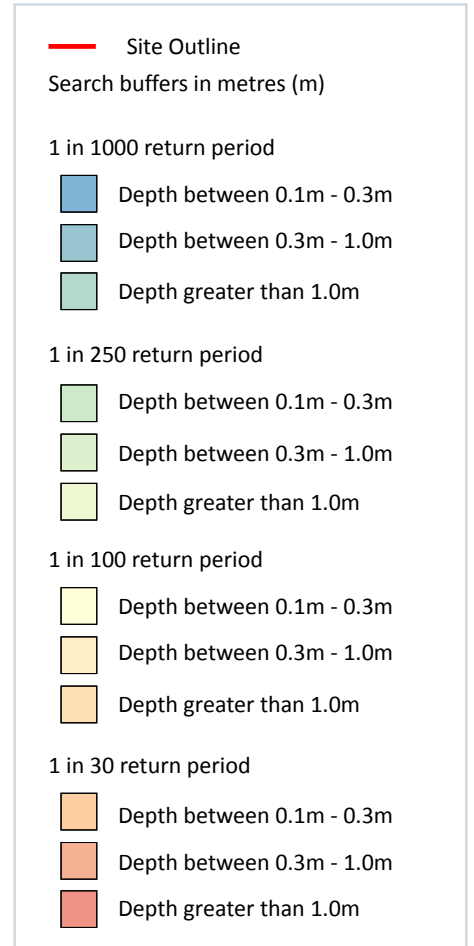
Features are displayed on the River and coastal flooding map on [page 87](#) >

Location	Type
On site	Zone 3 - (Fluvial Models)

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



## 8 Surface water flooding



### 8.1 Surface water flooding

**Highest risk on site**

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

**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 92 >](#)

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.

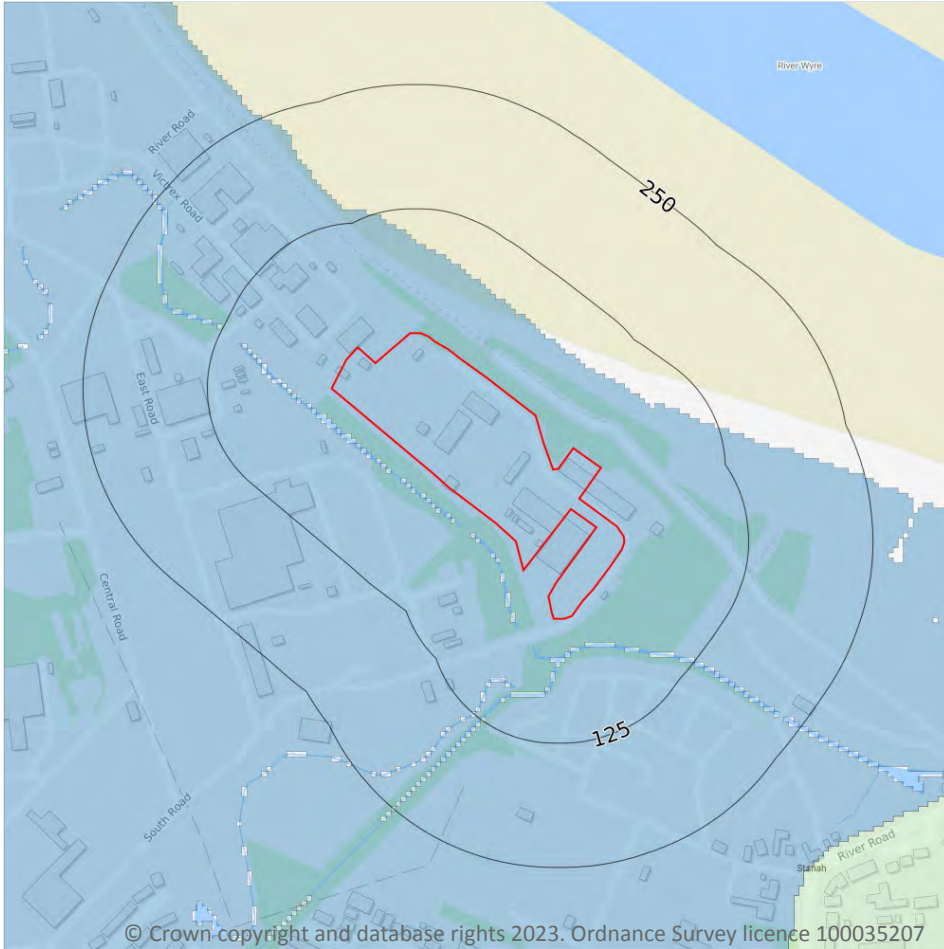
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.1m and 0.3m

*This data is sourced from Ambiental Risk Analytics.*



## 9 Groundwater flooding



### 9.1 Groundwater flooding

**Highest risk on site**

**Negligible**

**Highest risk within 50m**

**Negligible**

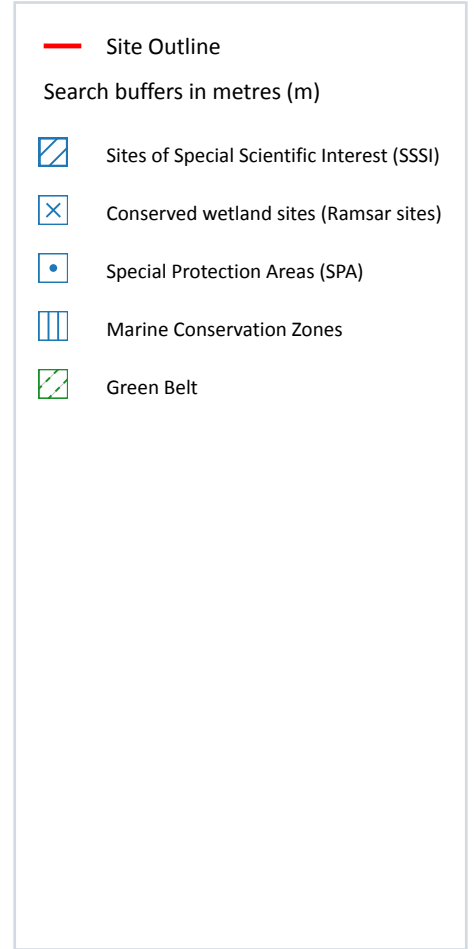
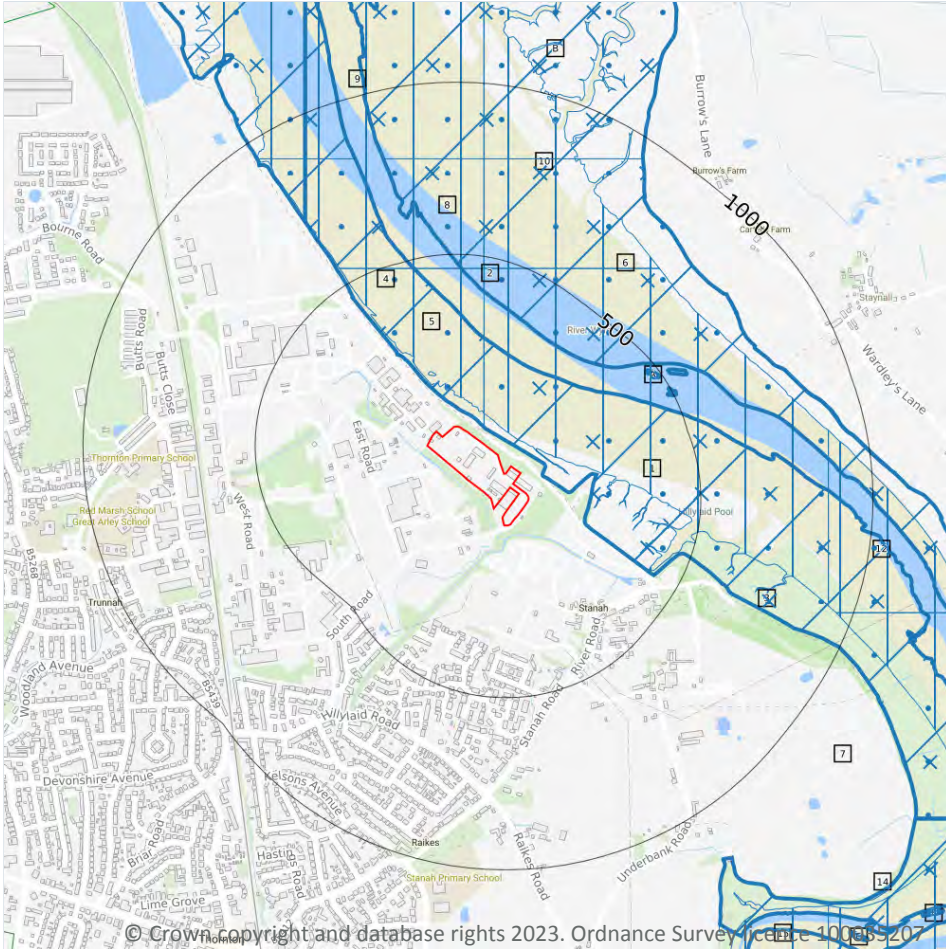
Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks 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 94](#) >

*This data is sourced from Ambiantal Risk Analytics.*



## 10 Environmental designations



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

Records within 2000m

16

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.

Features are displayed on the Environmental designations map on [page 95 >](#)

ID	Location	Name	Data source
1	39m N	Wyre Estuary	Natural England

ID	Location	Name	Data source
B	353m NE	Wyre Estuary	Natural England
A	467m NE	Wyre Estuary	Natural England
A	484m E	Wyre Estuary	Natural England
A	522m NE	Wyre Estuary	Natural England
C	718m NW	Wyre Estuary	Natural England
14	1152m SE	Wyre Estuary	Natural England
17	1382m SE	Wyre Estuary	Natural England
E	1541m SE	Wyre Estuary	Natural England
F	1648m SE	Wyre Estuary	Natural England
-	1674m SE	Wyre Estuary	Natural England
-	1723m SE	Wyre Estuary	Natural England
-	1729m SE	Wyre Estuary	Natural England
-	1743m N	Wyre Estuary	Natural England
-	1841m SE	Wyre Estuary	Natural England
-	1853m SE	Wyre Estuary	Natural England

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

## 10.2 Conserved wetland sites (Ramsar sites)

**Records within 2000m**

**12**

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.

Features are displayed on the Environmental designations map on [page 95](#) >



ID	Location	Site	Details
2	38m N	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
6	352m NE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
A	467m NE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>

ID	Location	Site	Details
A	484m E	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
A	521m NE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
E	1540m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>



ID	Location	Site	Details
F	1647m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
-	1673m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
-	1723m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>



ID	Location	Site	Details
-	1728m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
-	1840m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>
-	1852m SE	Name: Morecambe Bay Site status: Listed Data source: Natural England	<p>Overview: Morecambe Bay lies between the coasts of South Cumbria and Lancashire, and represents the largest continuous intertidal area in Britain. Morecambe Bay comprises the estuaries of five rivers and the accretion of mudflats behind Walney Island. The area is of intertidal mud and sandflats, with associated saltmarshes, shingle beaches and other coastal habitats. It is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns.</p> <p>Ramsar criteria: Ramsar criterion 4 The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i>.</p>

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



### 10.3 Special Areas of Conservation (SAC)

<b>Records within 2000m</b>	<b>0</b>
-----------------------------	----------

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)

<b>Records within 2000m</b>	<b>18</b>
-----------------------------	-----------

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.

Features are displayed on the Environmental designations map on [page 95 >](#)

ID	Location	Name	Species of interest	Habitat description	Data source
3	39m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
4	40m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England

ID	Location	Name	Species of interest	Habitat description	Data source
7	353m NE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
8	399m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
A	467m NE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
A	484m E	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England





ID	Location	Name	Species of interest	Habitat description	Data source
A	522m NE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
11	778m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
B	781m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
C	826m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England



ID	Location	Name	Species of interest	Habitat description	Data source
E	1542m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
F	1650m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1673m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1722m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England



ID	Location	Name	Species of interest	Habitat description	Data source
-	1728m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1840m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1852m SE	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England
-	1967m N	Morecambe Bay and Duddon Estuary	Little egret; Whooper swan; Pink-footed goose; Common shelduck; Northern pintail; Eurasian oystercatcher; Ringed plover; European golden plover; Grey plover; Red knot; Sanderling; Ruff; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Mediterranean gull; Lesser black-backed gull; Lesser black-backed gull; Herring gull; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin	Marine areas, Sea inlets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Shingle, Sea cliffs, Islets; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	Natural England

*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

0

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.

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

## 10.7 Designated Ancient Woodland

Records within 2000m

0

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.

*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

<b>Records within 2000m</b>	<b>0</b>
-----------------------------	----------

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

<b>Records within 2000m</b>	<b>25</b>
-----------------------------	-----------

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.

Features are displayed on the Environmental designations map on [page 95 >](#)

ID	Location	Name	Status
5	69m N	Wyre-Lune	Designated
A	69m NE	Wyre-Lune	Designated
9	459m N	Wyre-Lune	Designated
10	465m N	Wyre-Lune	Designated
12	870m E	Wyre-Lune	Designated
13	953m E	Wyre-Lune	Designated
15	1252m SE	Wyre-Lune	Designated
-	1305m N	Wyre-Lune	Designated
-	1409m SE	Wyre-Lune	Designated
-	1424m N	Wyre-Lune	Designated
-	1460m N	Wyre-Lune	Designated
-	1510m N	Wyre-Lune	Designated
-	1515m N	Wyre-Lune	Designated
-	1559m SE	Wyre-Lune	Designated
-	1567m N	Wyre-Lune	Designated
-	1666m N	Wyre-Lune	Designated
-	1673m NW	Wyre-Lune	Designated
-	1704m NW	Wyre-Lune	Designated



ID	Location	Name	Status
-	1744m NW	Wyre-Lune	Designated
-	1782m NW	Wyre-Lune	Designated
-	1846m N	Wyre-Lune	Designated
-	1848m NW	Wyre-Lune	Designated
-	1874m NW	Wyre-Lune	Designated
-	1919m NW	Wyre-Lune	Designated
-	1981m N	Wyre-Lune	Designated

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

## 10.11 Green Belt

<b>Records within 2000m</b>	<b>2</b>
-----------------------------	----------

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

Features are displayed on the Environmental designations map on [page 95 >](#)

ID	Location	Name	Local Authority name
23	1658m NW	Blackpool	Wyre
25	1700m S	Blackpool	Wyre

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

## 10.12 Proposed Ramsar sites

<b>Records within 2000m</b>	<b>0</b>
-----------------------------	----------

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

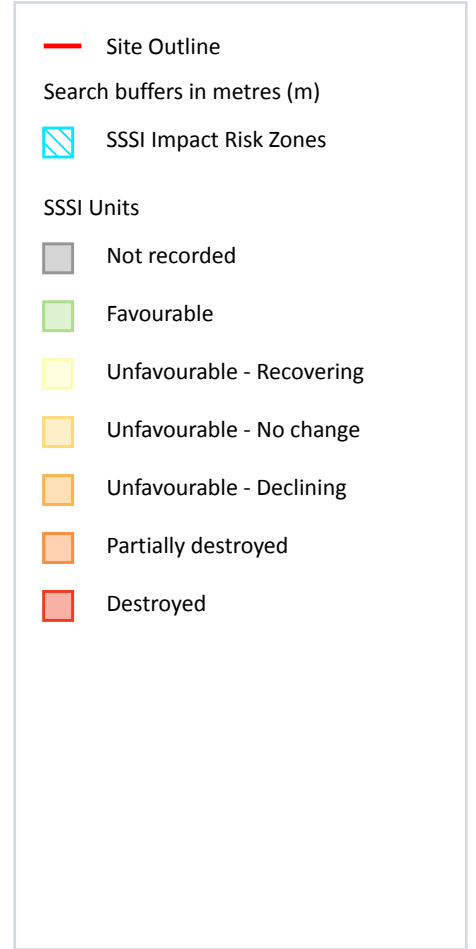
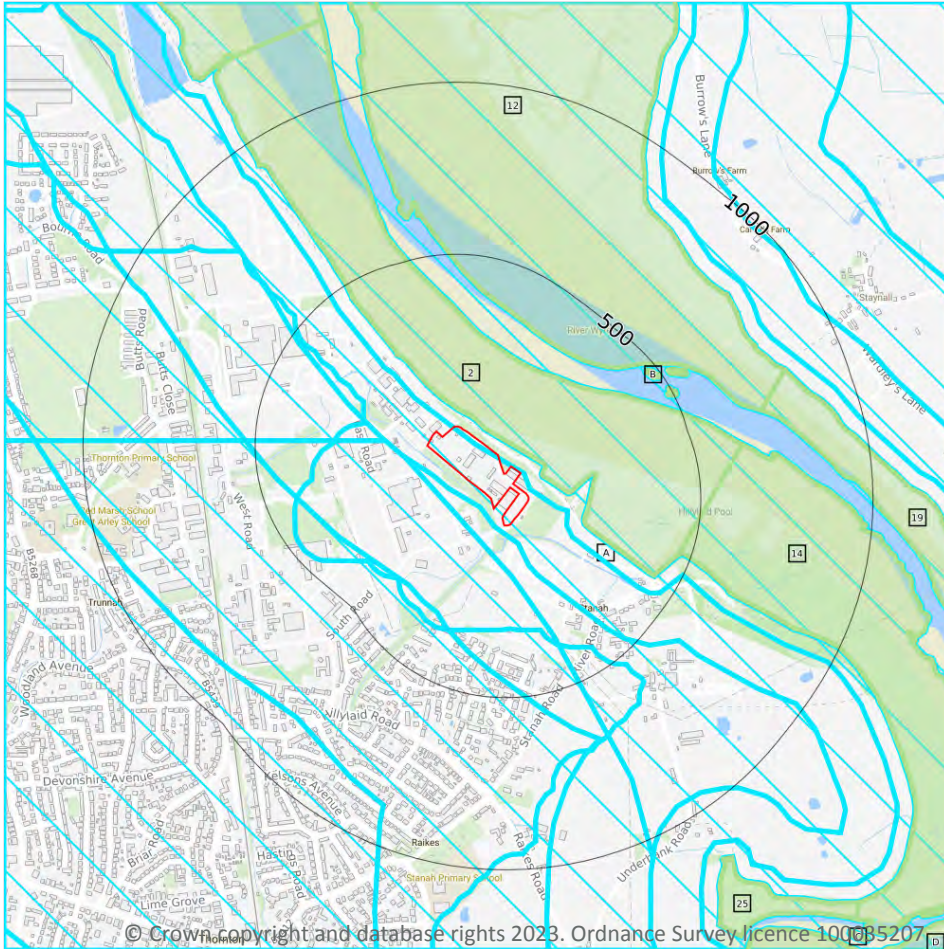
0

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



### 10.17 SSSI Impact Risk Zones

#### Records on site

2

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 110 >](#)

ID	Location	Type of developments requiring consultation
A	On site	<b>All applications - ALL PLANNING APPLICATIONS - EXCEPT HOUSEHOLDER APPLICATIONS.</b> <b>Notes: New residential developments in this area should consider recreational disturbance impacts on the coastal designated sites. Please consider this issue in the HRA screening.</b>



ID	Location	Type of developments requiring consultation
A	On site	<p>All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures</p> <p>Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.</p> <p>Wind and Solar - Solar schemes with footprint &gt; 0.5ha, all wind turbines</p> <p>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.</p> <p>Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is &gt; 1,000m<sup>2</sup> or footprint exceeds 0.2ha</p> <p>Residential - Residential development of 10 units or more.</p> <p>Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units</p> <p>Air pollution - Any development that could cause AIR POLLUTION or DUST either in its construction or operation (incl: industrial/commercial processes, livestock &amp; poultry units, slurry lagoons &amp; digestate stores, manure stores).</p> <p>Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management</p> <p>Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.</p> <p>Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream.</p> <p>Notes: New residential developments in this area should consider recreational disturbance impacts on the coastal designated sites. Please consider this issue in the HRA screening.</p>

*This data is sourced from Natural England.*

## 10.18 SSSI Units

Records within 2000m

21

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.

Features are displayed on the SSSI Impact Zones and Units map on [page 110 >](#)

ID: 2  
 Location: 39m N  
 SSSI name: Wyre Estuary  
 Unit name: Hill House International Frontage  
 Broad habitat: Littoral Sediment  
 Condition: Favourable



## Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	20/12/2022
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 12  
 Location: 353m NE  
 SSSI name: Wyre Estuary  
 Unit name: Burrows Marsh Sssi  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	20/12/2022
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 14  
 Location: 464m SE  
 SSSI name: Wyre Estuary  
 Unit name: Stanah Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: B  
 Location: 467m NE  
 SSSI name: Wyre Estuary  
 Unit name: Skippool Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable



## Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: B  
 Location: 484m E  
 SSSI name: Wyre Estuary  
 Unit name: Skippool Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: B  
 Location: 522m NE  
 SSSI name: Wyre Estuary  
 Unit name: Skippool Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 19  
 Location: 722m E  
 SSSI name: Wyre Estuary  
 Unit name: Wardleys Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:



Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 25  
 Location: 1152m SE  
 SSSI name: Wyre Estuary  
 Unit name: Nestleton Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Estuaries	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 26  
 Location: 1231m NW  
 SSSI name: Wyre Estuary  
 Unit name: Jameson Road Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
 Location: 1270m N  
 SSSI name: Wyre Estuary  
 Unit name: The Heads  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	20/12/2022



Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: 30  
 Location: 1382m SE  
 SSSI name: Wyre Estuary  
 Unit name: Bank House Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	20/12/2022
SM4-28 - Saltmarsh	-	-

ID: -  
 Location: 1455m SE  
 SSSI name: Wyre Estuary  
 Unit name: Wardley's Pool - Peg's Pool  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: C  
 Location: 1541m SE  
 SSSI name: Wyre Estuary  
 Unit name: Stanah Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009



ID: D  
 Location: 1647m SE  
 SSSI name: Wyre Estuary  
 Unit name: Wardley's Pool - Peg's Pool  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: D  
 Location: 1648m SE  
 SSSI name: Wyre Estuary  
 Unit name: Stanah Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
 Location: 1674m SE  
 SSSI name: Wyre Estuary  
 Unit name: Stanah Marsh  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
 Location: 1723m SE  
 SSSI name: Wyre Estuary  
 Unit name: Wardley's Pool - Peg's Pool  
 Broad habitat: Littoral Sediment  
 Condition: Favourable  
 Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
Location: 1729m SE  
SSSI name: Wyre Estuary  
Unit name: Wardley's Pool - Peg's Pool  
Broad habitat: Littoral Sediment  
Condition: Favourable  
Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
Location: 1841m SE  
SSSI name: Wyre Estuary  
Unit name: Wardley's Pool - Peg's Pool  
Broad habitat: Littoral Sediment  
Condition: Favourable  
Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009

ID: -  
Location: 1853m SE  
SSSI name: Wyre Estuary  
Unit name: Wardley's Pool - Peg's Pool  
Broad habitat: Littoral Sediment  
Condition: Favourable  
Reportable features:

Feature name	Feature condition	Date of assessment
SM4-28 - Saltmarsh	Favourable	01/09/2009



ID: -  
Location: 1967m N  
SSSI name: Wyre Estuary  
Unit name: Barnaby Sands SSSI  
Broad habitat: Littoral Sediment  
Condition: Favourable  
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, <i>Limosa limosa islandica</i>	Favourable	20/12/2022
Aggregations of non-breeding birds - Teal, <i>Anas crecca</i>	Favourable	20/12/2022
Aggregations of non-breeding birds - Turnstone, <i>Arenaria interpres</i>	Favourable	20/12/2022
SM4-28 - Saltmarsh	Favourable	01/09/2009

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





## 11 Visual and cultural designations

### 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

0

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.



*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

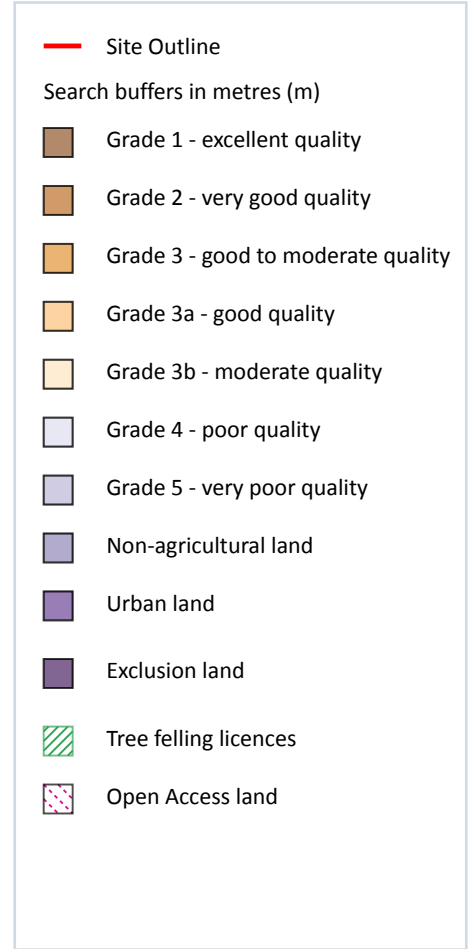
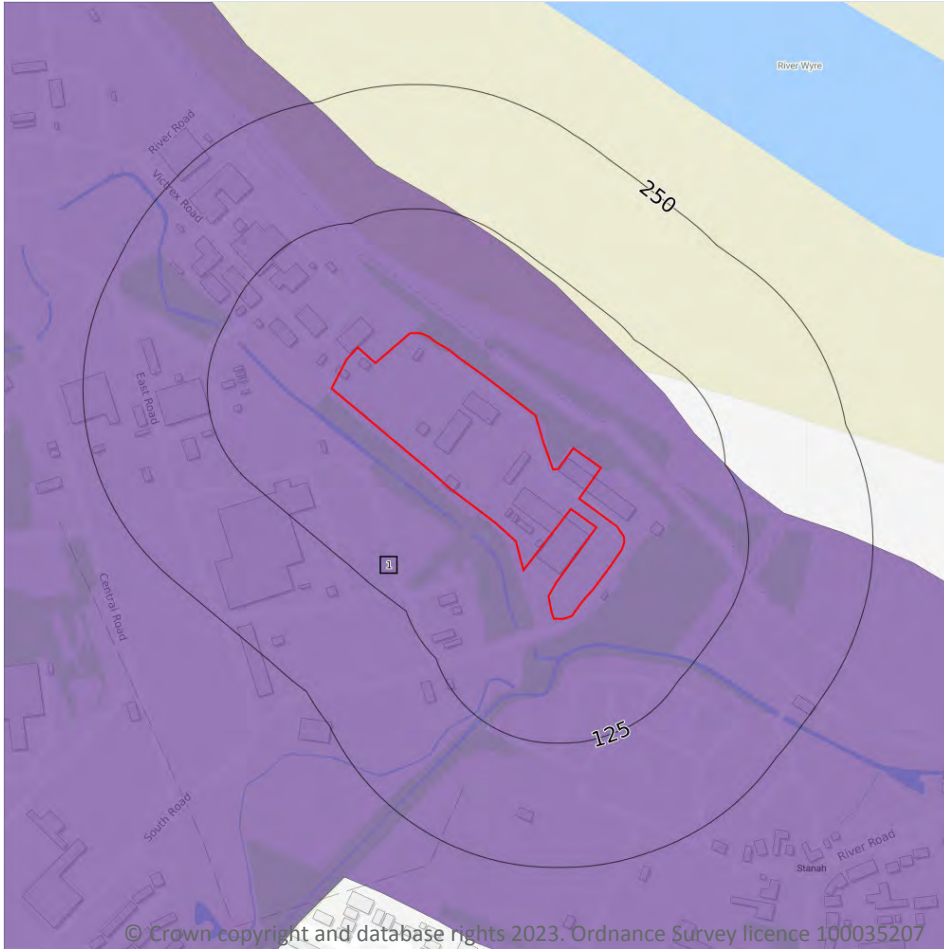
0

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



### 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 121](#) >

ID	Location	Classification	Description
1	On site	Urban	-

*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

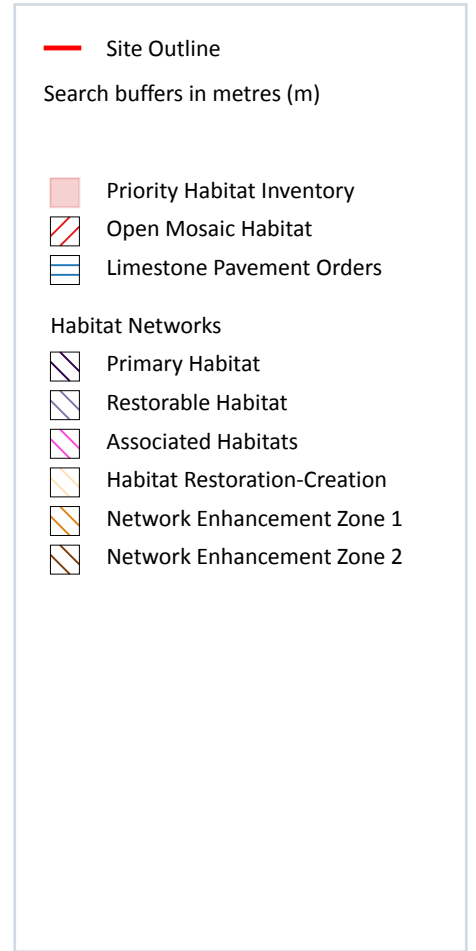
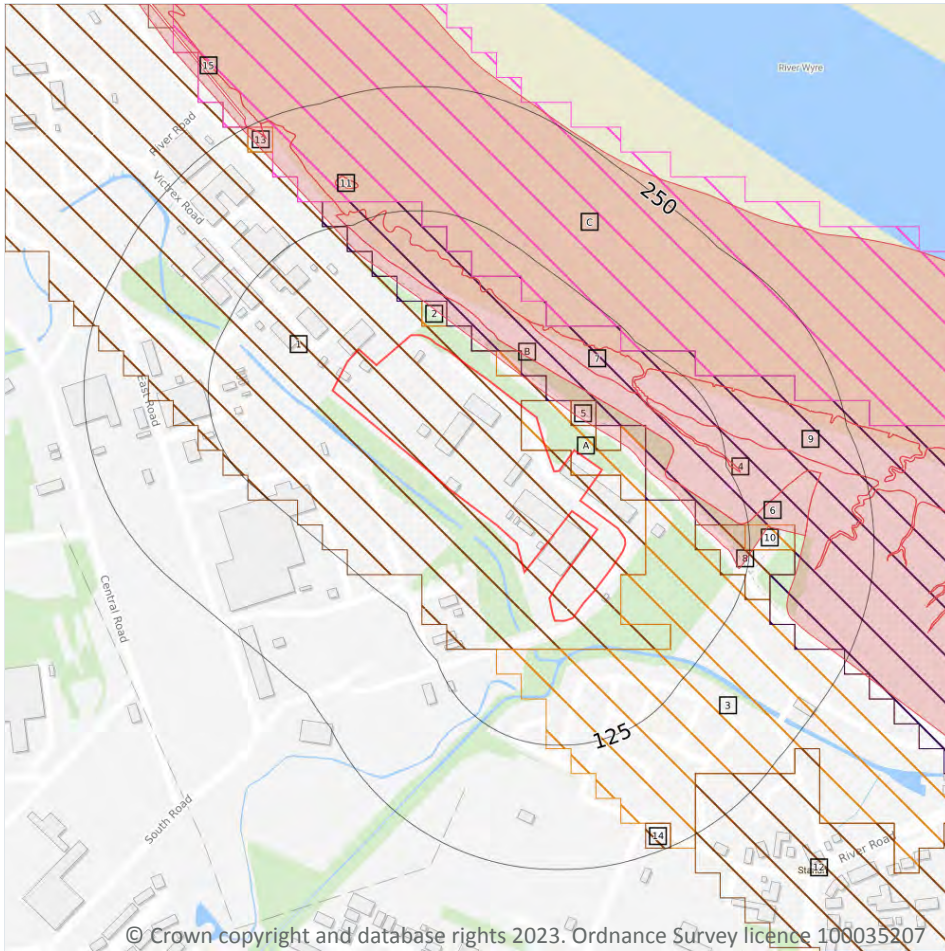
0

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



### 13.1 Priority Habitat Inventory

Records within 250m

7

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 123 >](#)

ID	Location	Main Habitat	Other habitats
B	24m N	No main habitat but additional habitats present	Additional: SALTM (INV 50%)
6	39m N	Coastal saltmarsh	Main habitat: SALTM (INV > 50%)
C	69m N	Mudflats	Main habitat: MUDFL (INV > 50%); Additional: SALTM (ENSIS L2)

ID	Location	Main Habitat	Other habitats
7	69m NE	Coastal saltmarsh	Main habitat: MUDFL (INV > 50%); SALTM (INV > 50%)
9	85m E	Coastal saltmarsh	Main habitat: MUDFL (INV > 50%); SALTM (INV > 50%)
11	158m NW	No main habitat but additional habitats present	Additional: SALTM (ENSIS L2)
15	233m NW	No main habitat but additional habitats present	Additional: SALTM (INV 50%, ENSIS L2)

This data is sourced from Natural England.

## 13.2 Habitat Networks

<b>Records within 250m</b>	<b>14</b>
----------------------------	-----------

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 123 >](#)

ID	Location	Type	Habitat
<b>1</b>	<b>On site</b>	<b>Network Enhancement Zone 2</b>	<b>Not specified</b>
<b>A</b>	<b>On site</b>	<b>Network Enhancement Zone 1</b>	<b>Not specified</b>
B	9m N	Network Enhancement Zone 1	Not specified
2	9m NW	Network Enhancement Zone 1	Not specified
3	11m SE	Network Enhancement Zone 1	Not specified
A	13m E	Network Enhancement Zone 2	Not specified
4	14m N	Primary Habitat	Saltmarsh
5	25m E	Network Enhancement Zone 2	Not specified
8	70m SE	Network Enhancement Zone 2	Not specified
C	75m N	Associated Habitats	Other associated habitats
10	120m E	Network Enhancement Zone 1	Not specified
12	199m SE	Network Enhancement Zone 2	Not specified
13	216m NW	Network Enhancement Zone 1	Not specified
14	219m SE	Network Enhancement Zone 2	Not specified

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

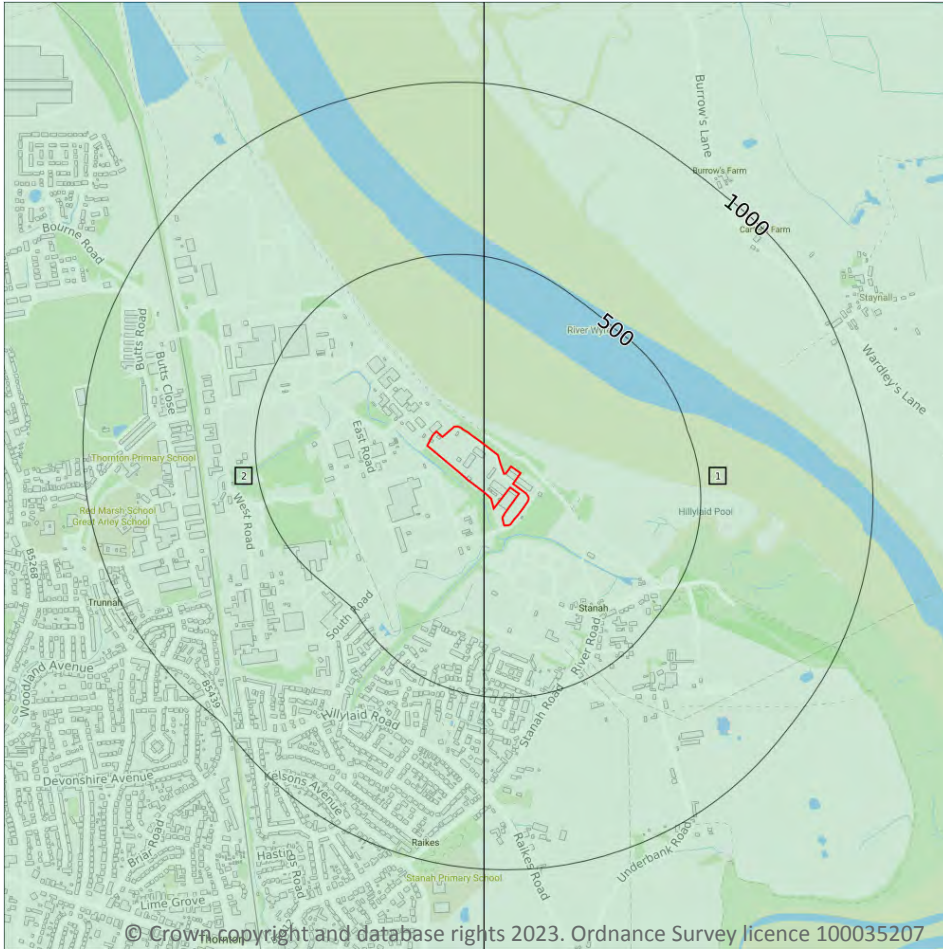
0

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.*



## 14 Geology 1:10,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

### 14.1 10k Availability

Records within 500m

2

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 126 >](#)

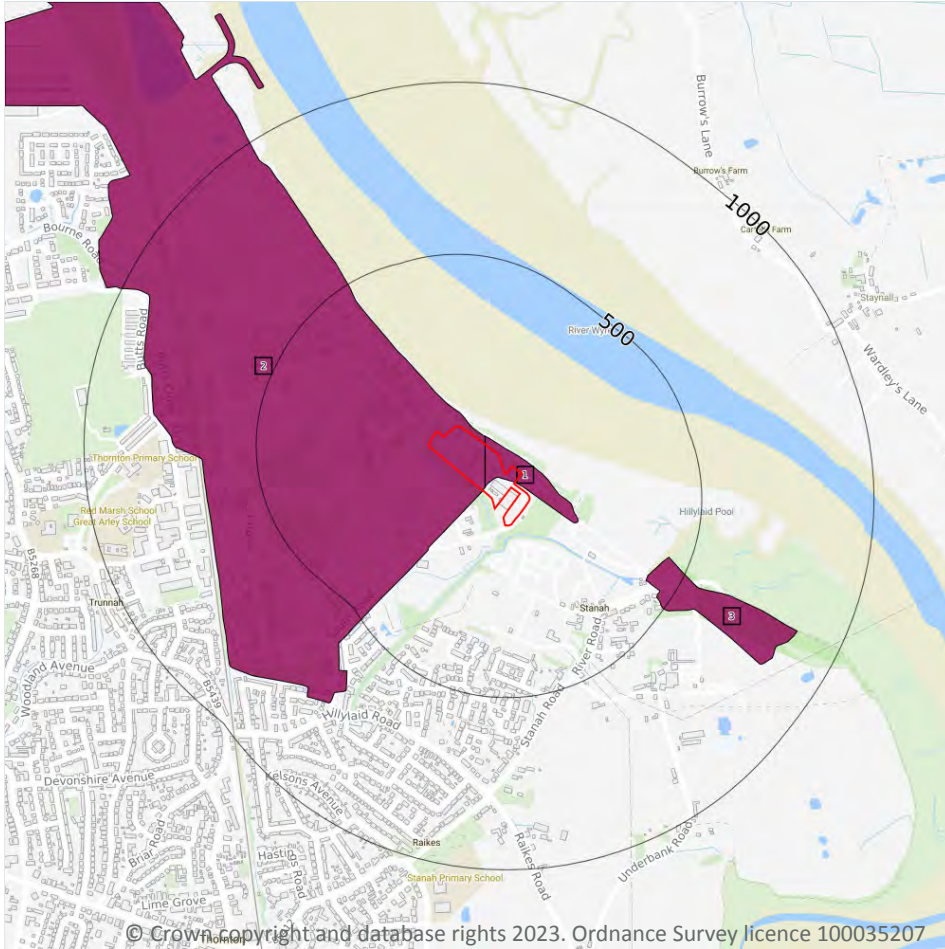
ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SD34SE
2	On site	Full	Full	Full	No coverage	SD34SW

This data is sourced from the British Geological Survey.





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



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

Records within 500m

3

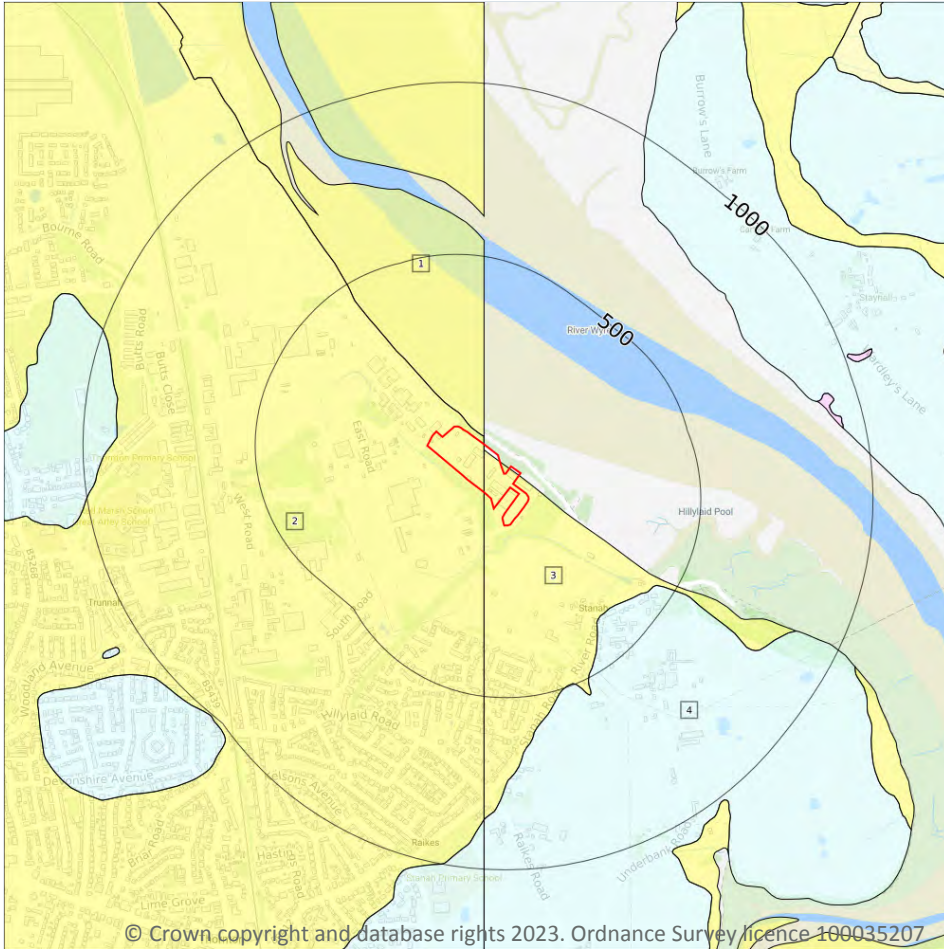
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 127 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	407m SE	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

4

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 128 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	TFD-XCZ	Tidal Flat Deposits - Clay And Silt	Clay And Silt
2	On site	TFD1-XCZ	Tidal Flat Deposits, 1 - Clay And Silt	Clay And Silt
3	On site	TFD1-XCZ	Tidal Flat Deposits, 1 - Clay And Silt	Clay And Silt
4	373m SE	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton



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

## 14.4 Landslip (10k)

**Records within 500m**

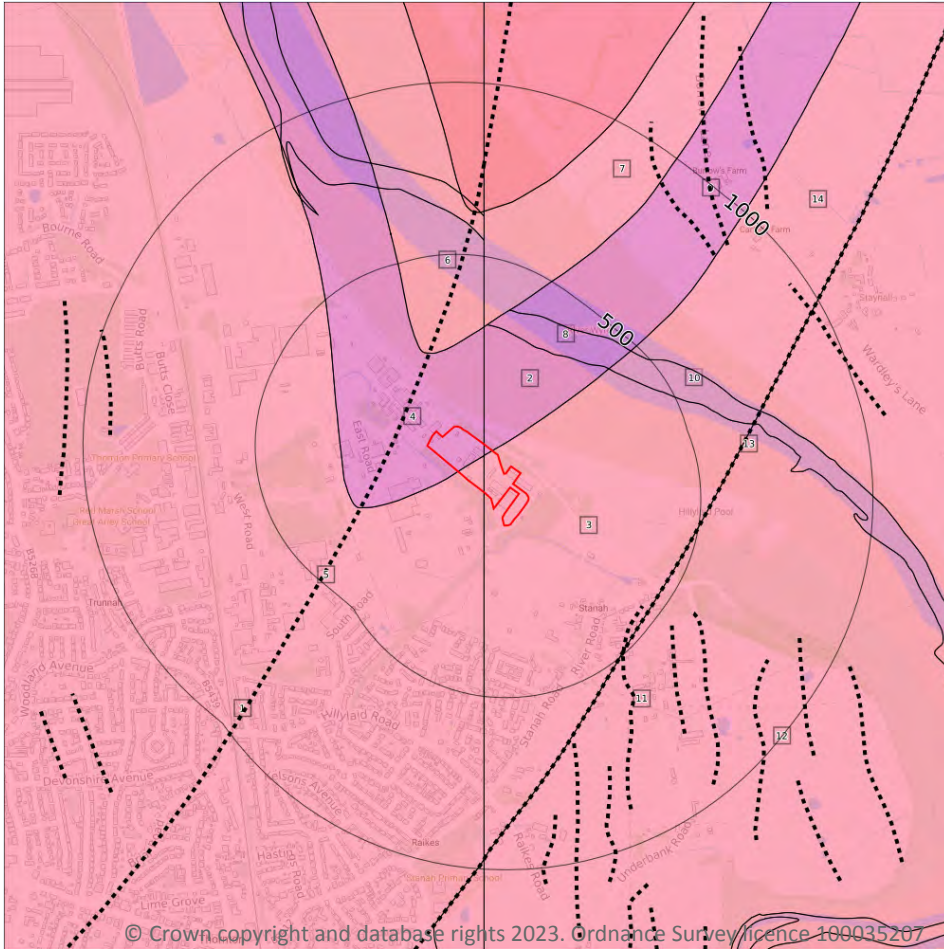
**0**

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.

*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

11

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 130](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age
2	On site	PRSA-MDHA	Preesall Halite Member - Mudstone And Halite-stone	Ladinian Age - Anisian Age
3	On site	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age



ID	Location	LEX Code	Description	Rock age
4	On site	PRSA-MDHA	Preesall Halite Member - Mudstone And Halite-stone	Ladinian Age - Anisian Age
6	221m N	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age
7	299m N	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age
8	307m N	PRSA-MDHA	Preesall Halite Member - Mudstone And Halite-stone	Ladinian Age - Anisian Age
9	370m N	PRSA-MDHA	Preesall Halite Member - Mudstone And Halite-stone	Ladinian Age - Anisian Age
10	397m NE	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age
12	466m SE	SNM-MDST	Singleton Mudstone Member - Mudstone	Anisian Age - Early Triassic Epoch
14	478m NE	KRM-MDST	Kirkham Mudstone Member - Mudstone	Ladinian Age - Anisian Age

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

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

**Records within 500m**

**3**

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 130 >](#)

ID	Location	Category	Description
5	95m NW	FOLD_AXIS	Axial plane trace of major syncline
11	448m SE	LANDFORM	Drumlin, form-line at base of mound
13	466m SE	FAULT	Normal fault, inferred; crossmarks on downthrow side

*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.

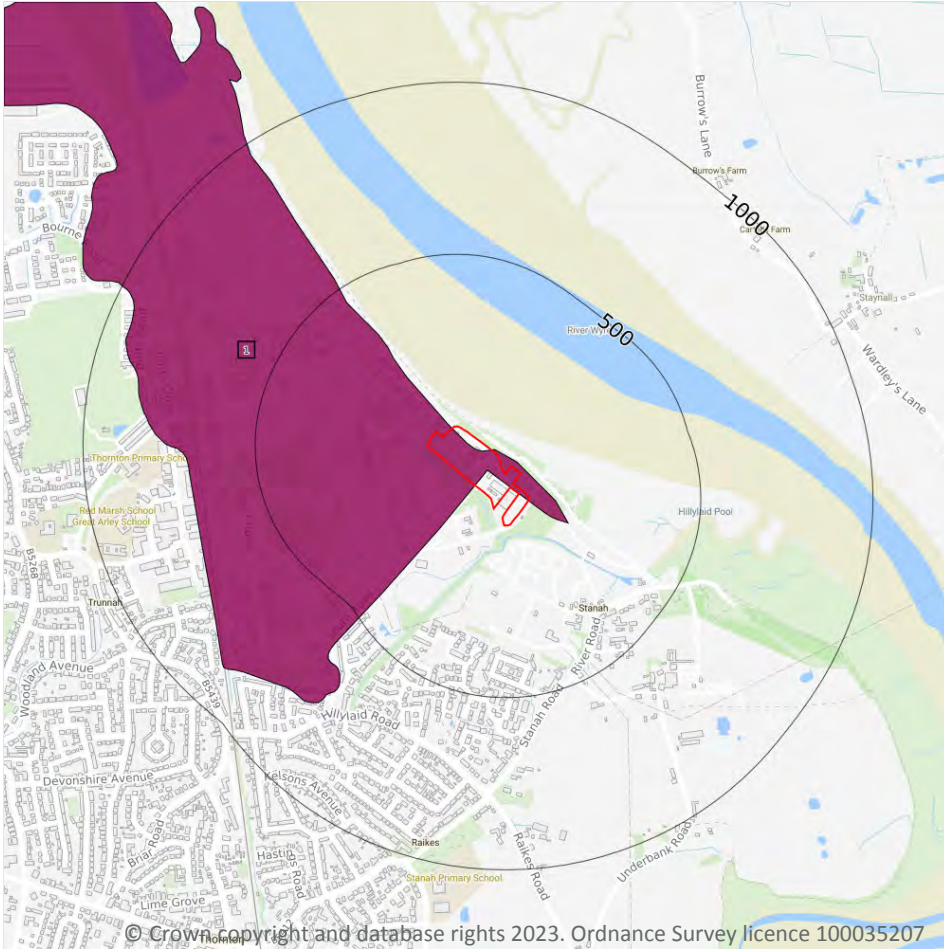
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 132](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	EW066_blackpool_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

1

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 133 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

### 15.3 Artificial ground permeability (50k)

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

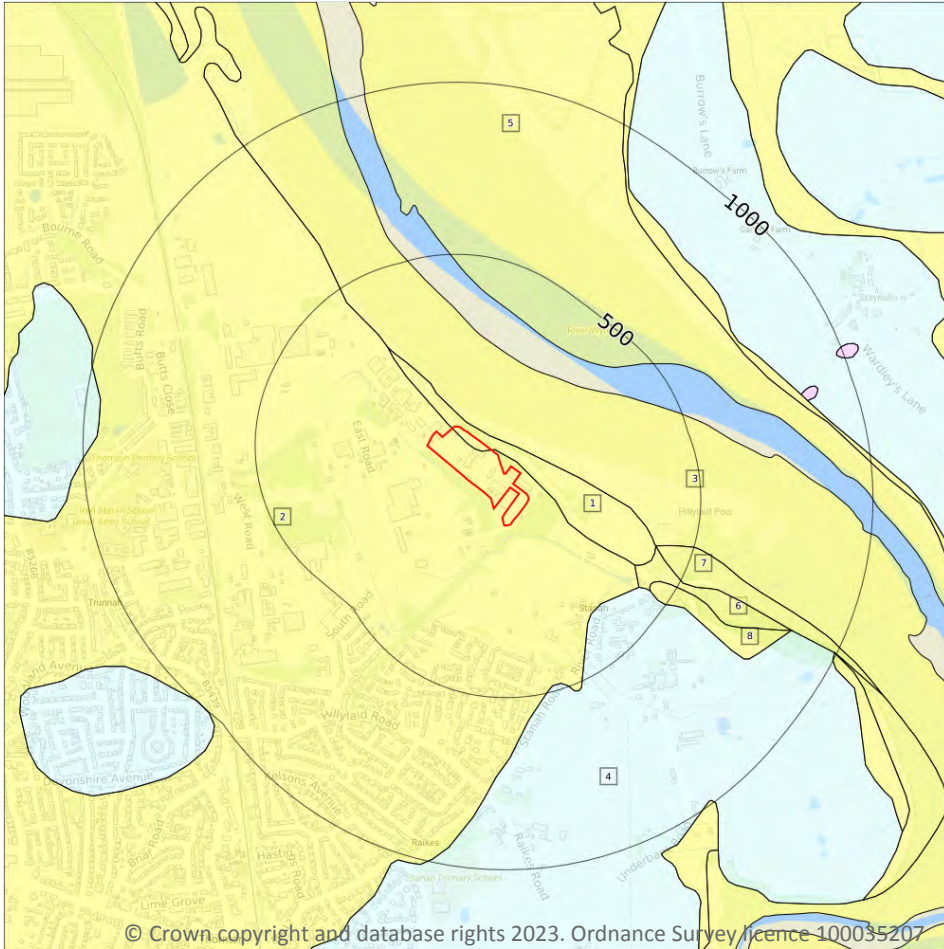
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low
On site	Mixed	Very High	Low

*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

8

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 135 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
2	On site	TFD1-XCZ	TIDAL FLAT DEPOSITS, 1	CLAY AND SILT
3	22m N	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
4	349m SE	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON



ID	Location	LEX Code	Description	Rock description
5	353m NE	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
6	362m SE	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
7	394m SE	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
8	431m SE	TFD1-XCZ	TIDAL FLAT DEPOSITS, 1	CLAY AND SILT

This data is sourced from the British Geological Survey.

## 15.5 Superficial permeability (50k)

Records within 50m

4

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
On site	Mixed	Low	Very Low
On site	Mixed	Low	Very Low
On site	Intergranular	Low	Very Low
On site	Intergranular	Low	Very Low

This data is sourced from the British Geological Survey.

## 15.6 Landslip (50k)

Records within 500m

0

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)

Records within 50m

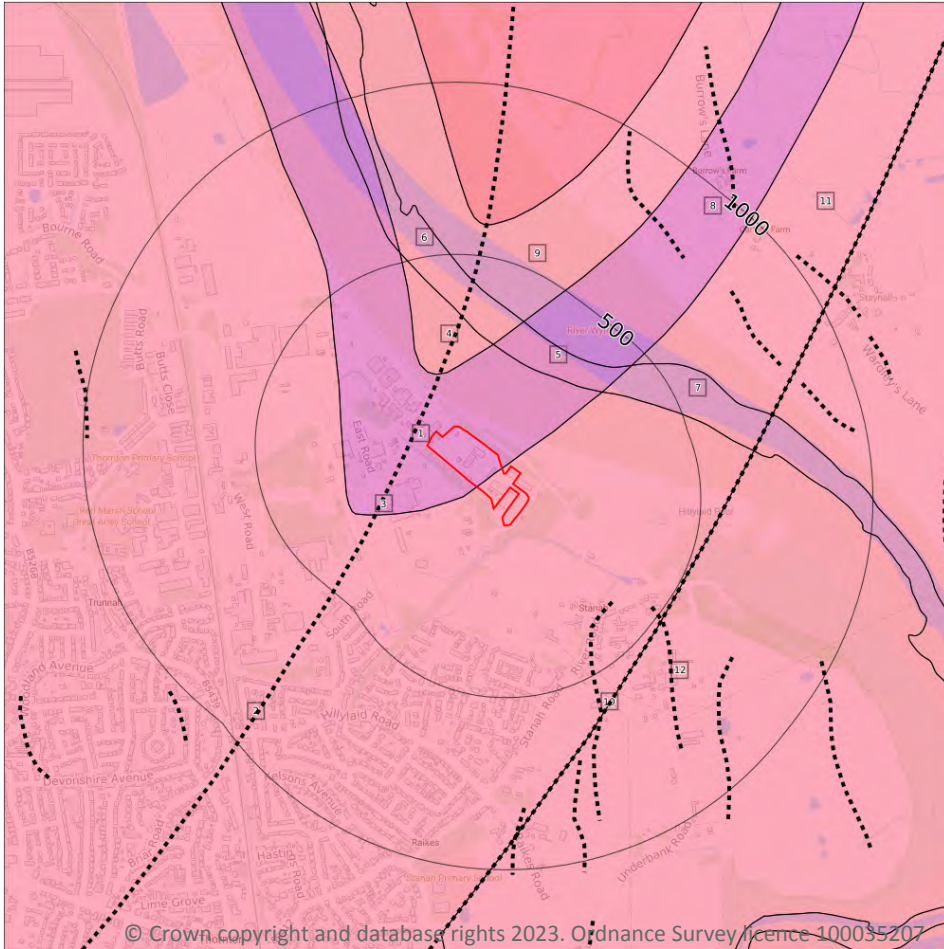
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any 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

9

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 137](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	PRSA-MDHA	PREESALL HALITE MEMBER - MUDSTONE AND HALITE-STONE	ANISIAN
2	On site	KRM-MDST	KIRKHAM MUDSTONE MEMBER - MUDSTONE	ANISIAN
4	158m N	SIM-MDST	SIDMOUTH MUDSTONE FORMATION - MUDSTONE	OLENEKIAN



ID	Location	LEX Code	Description	Rock age
5	253m N	PRSA-MDHA	PREESALL HALITE MEMBER - MUDSTONE AND HALITE-STONE	ANISIAN
6	260m N	SIM-MDST	SIDMOUTH MUDSTONE FORMATION - MUDSTONE	OLENEKIAN
7	335m NE	KRM-MDST	KIRKHAM MUDSTONE MEMBER - MUDSTONE	ANISIAN
8	353m NE	PRSA-MDHA	PREESALL HALITE MEMBER - MUDSTONE AND HALITE-STONE	ANISIAN
9	358m N	SIM-MDST	SIDMOUTH MUDSTONE FORMATION - MUDSTONE	OLENEKIAN
11	450m NE	KRM-MDST	KIRKHAM MUDSTONE MEMBER - MUDSTONE	ANISIAN

This data is sourced from the British Geological Survey.

## 15.9 Bedrock permeability (50k)

Records within 50m

4

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	Low	Low
On site	Fracture	Low	Low
On site	Fracture	Low	Low
On site	Fracture	Low	Low

This data is sourced from the British Geological Survey.

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

Records within 500m

3

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 137 >](#)

ID	Location	Category	Description
3	50m NW	FOLD_AXIS	Axial plane trace of major syncline

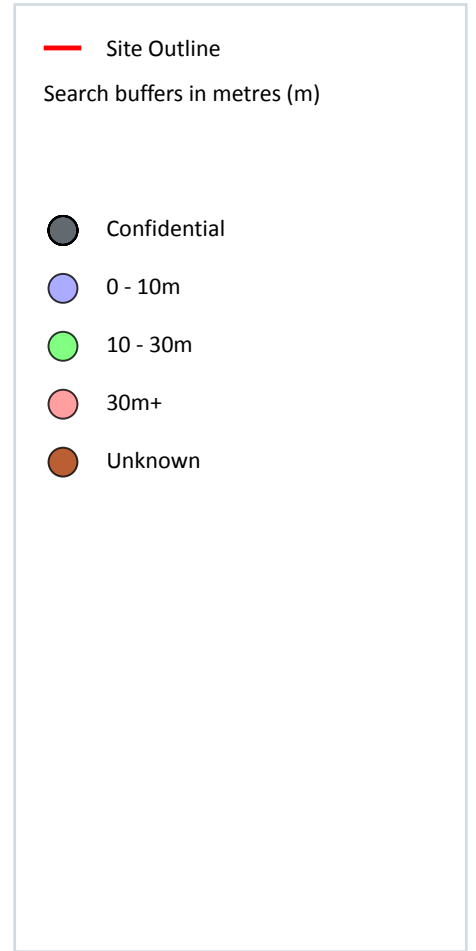
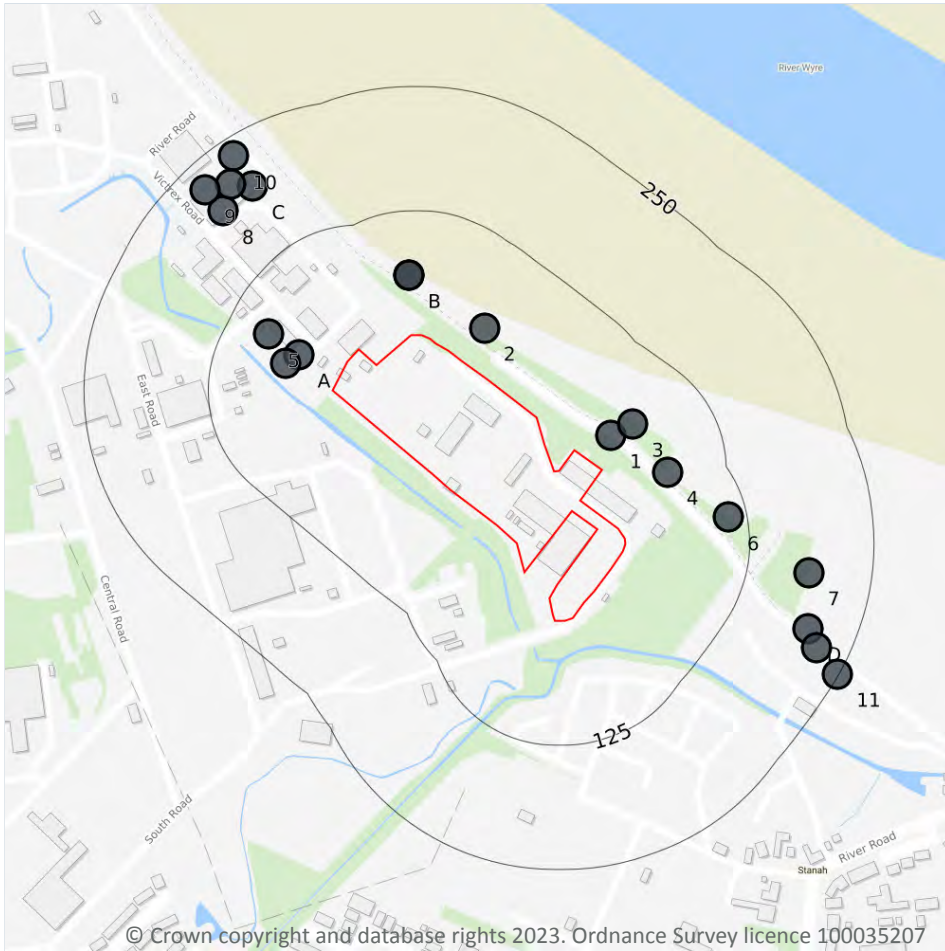


ID	Location	Category	Description
10	369m SE	LANDFORM	Drumlin, form line at base
12	471m SE	LANDFORM	Drumlin, form line at base

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



## 16 Boreholes



### 16.1 BGS Boreholes

Records within 250m

19

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.

Features are displayed on the Boreholes map on [page 140](#) >

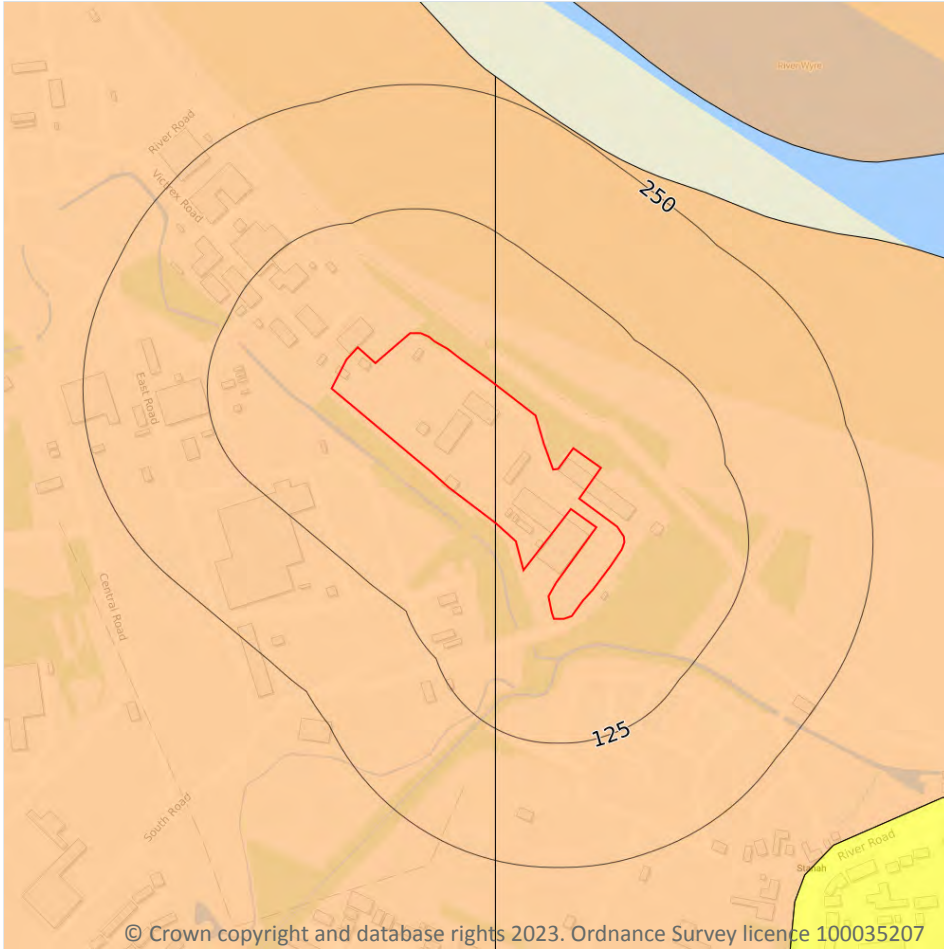
ID	Location	Grid reference	Name	Length	Confidential	Web link
1	33m E	335115 443440	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT 3	-	Y	N/A
2	40m N	334988 443548	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS5	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	47m NW	334801 443521	VICTREX PLC THORNTON CLEVELEYS LANCASHIRE B303	-	Y	N/A
A	55m NW	334788 443513	VICTREX PLC THORNTON CLEVELEYS LANCASHIRE B302	-	Y	N/A
3	56m E	335137 443452	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS7	-	Y	N/A
B	60m NW	334912 443601	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS4	-	Y	N/A
B	60m NW	334912 443601	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS3	-	Y	N/A
4	66m E	335172 443403	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS8	-	Y	N/A
5	83m NW	334771 443542	VICTREX PLC THORNTON CLEVELEYS LANCASHIRE B301	-	Y	N/A
6	106m E	335233 443358	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS9	-	Y	N/A
7	187m E	335314 443302	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS10	-	Y	N/A
8	195m NW	334725 443666	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M204	-	Y	N/A
C	196m NW	334755 443691	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M205	-	Y	N/A
D	201m SE	335313 443246	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS11	-	Y	N/A
C	210m NW	334733 443693	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M203	-	Y	N/A
D	218m SE	335322 443227	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT WS12	-	Y	N/A
9	223m NW	334707 443687	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M201	-	Y	N/A
10	231m NW	334736 443721	MELT FILTRATION PLANT VICTREX PLC THORNTON CLEVELEYS LANCS M202	-	Y	N/A
11	249m SE	335343 443200	THORNTON CLEVELEYS FLOOD & TIDAL DEFENCES ASSESMENT 4	-	Y	N/A

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



## 17 Natural ground subsidence - Shrink swell clays



### 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).

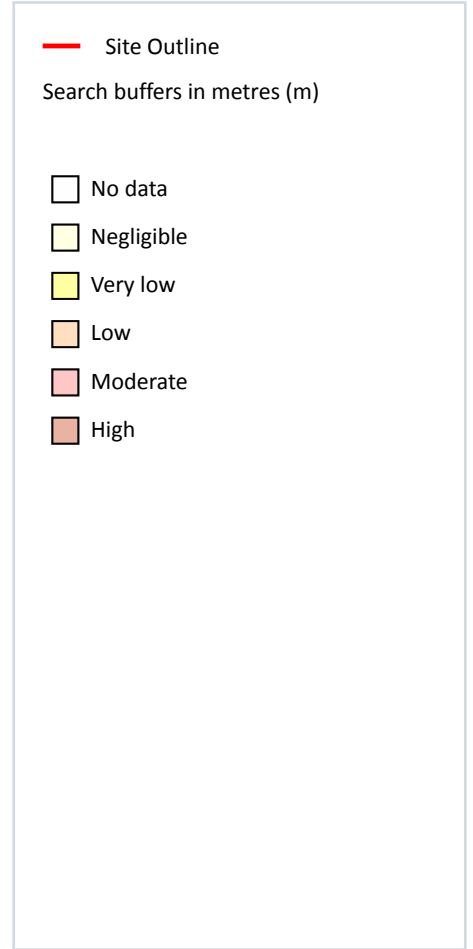
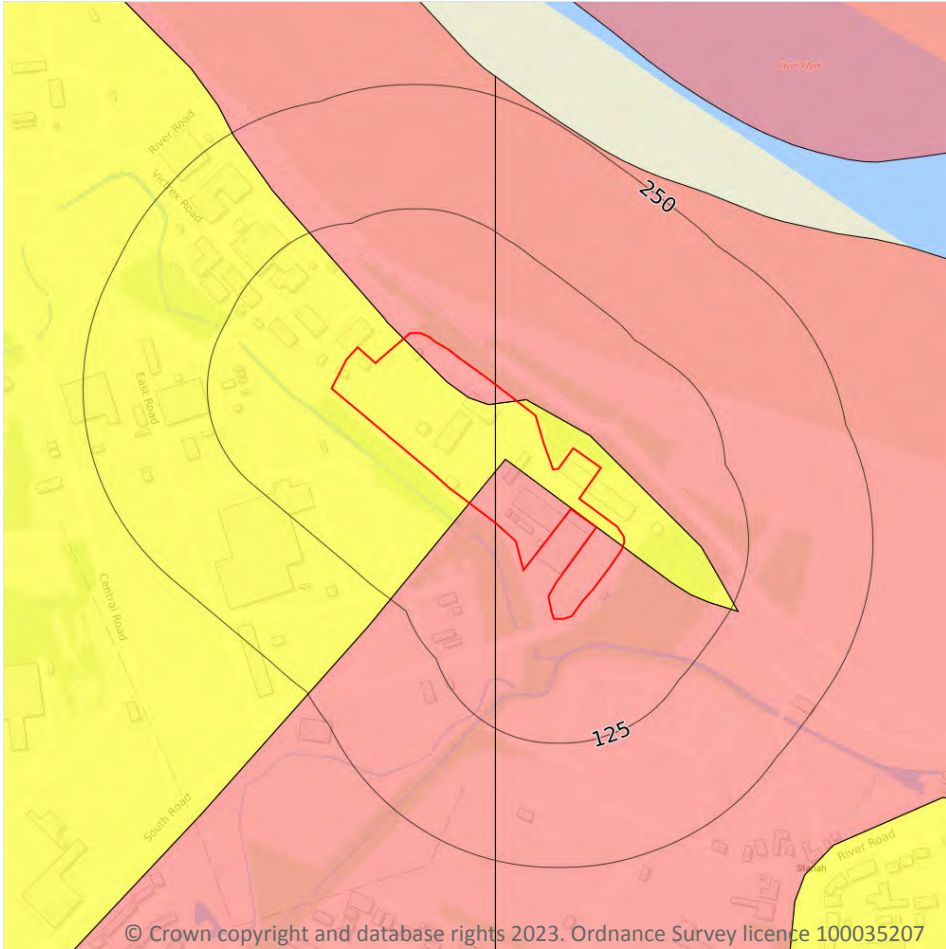
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 142 >](#)

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.

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



## Natural ground subsidence - Running sands



### 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 143](#) >

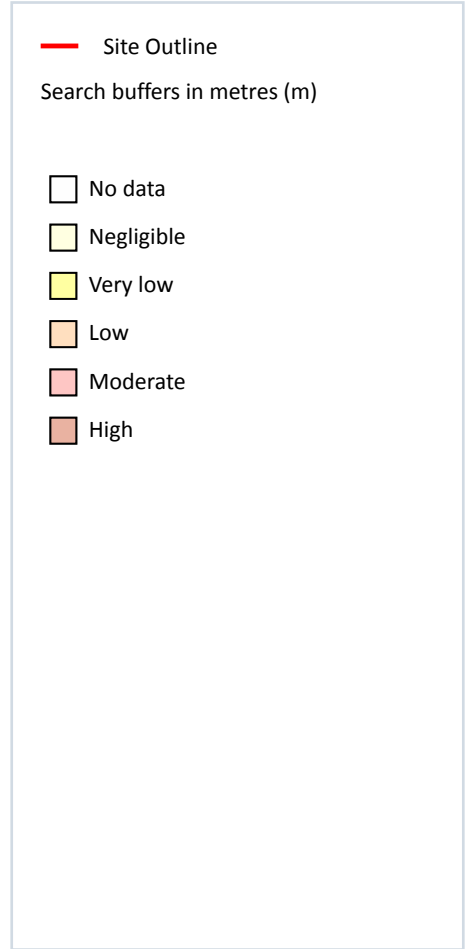
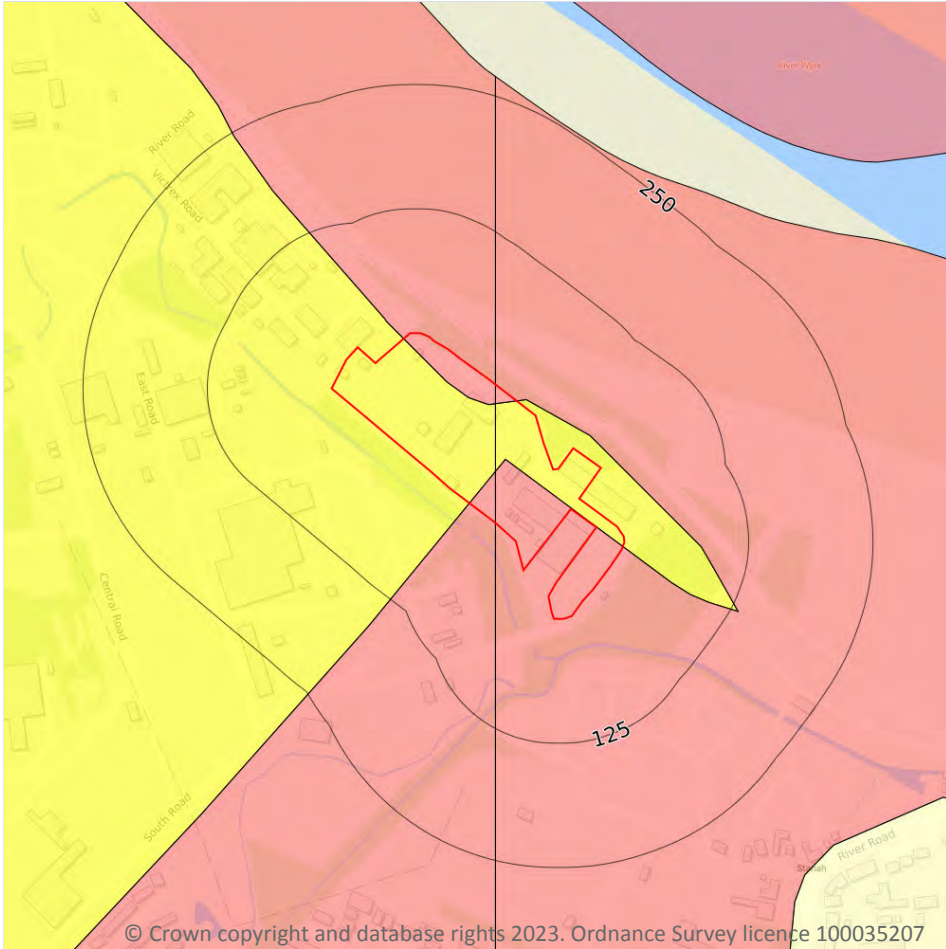
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

Location	Hazard rating	Details
On site	Moderate	Running sand conditions are probably 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



### 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 145 >](#)

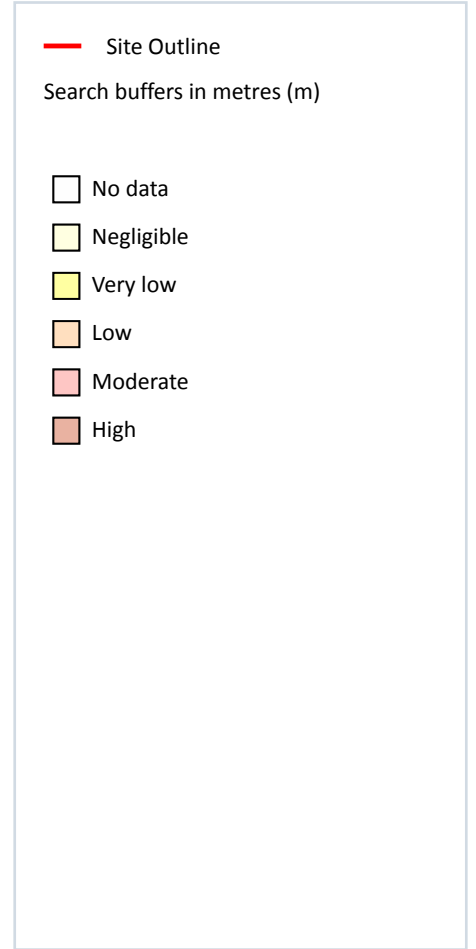
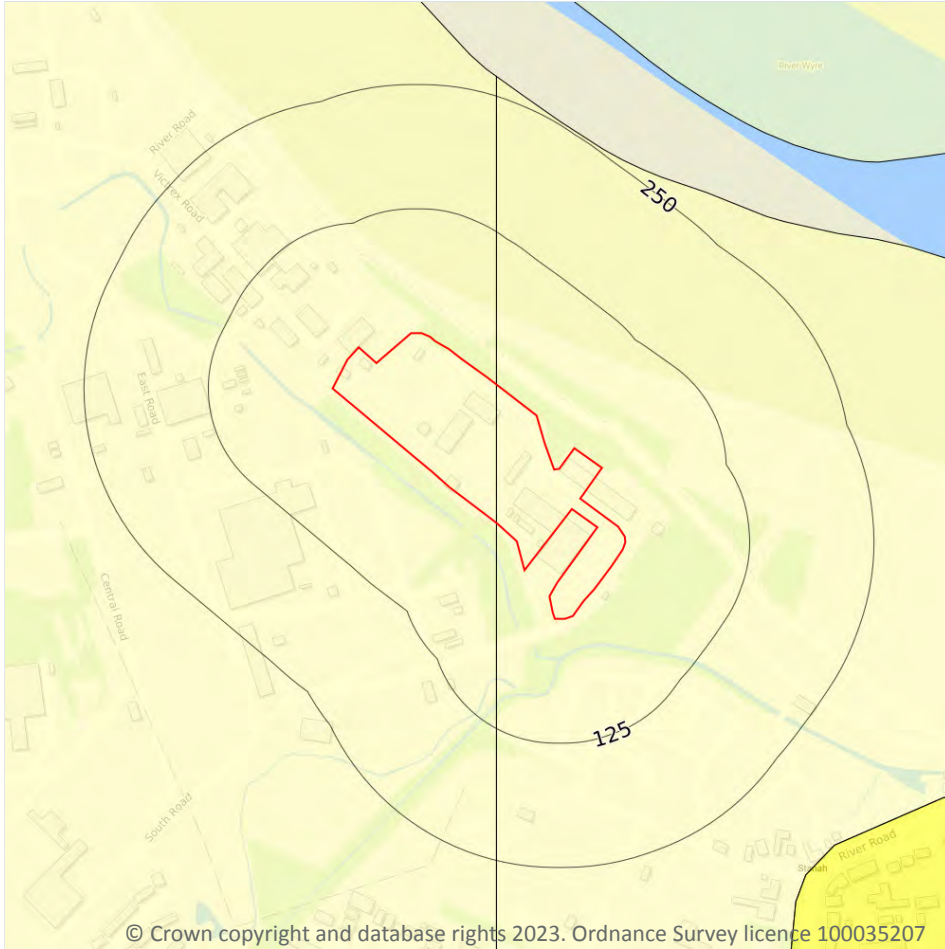
Location	Hazard rating	Details
On site	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

Location	Hazard rating	Details
On site	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



### 17.4 Collapsible deposits

Records within 50m

1

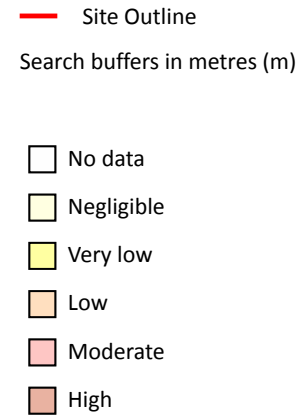
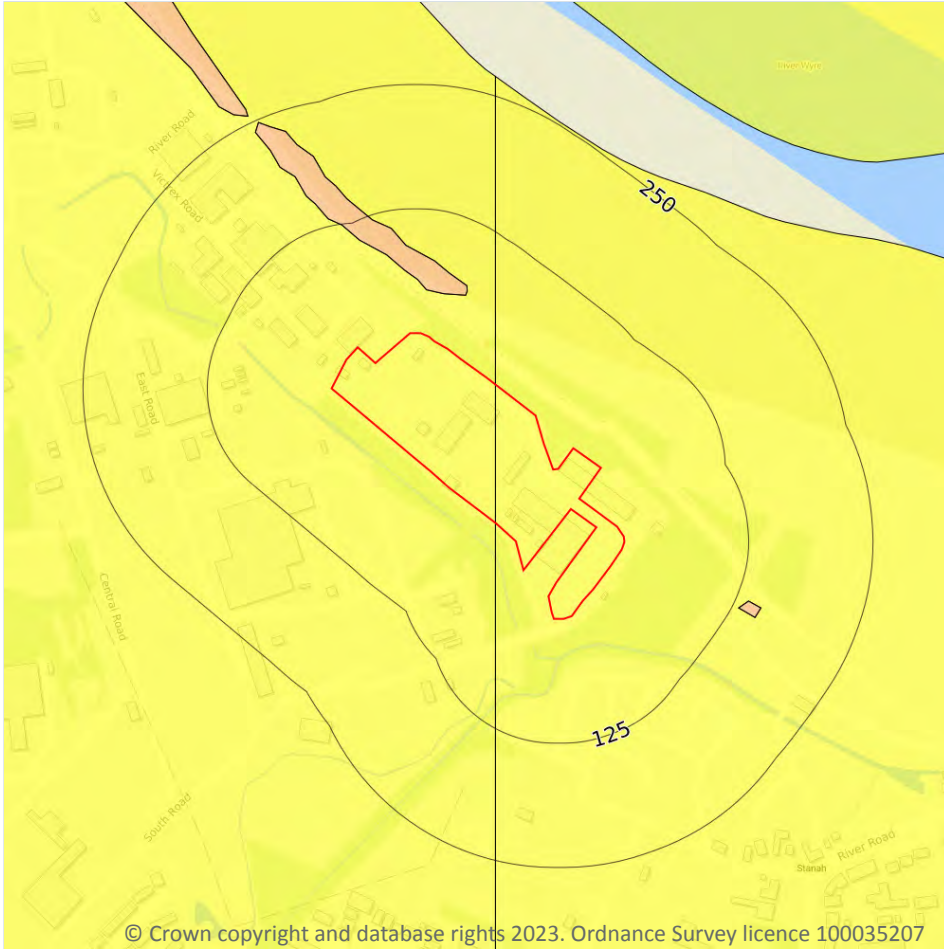
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 147](#) >

Location	Hazard rating	Details
On site	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



© Crown copyright and database rights 2023. Ordnance Survey licence 100035207

### 17.5 Landslides

Records within 50m

2

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 148](#) >

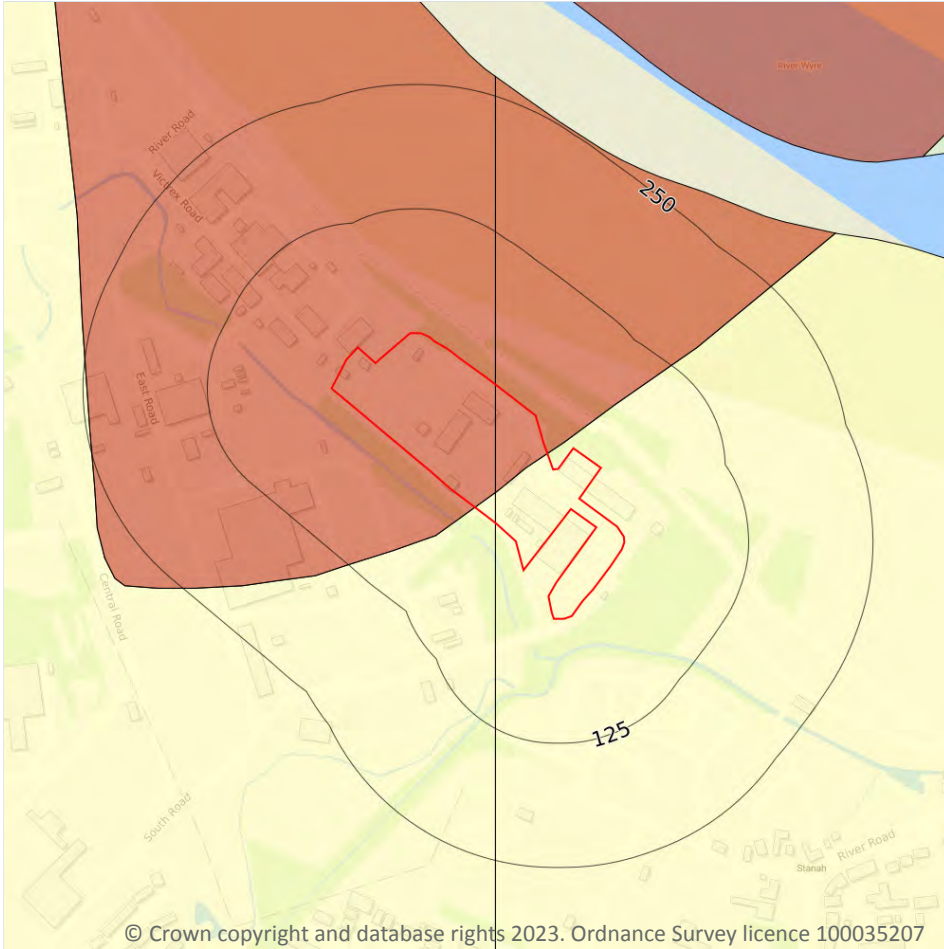
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

Location	Hazard rating	Details
44m N	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

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



## Natural ground subsidence - Ground dissolution of soluble rocks



### 17.6 Ground dissolution of soluble rocks

Records within 50m

2

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 150](#) >

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.

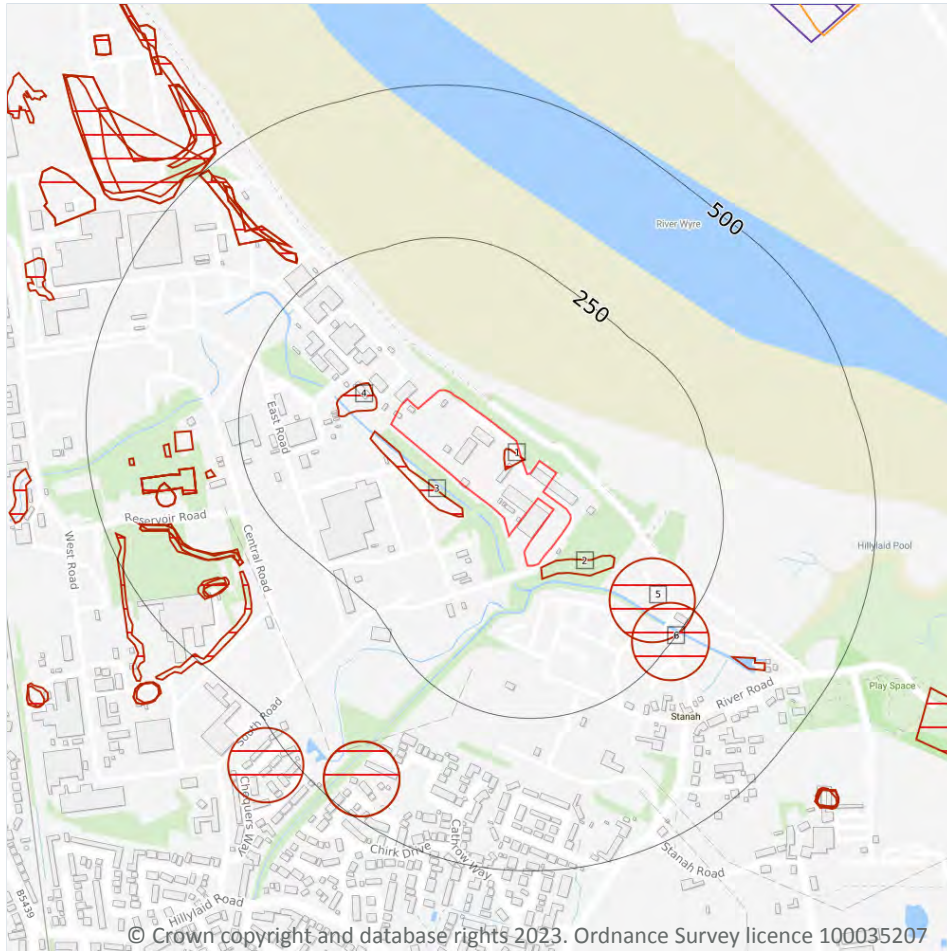


Location	Hazard rating	Details
On site	High	<b>Soluble rocks are present within the ground. Numerous dissolution features may be present. Potential for difficult ground conditions should be investigated. Potential for localised subsidence is at a level where it should be considered.</b>

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



## 18 Mining and ground workings



### 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

6

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 152 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Unspecified Pit	1968	1:10560
2	7m SE	Unspecified Heap	1985	1:10000
3	26m W	Refuse Heap	1967	1:10560
4	34m NW	Pond	1846	1:10560
5	114m SE	Pool	1985	1:10000
6	185m SE	Pool	1968	1:10560

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

## 18.3 Underground workings

Records within 1000m

0

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

*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

1

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).

Features are displayed on the Mining and ground workings map on [page 152 >](#)

ID	Location	Name	Commodity	Class	Likelihood
19	834m NE	Preesall Saltfield	Salt - brine and salt	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.

*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, Tith 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**

**0**

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

*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.

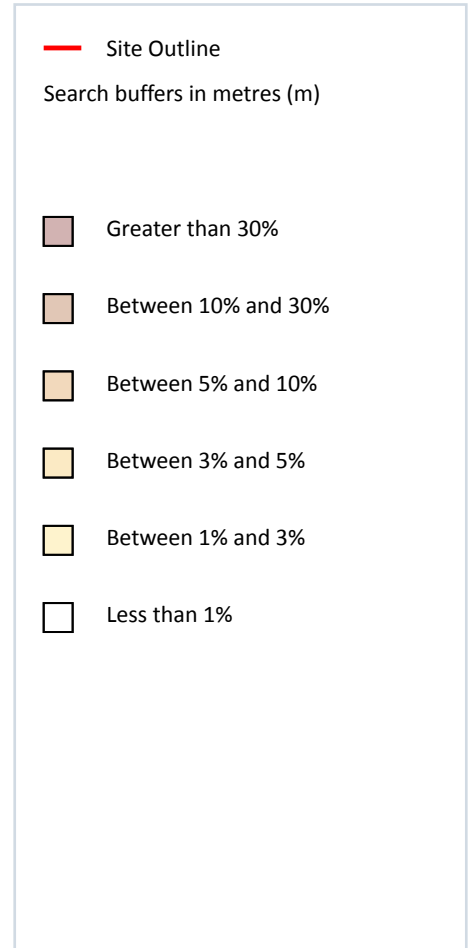
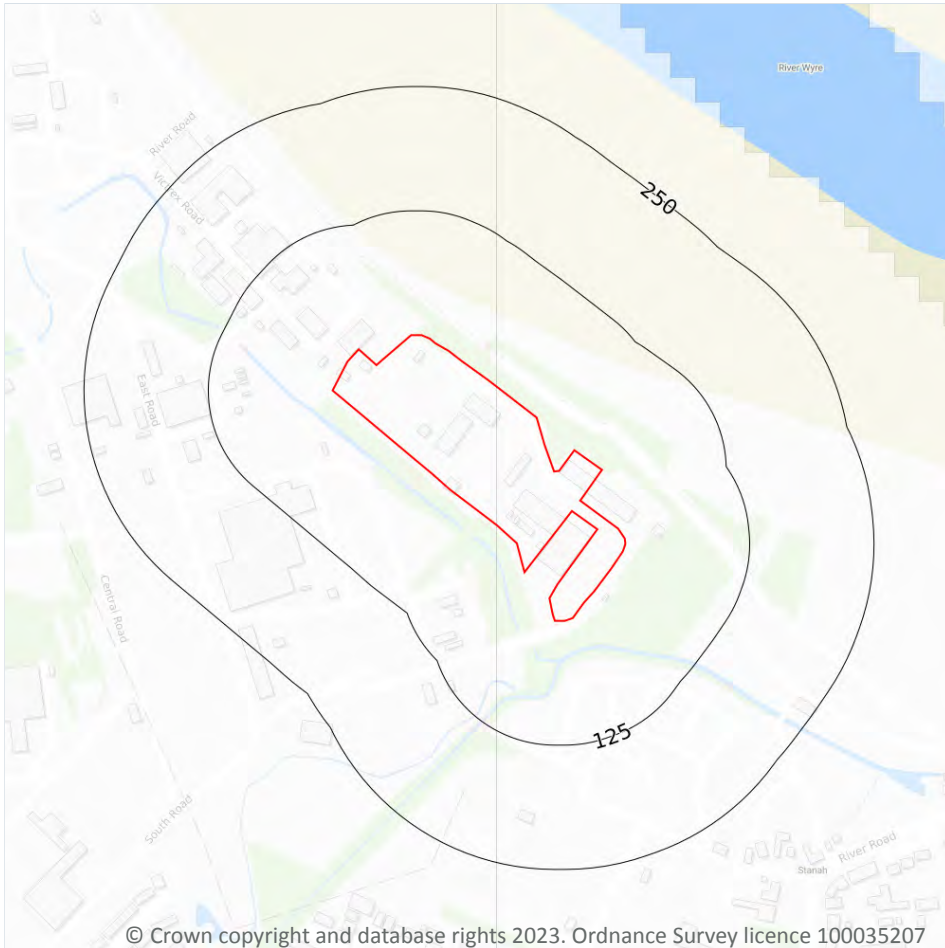
The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

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





## 20 Radon



© Crown copyright and database rights 2023. Ordnance Survey licence 100035207

### 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 159 >](#)

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

13

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 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
9m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
15m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
22m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
28m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
40m NE	15 mg/kg	No data	100 mg/kg	60 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

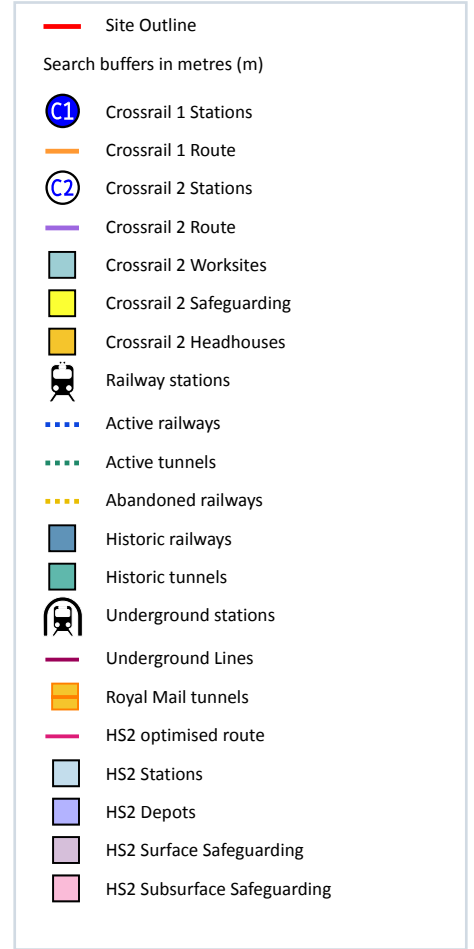
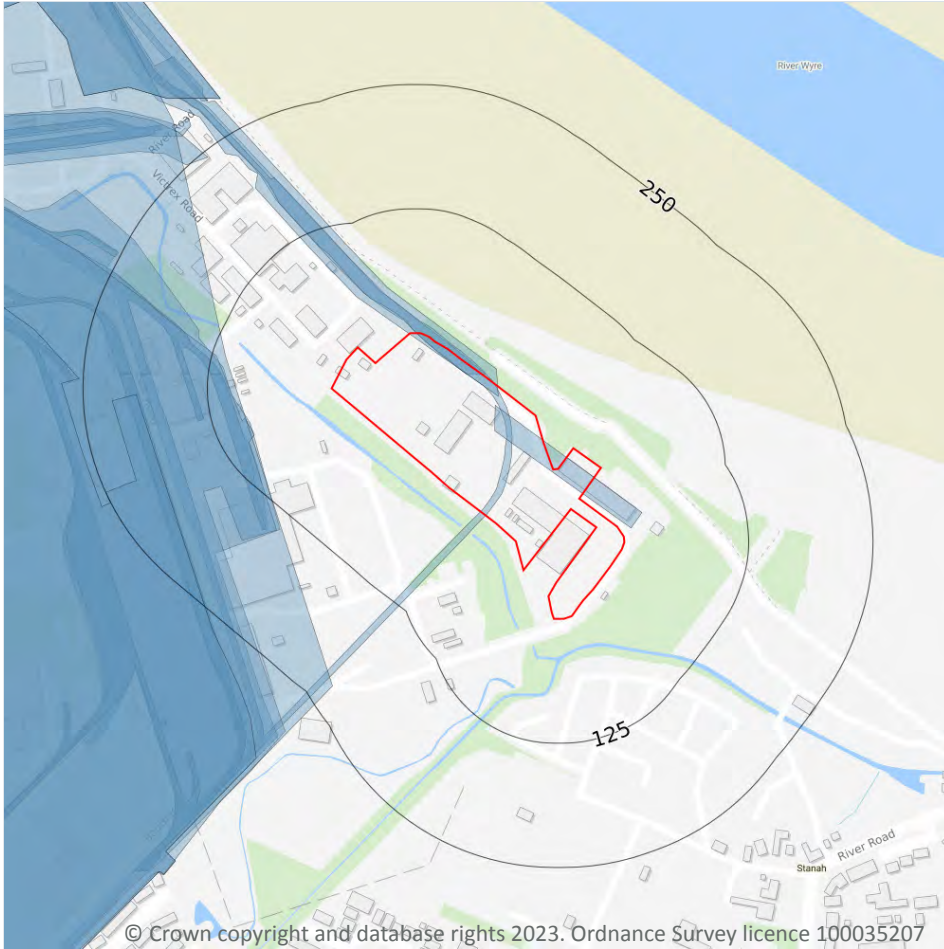
0

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



### 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**

**16**

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 163 >](#)

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1960	1250
On site	Railway Sidings	1965	2500
On site	Railway Sidings	1951	10560
On site	Railway Sidings	1973	10000
89m W	Railway Sidings	1973	10000
90m W	Railway Sidings	1951	10560
91m W	Railway Sidings	1967	10560
99m W	Railway Sidings	1960	1250
111m W	Railway Sidings	1960	1250
132m W	Railway Sidings	1960	1250
168m W	Railway Sidings	1960	1250
187m W	Railway Sidings	1977	1250
189m W	Railway Sidings	1981	10000
192m W	Railway Sidings	1980	1250
202m W	Railway Sidings	1960	1250
202m W	Railway Sidings	1979	1250

*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

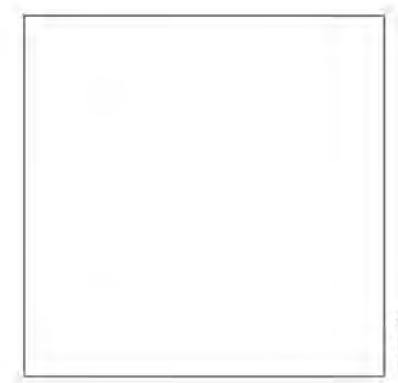
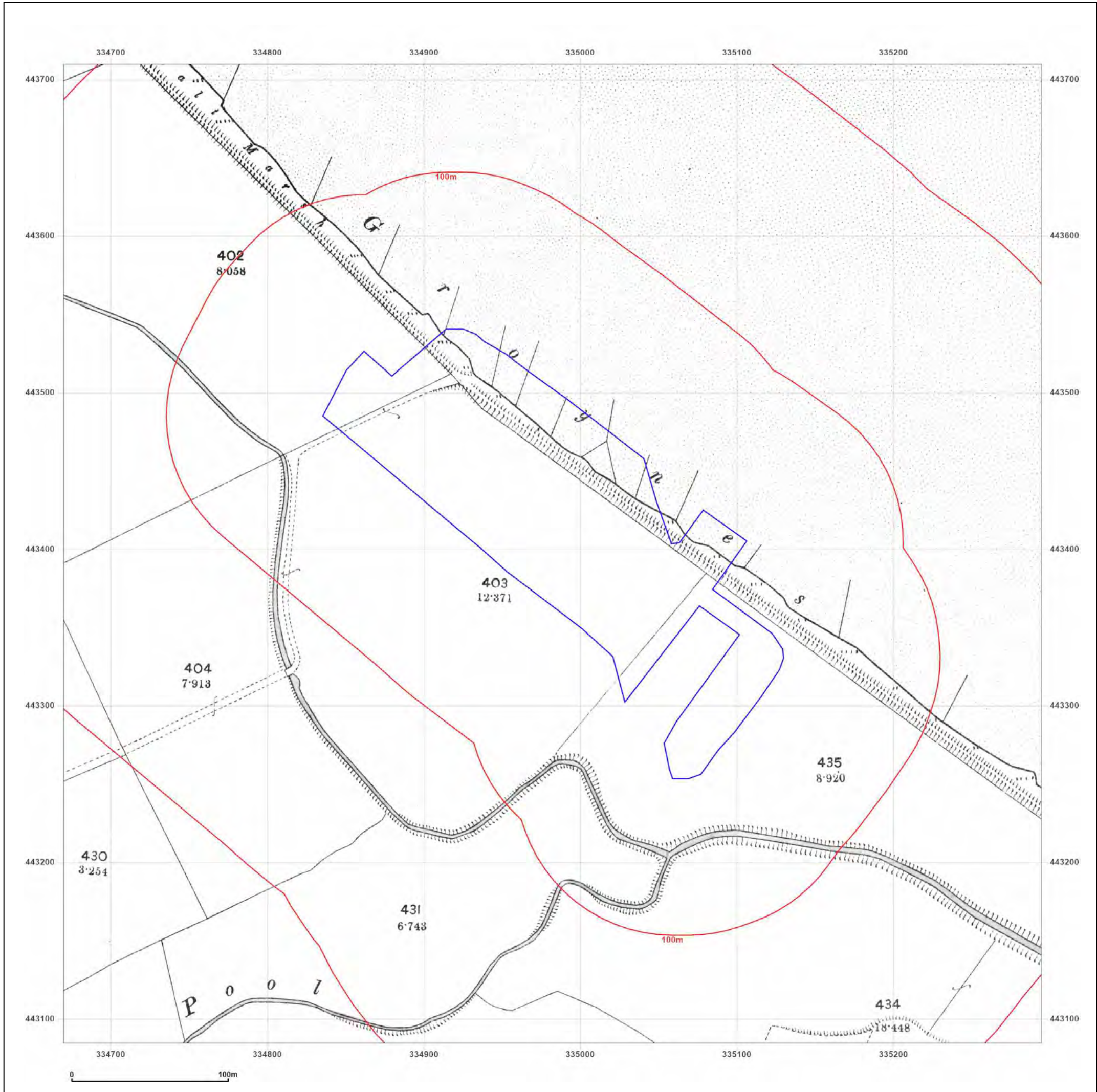
Groundsure's Terms and Conditions can be accessed at this link: [www.groundsure.com/terms-and-conditions-april-2023/](http://www.groundsure.com/terms-and-conditions-april-2023/) ↗.



**Site Details:**  
 334982.9920421878,443421.54  
 84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series  
**Map date:** 1890  
**Scale:** 1:2,500  
**Printed at:** 1:2,500



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



Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)

**Site Details:**

334982.9920421878,443421.54  
84771532

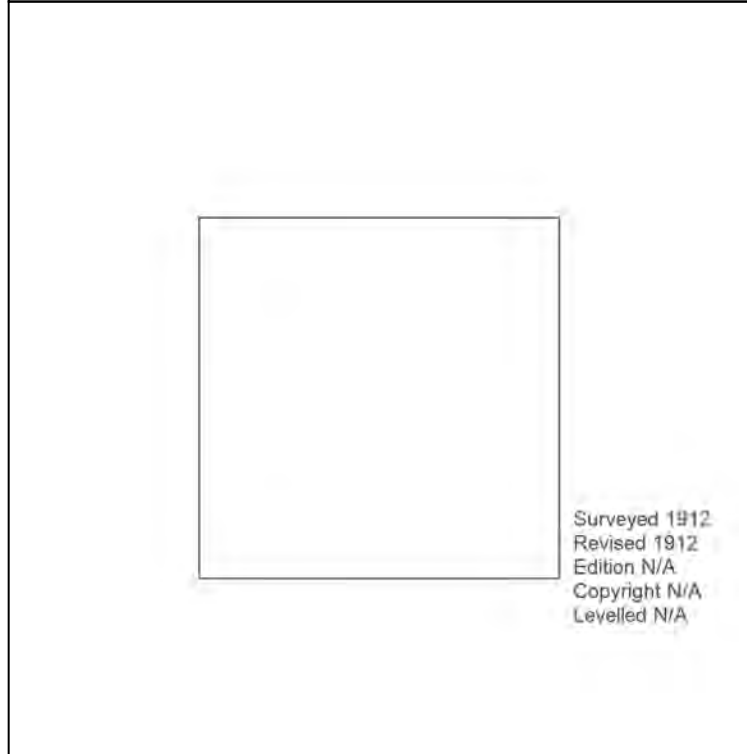
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1912

**Scale:** 1:2,500

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



Surveyed 1912  
Revised 1912  
Edition N/A  
Copyright N/A  
Levelled N/A

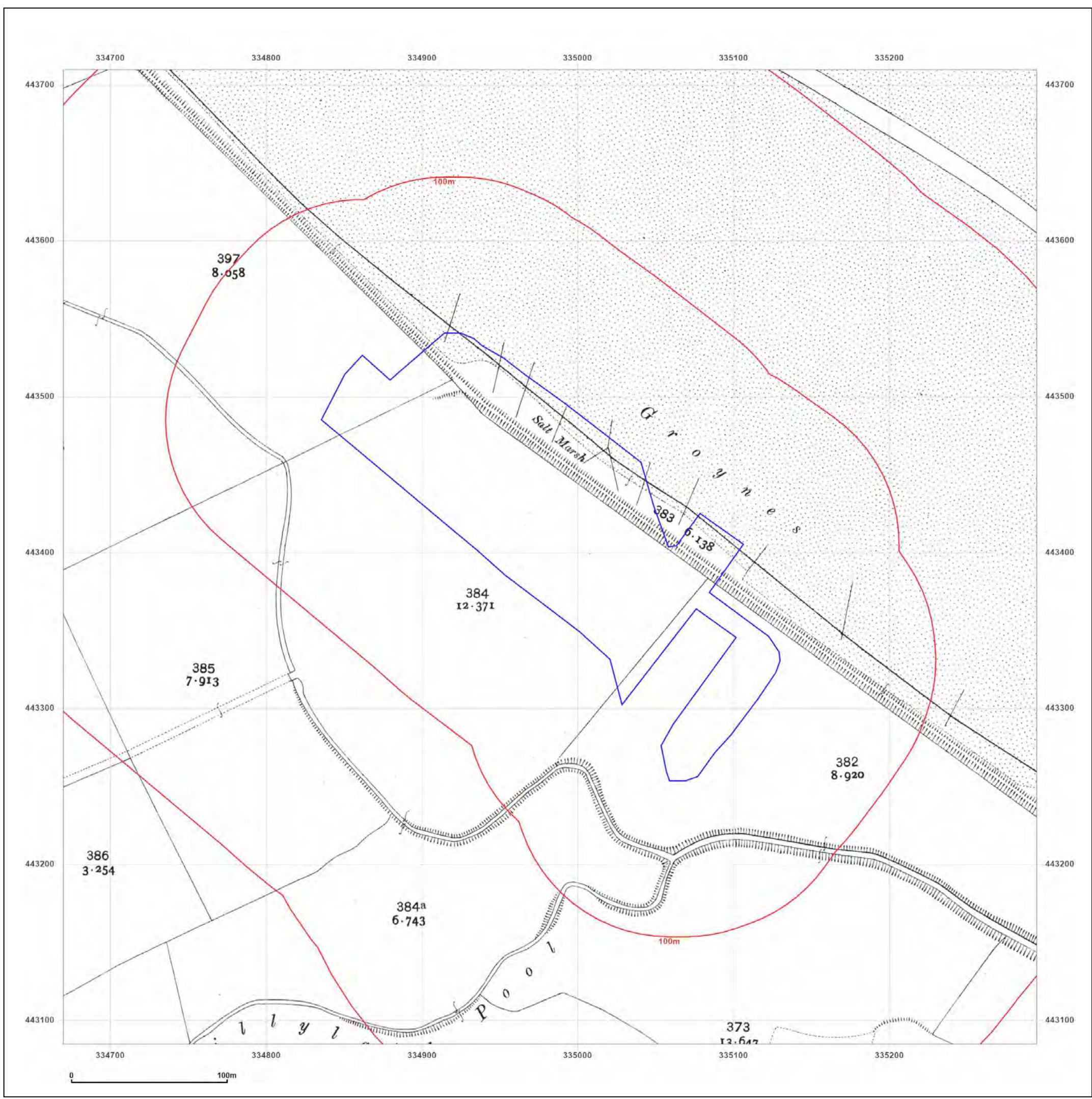


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

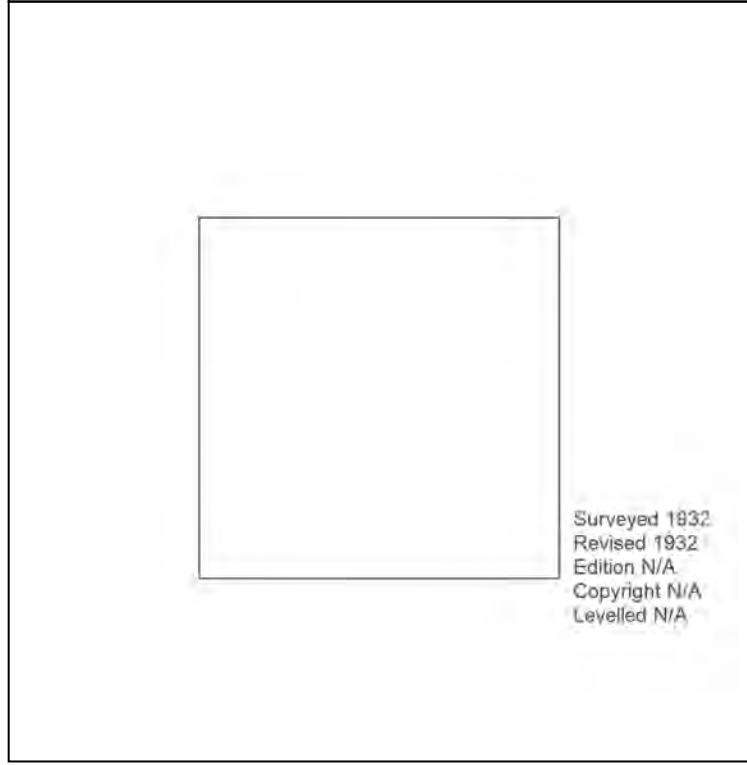
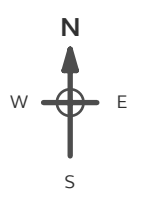
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1932

**Scale:** 1:2,500

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



Surveyed 1832  
Revised 1932  
Edition N/A  
Copyright N/A  
Levelled N/A

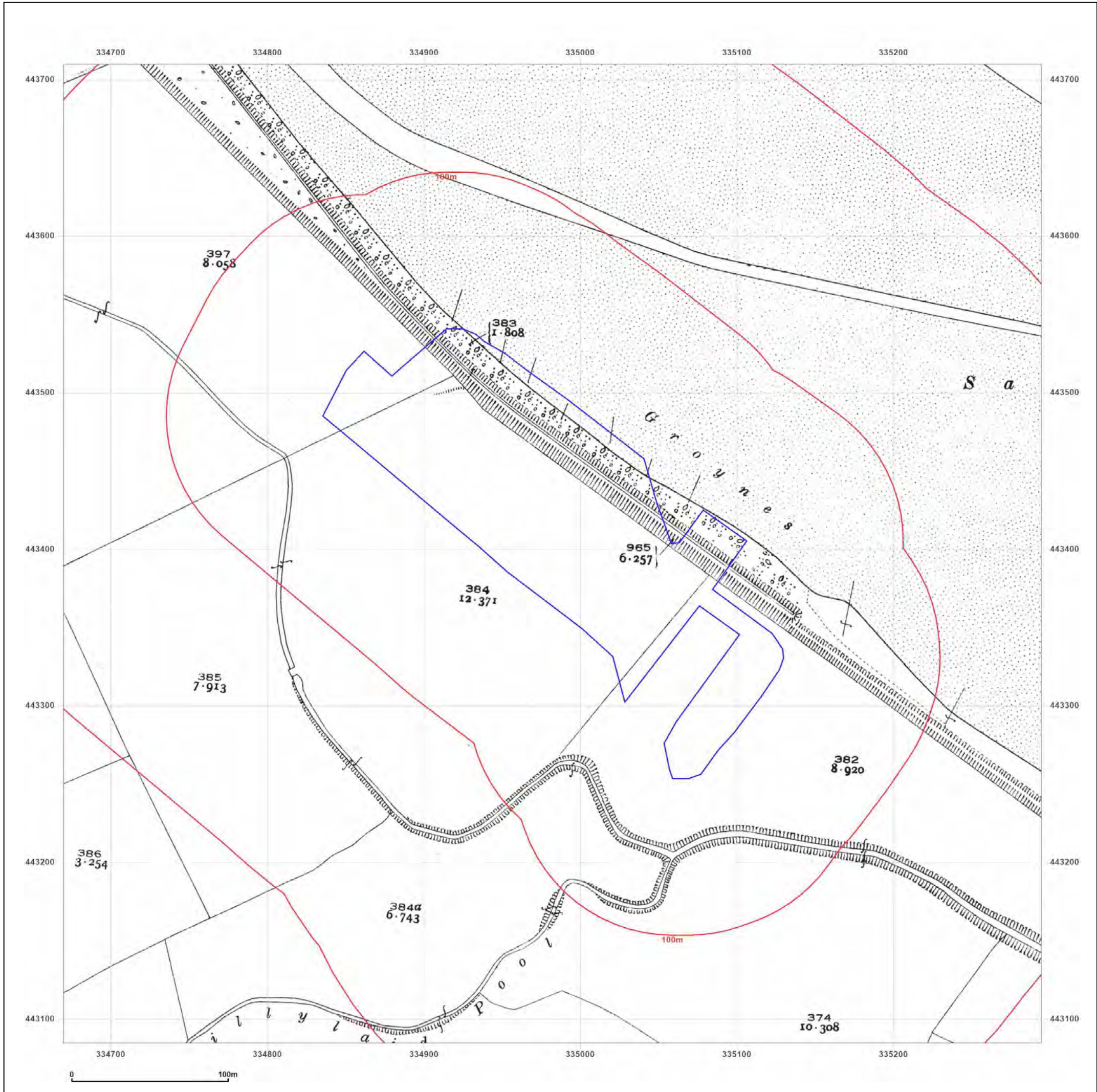


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

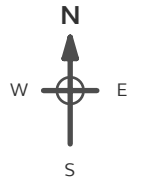
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 334982.9920421878,443421.54  
 84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series  
**Map date:** 1939  
**Scale:** 1:2,500  
**Printed at:** 1:2,500



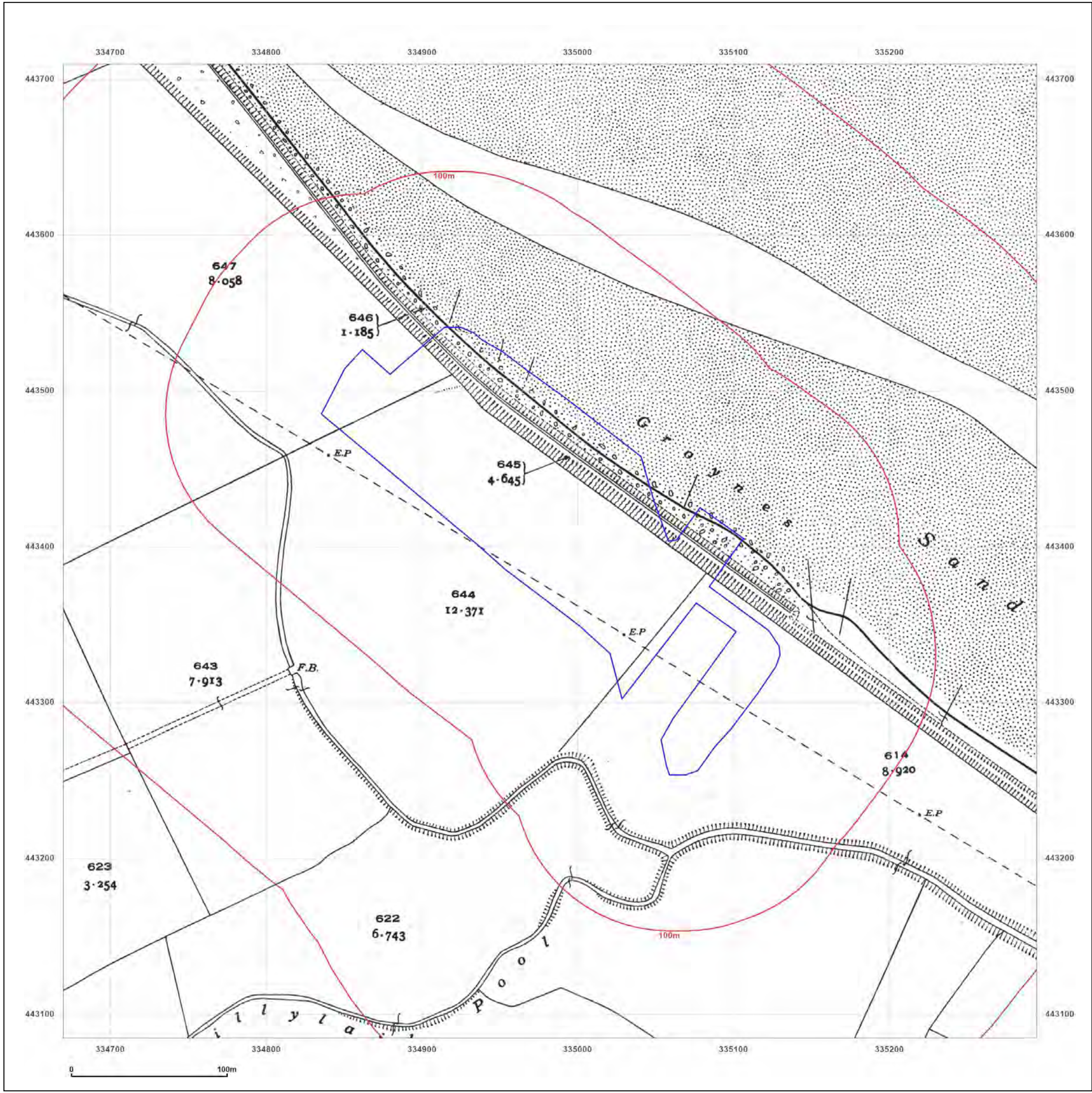
Surveyed 1939  
 Revised 1939  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Powered by  Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

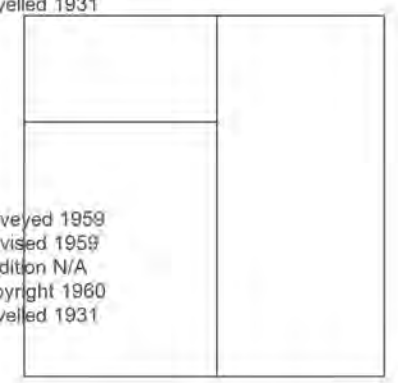
**Map date:** 1960

**Scale:** 1:1,250

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



Surveyed 1959  
Revised 1959  
Edition N/A  
Copyright 1960  
Levelled 1931



Surveyed 1959  
Revised 1959  
Edition N/A  
Copyright 1960  
Levelled 1931



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)

**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1965

**Scale:** 1:2,500

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



Surveyed 1965  
Revised 1965  
Edition N/A  
Copyright 1967  
Levelled 1960

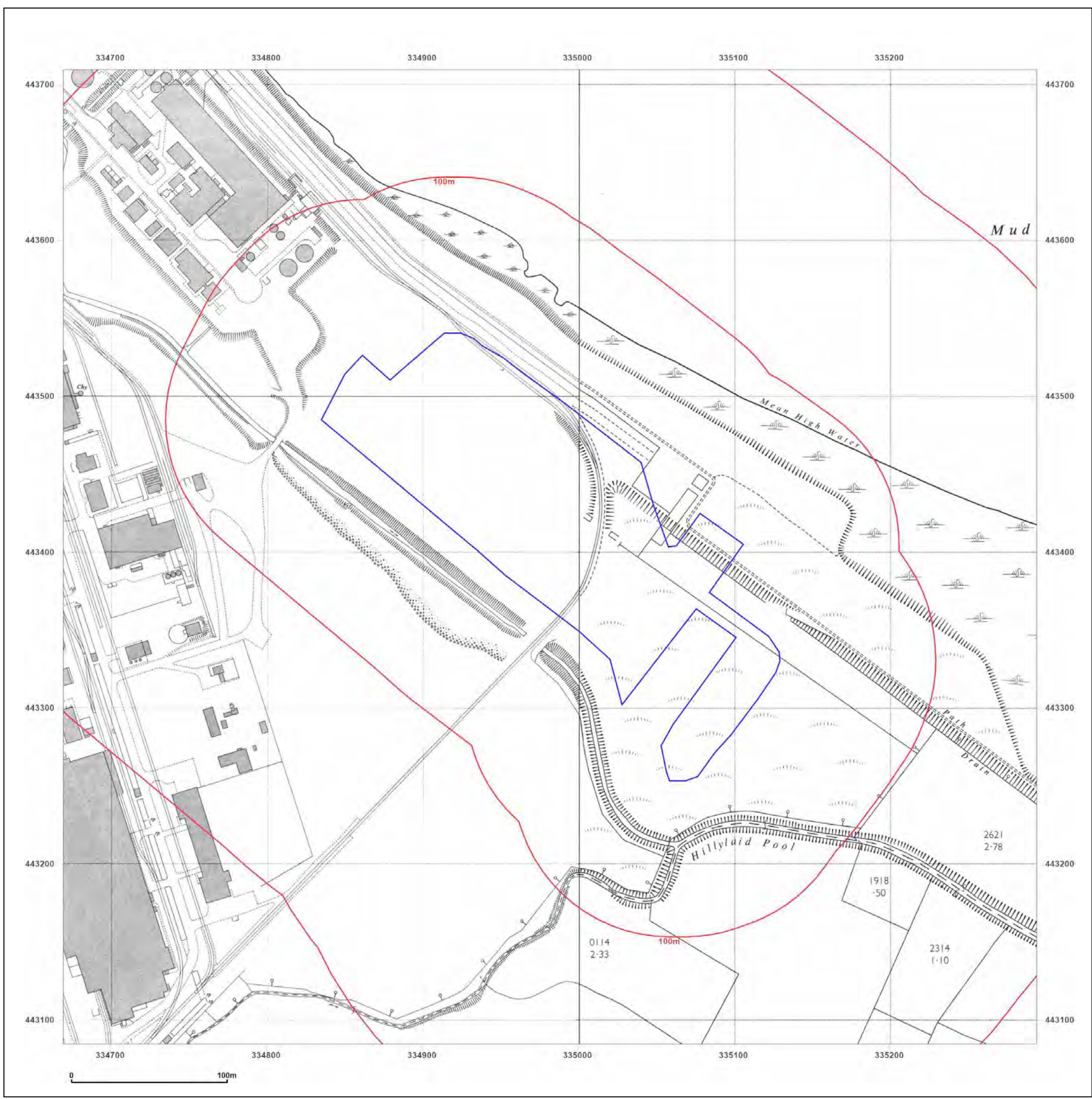


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

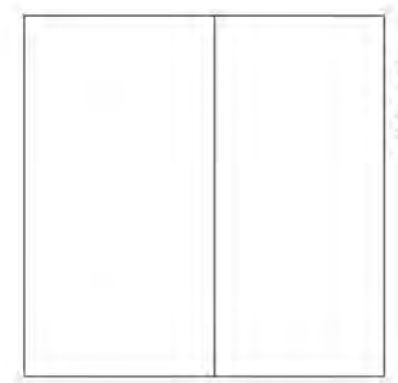
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1967

**Scale:** 1:2,500

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1967  
Levelled 1960

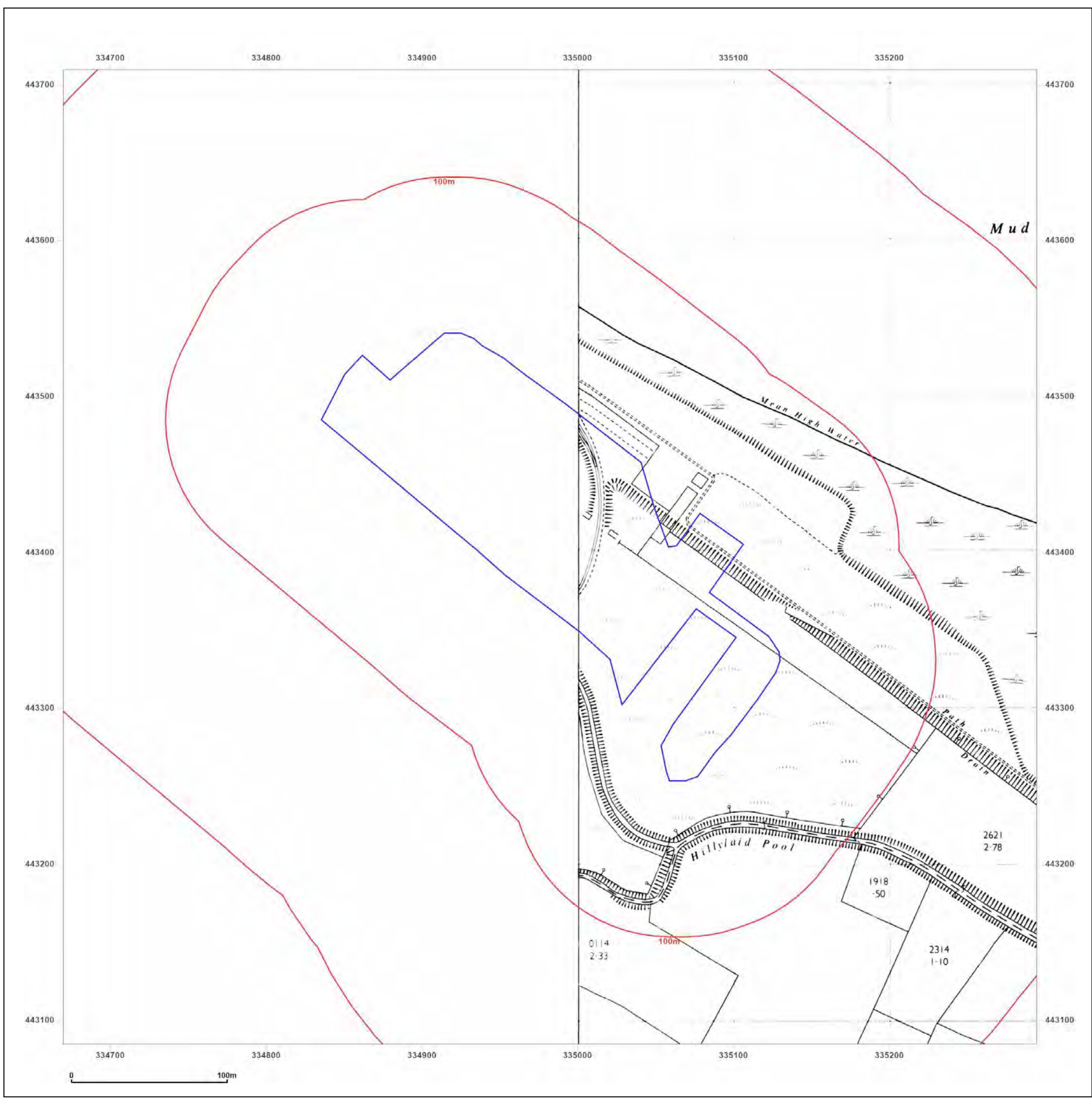


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1976

**Scale:** 1:1,250

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1975  
Levelled N/A



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1975  
Levelled N/A



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1977-1980

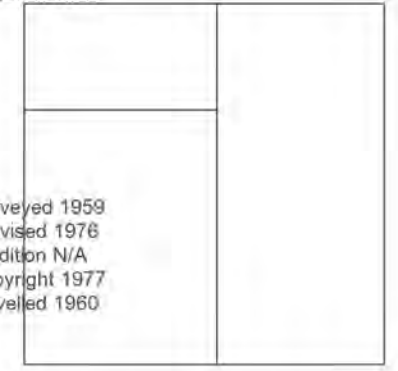
**Scale:** 1:1,250

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1980  
Levelled 1960

Surveyed 1959  
Revised 1976  
Edition N/A  
Copyright 1977  
Levelled 1960



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

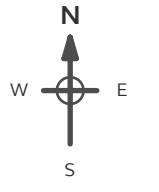
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1979-1980

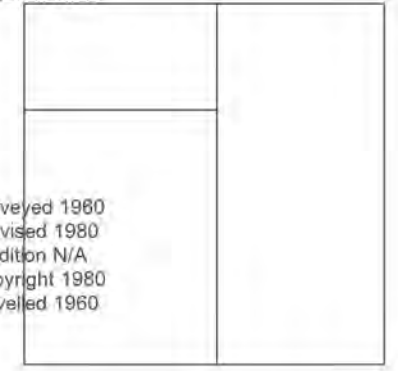
**Scale:** 1:1,250

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1979  
Levelled 1960

Surveyed 1980  
Revised 1980  
Edition N/A  
Copyright 1980  
Levelled 1960

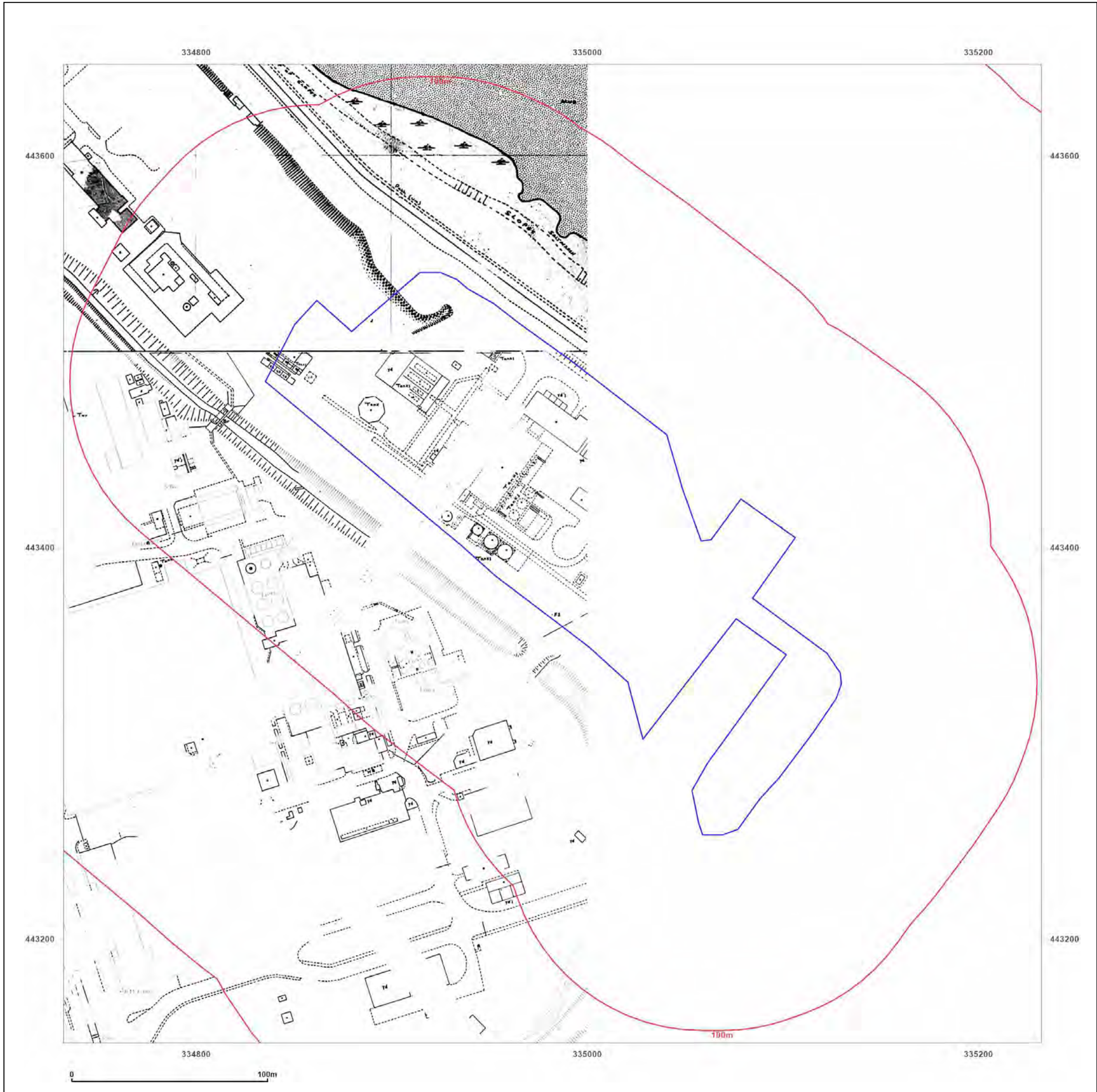


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

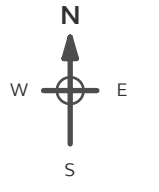
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1980

**Scale:** 1:1,250

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1980  
Levelled 1960



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

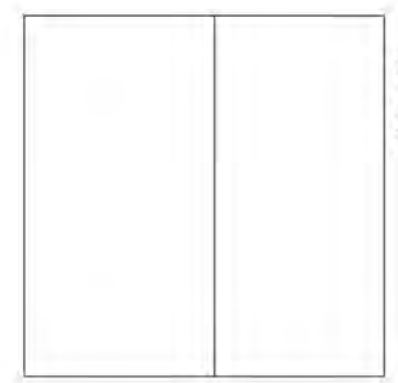
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1981

**Scale:** 1:2,500

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



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1981  
Levelled 1960

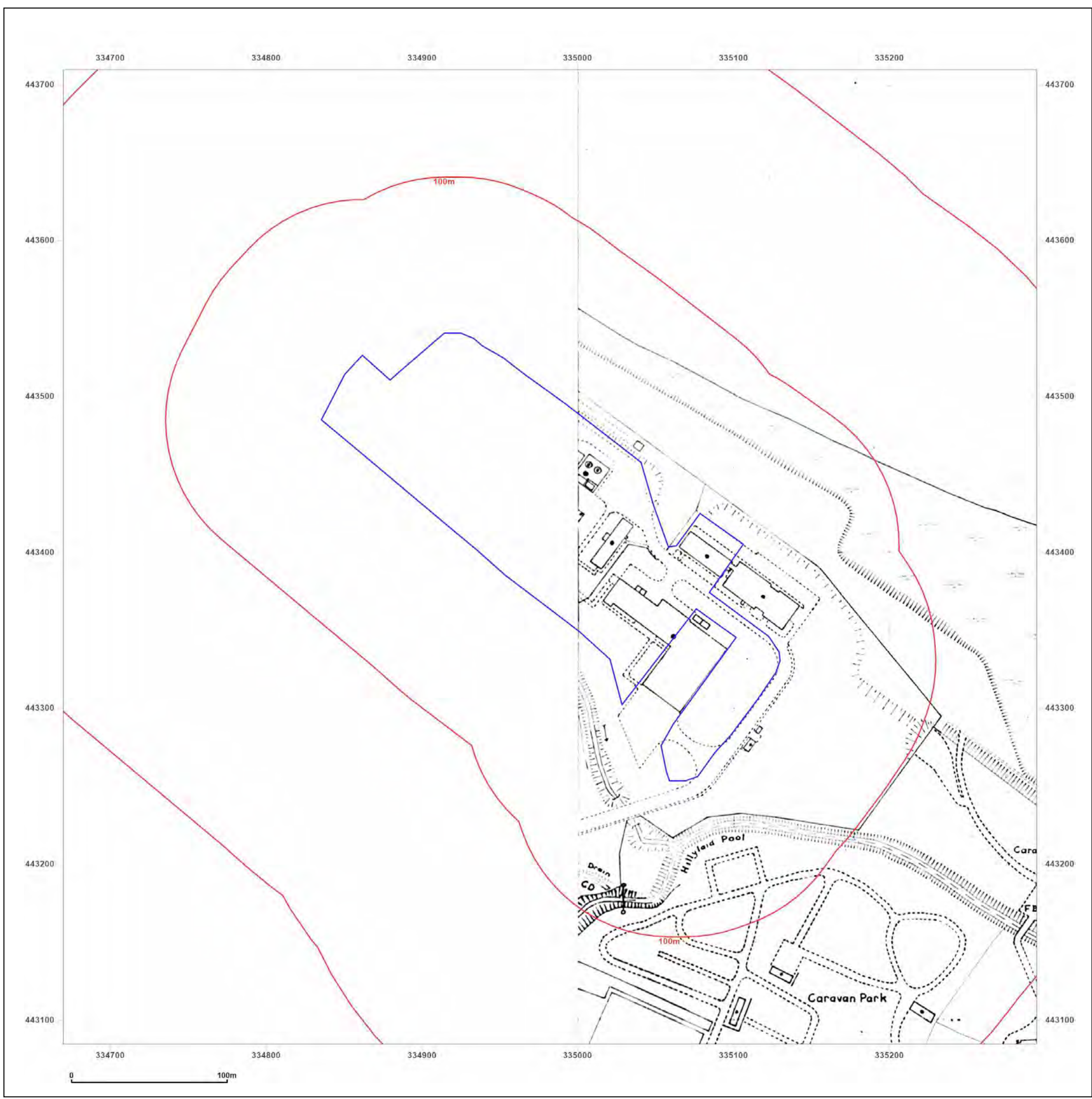


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

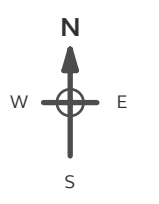
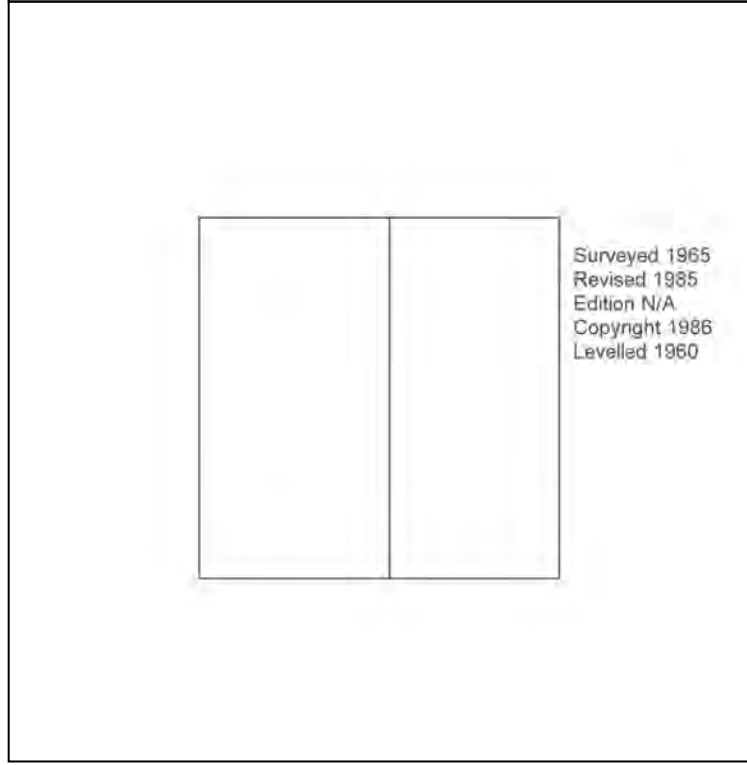
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1985

**Scale:** 1:2,500

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

0056  
6.338ha  
15.66

0052  
1.926ha  
4.76

2212  
15.898ha  
39.28

Tanks

Works

Track

Caravan Park

Drain

C/D

Carava

100m

100m

334700 334800 334900 335000 335100 335200

443100 443200 443300 443400 443500 443600 443700

0 100m

Surveyed 1965  
Revised 1985  
Edition N/A  
Copyright 1986  
Levelled 1960



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)

**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1993

**Scale:** 1:1,250

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



Surveyed 1993  
Revised N/A  
Edition N/A  
Copyright 1993  
Levelled N/A



Surveyed 1993  
Revised N/A  
Edition N/A  
Copyright 1993  
Levelled N/A



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)

**Site Details:**

334982.9920421878,443421.54  
84771532

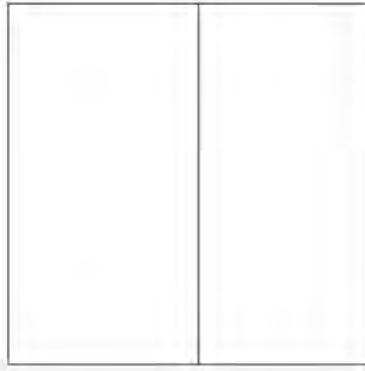
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1993

**Scale:** 1:2,500

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

Surveyed 1993  
Revised N/A  
Edition N/A  
Copyright 1993  
Levelled N/A

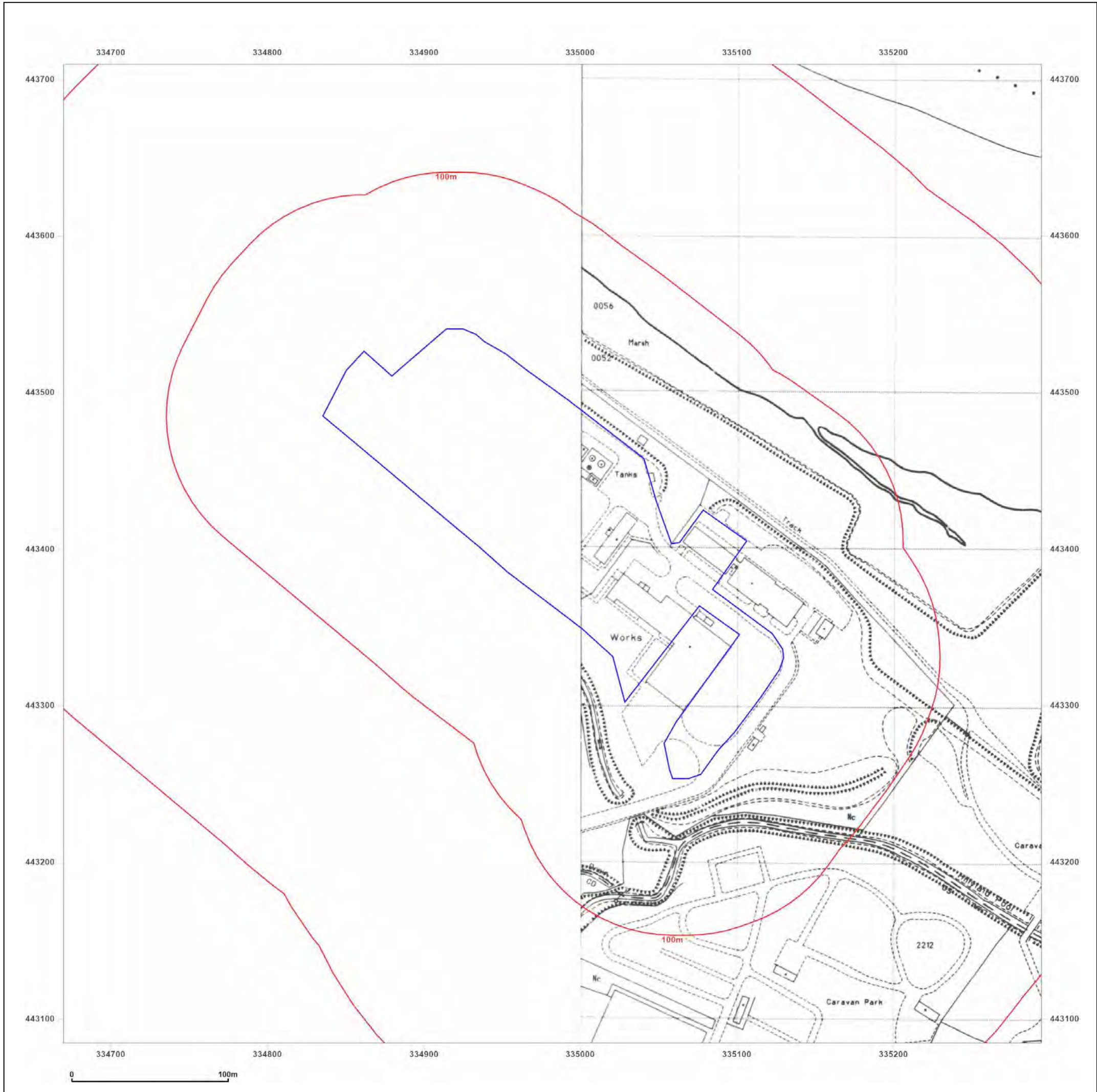


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1994

**Scale:** 1:1,250

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



Surveyed 1994  
Revised N/A  
Edition N/A  
Copyright 1994  
Levelled N/A



Surveyed 1994  
Revised N/A  
Edition N/A  
Copyright 1994  
Levelled N/A



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1994

**Scale:** 1:1,250

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



Surveyed 1994  
Revised 1994  
Edition N/A  
Copyright 1994  
Levelled N/A

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



Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

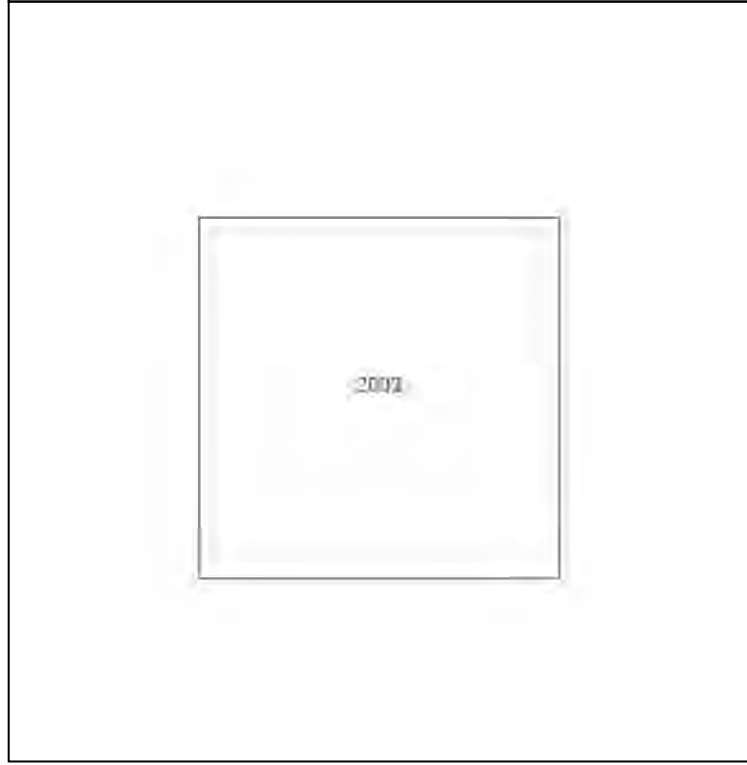
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** LandLine

**Map date:** 2003

**Scale:** 1:1,250

**Printed at:** 1:1,250

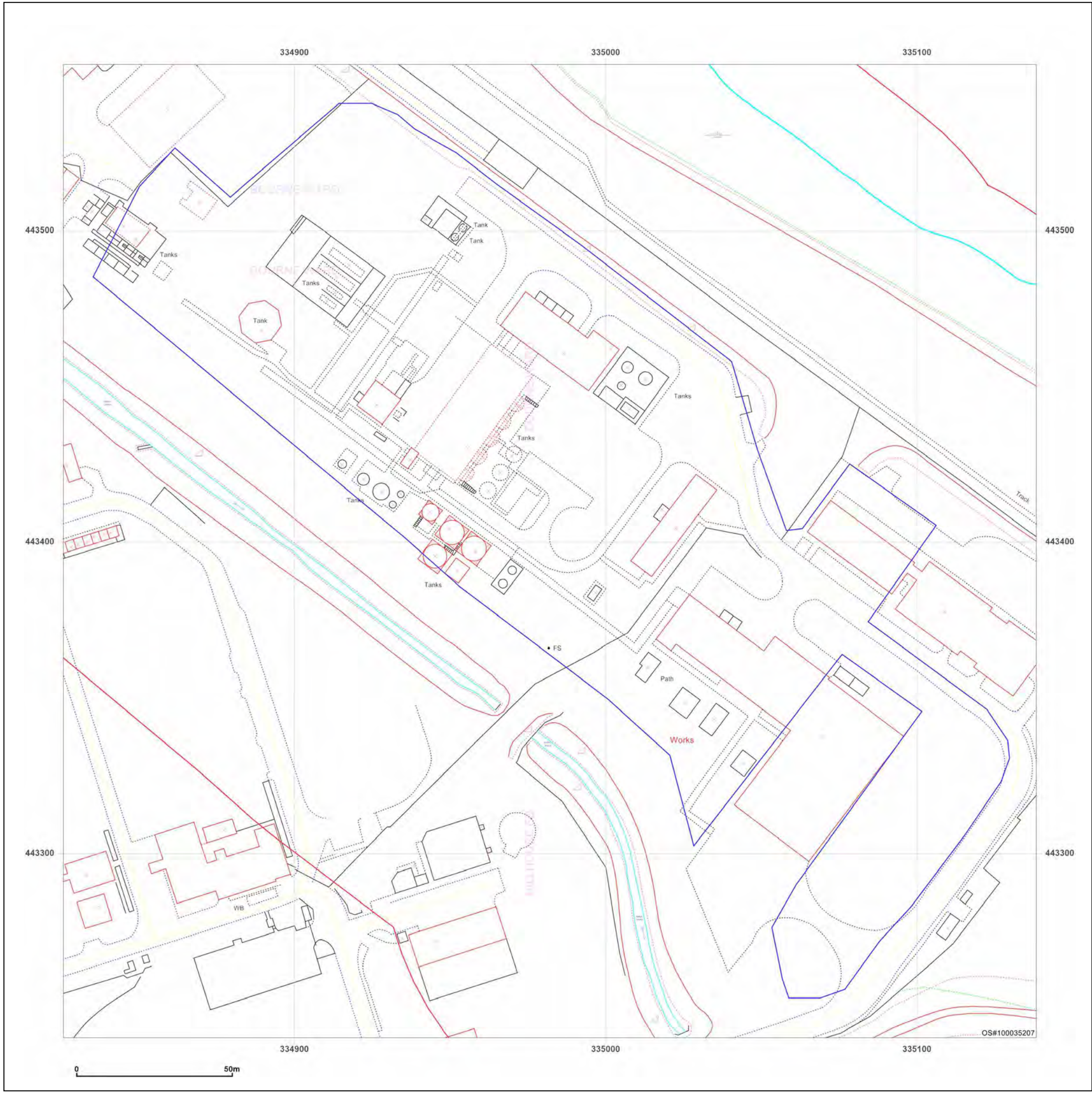


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

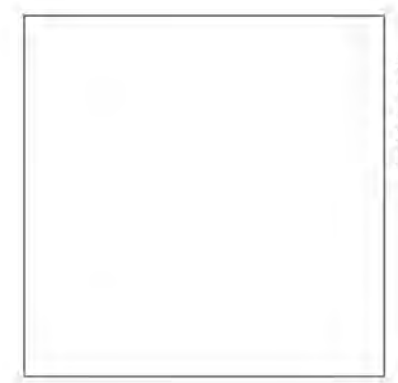
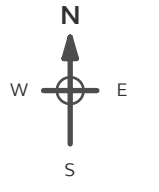
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1848

**Scale:** 1:10,560

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



Surveyed 1844  
Revised N/A  
Edition 1848  
Copyright N/A  
Levelled N/A

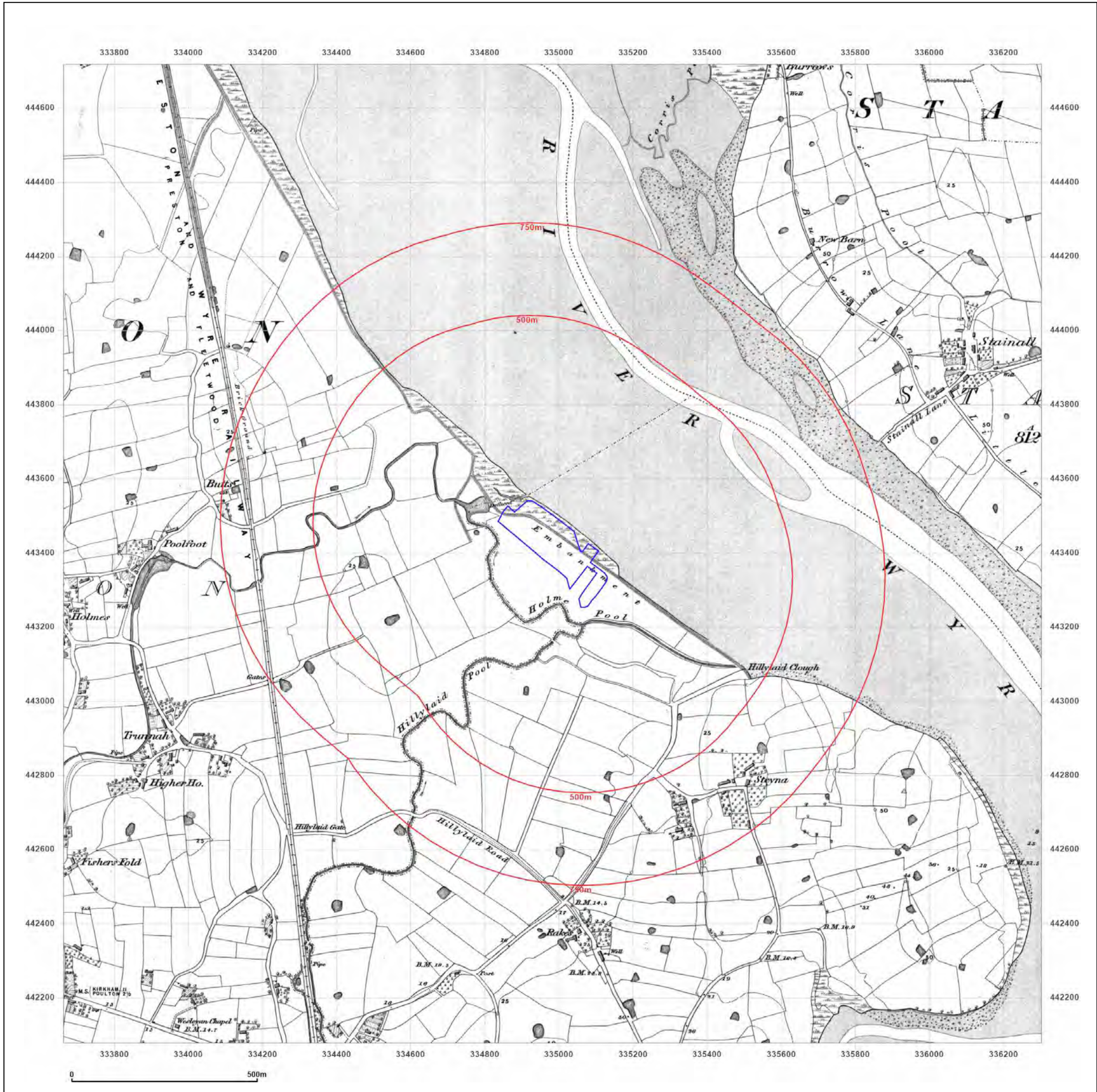


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

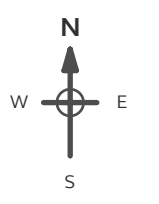
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series  
**Map date:** 1891  
**Scale:** 1:10,560  
**Printed at:** 1:10,560



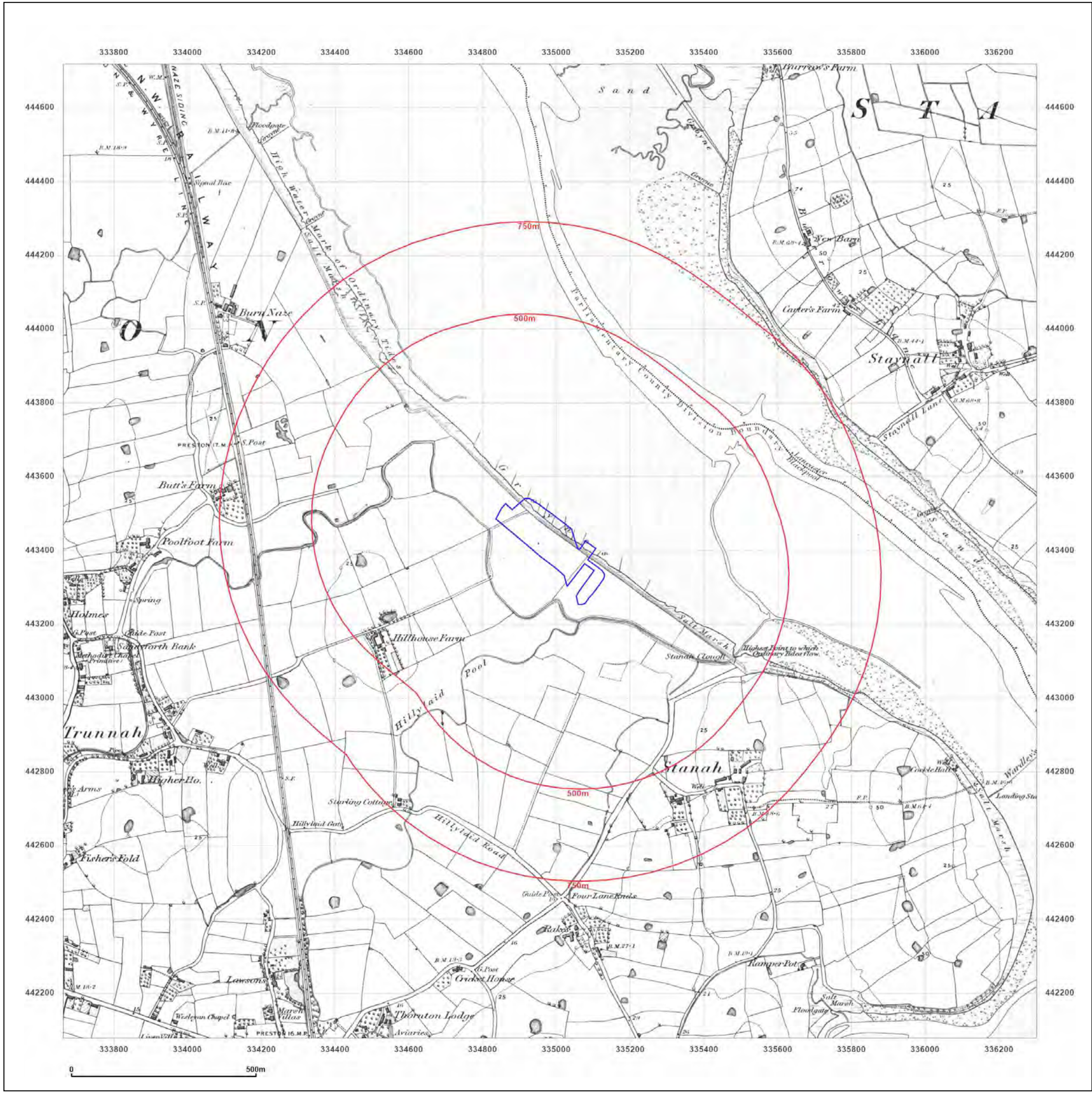
Surveyed 1844  
Revised 1891  
Edition N/A  
Copyright N/A  
Levelled N/A

**Powered by**  
  
Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

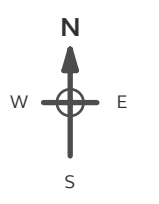
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1910

**Scale:** 1:10,560

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



Surveyed 1845  
Revised 1910  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1844  
Revised 1910  
Edition N/A  
Copyright N/A  
Levelled N/A

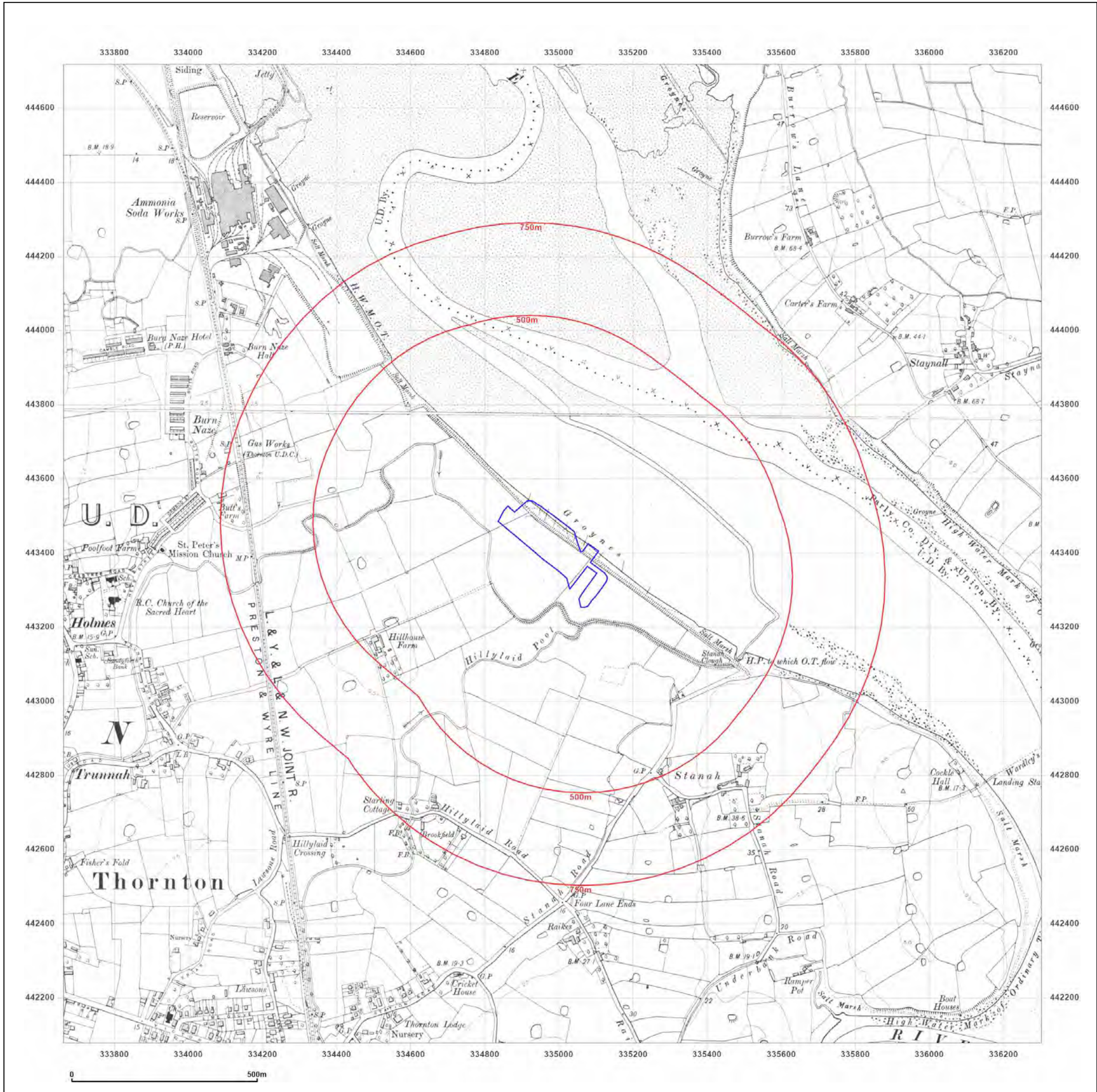


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1930-1931

**Scale:** 1:10,560

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



Surveyed 1845  
Revised 1930  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1844  
Revised 1931  
Edition N/A  
Copyright N/A  
Levelled N/A

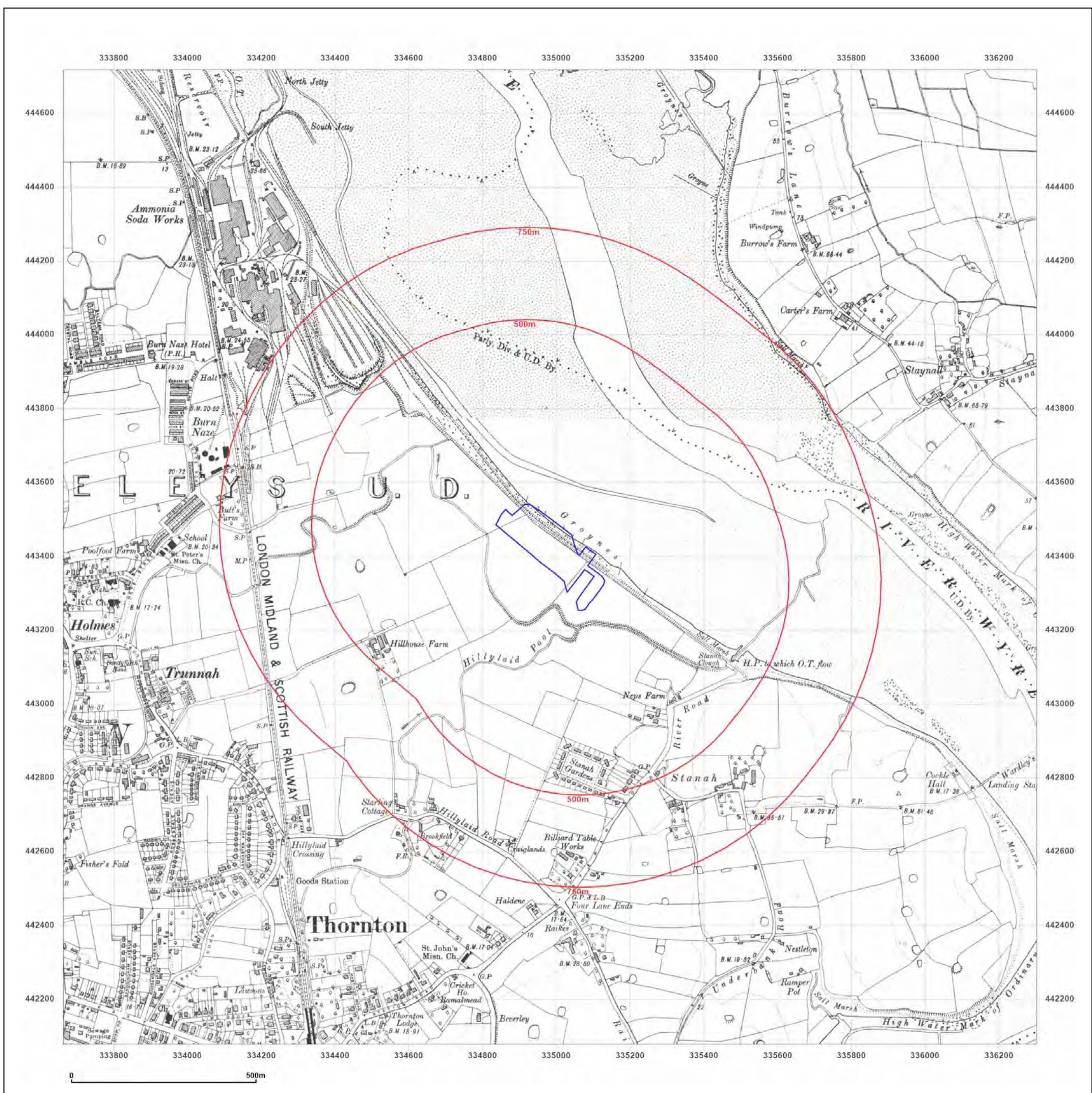


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** County Series

**Map date:** 1938

**Scale:** 1:10,560

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



Surveyed 1845  
Revised 1938  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1844  
Revised 1938  
Edition N/A  
Copyright N/A  
Levelled N/A

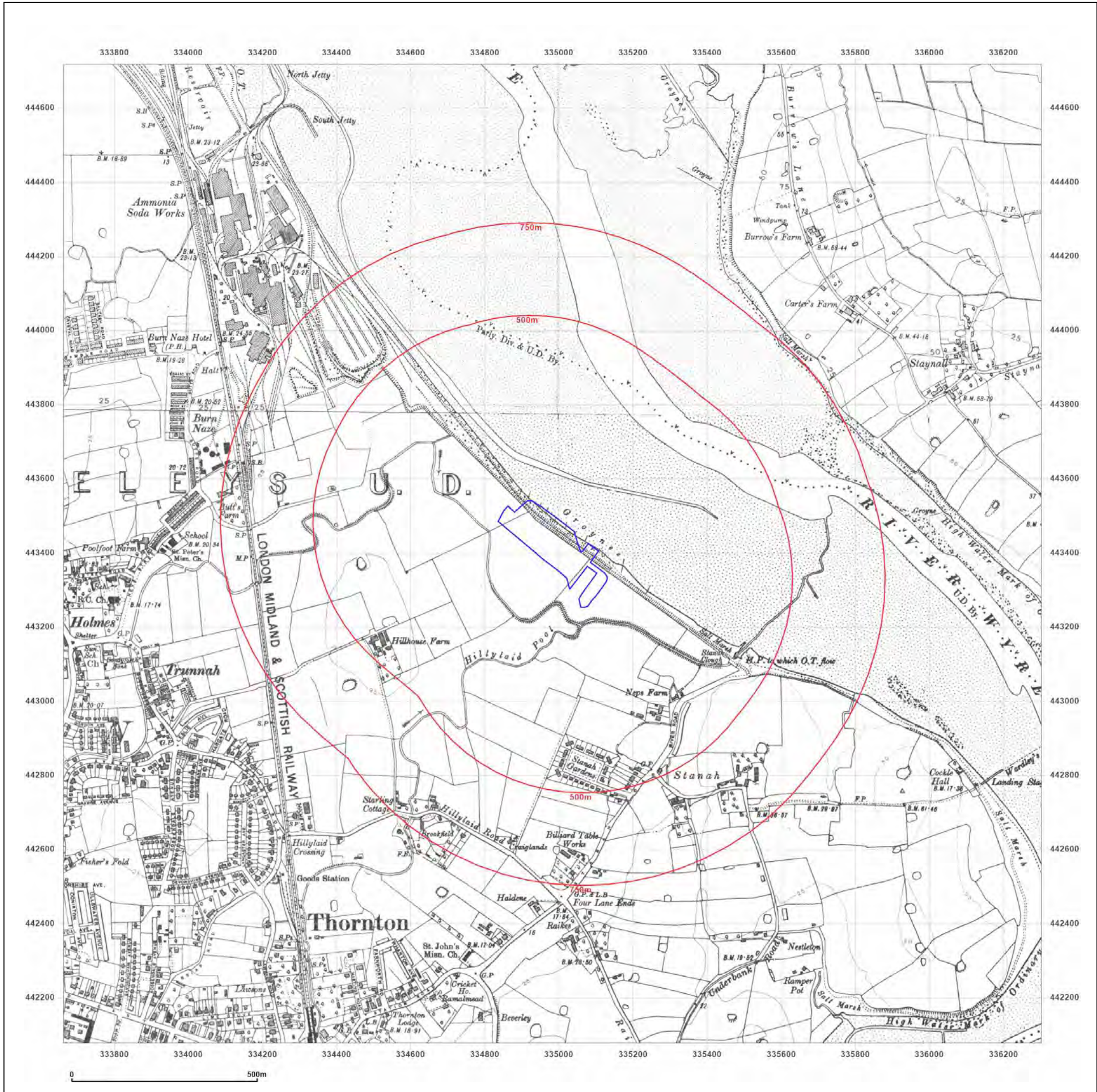


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** Provisional

**Map date:** 1951

**Scale:** 1:10,560

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



Surveyed 1951  
Revised 1951  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1951  
Revised 1951  
Edition N/A  
Copyright N/A  
Levelled N/A

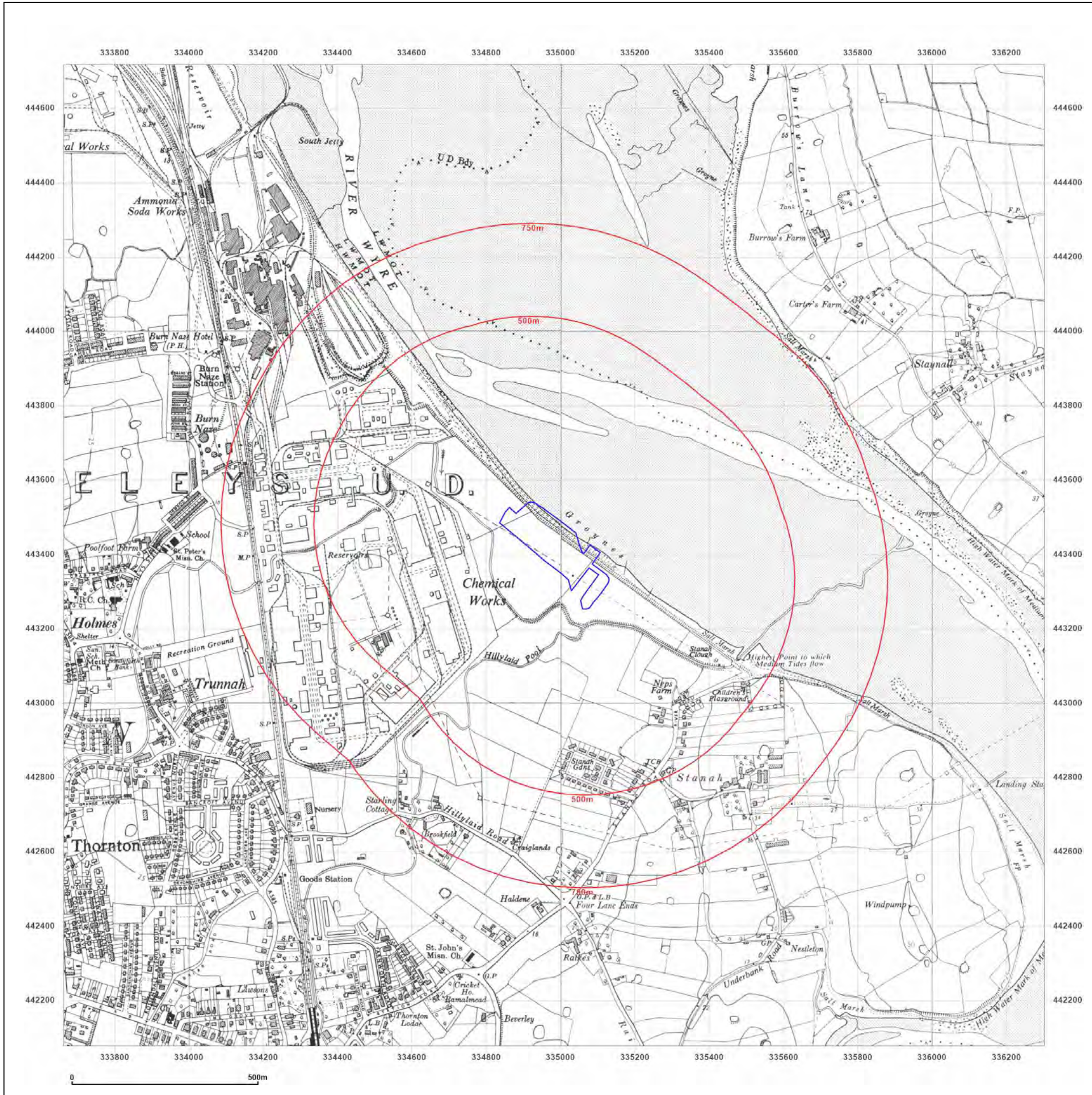


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** Provisional

**Map date:** 1967-1968

**Scale:** 1:10,560

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



Surveyed 1967  
Revised 1967  
Edition N/A  
Copyright N/A  
Levelled N/A

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

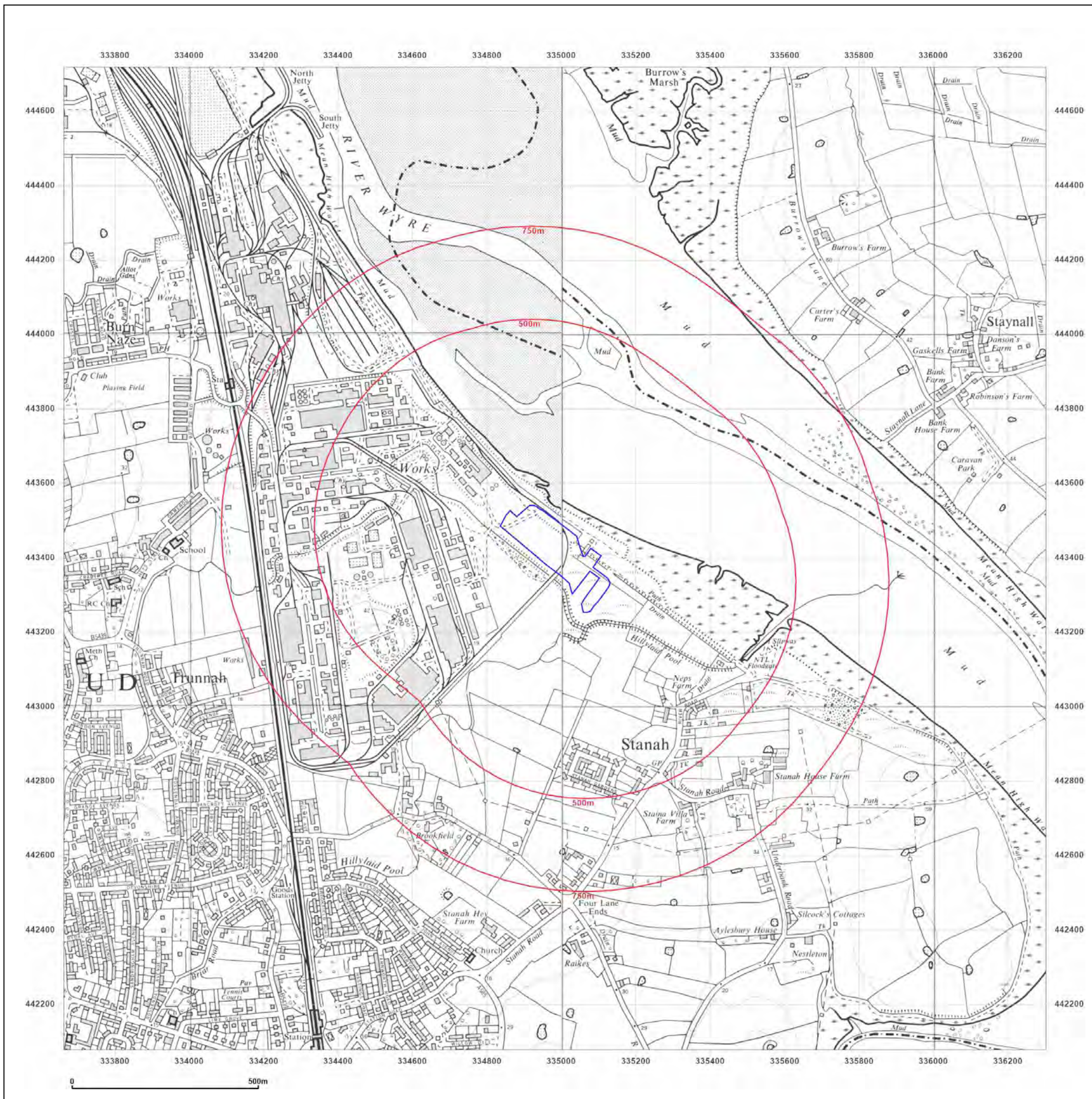


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1973

**Scale:** 1:10,000

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



Surveyed 1973  
Revised 1973  
Edition N/A  
Copyright N/A  
Levelled N/A

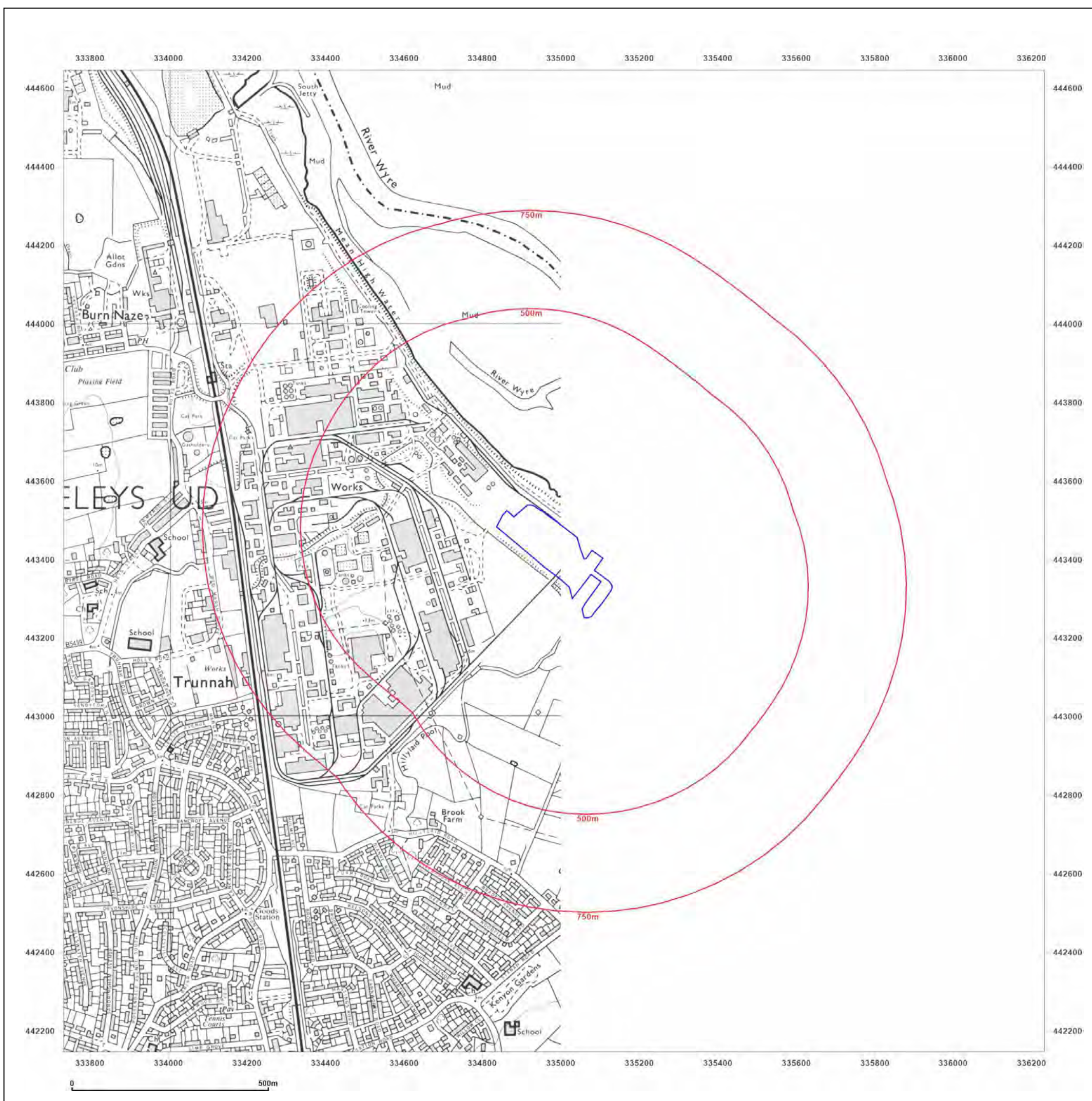


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1981-1985

**Scale:** 1:10,000

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



Surveyed 1981  
Revised 1981  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1983  
Revised 1985  
Edition N/A  
Copyright N/A  
Levelled N/A

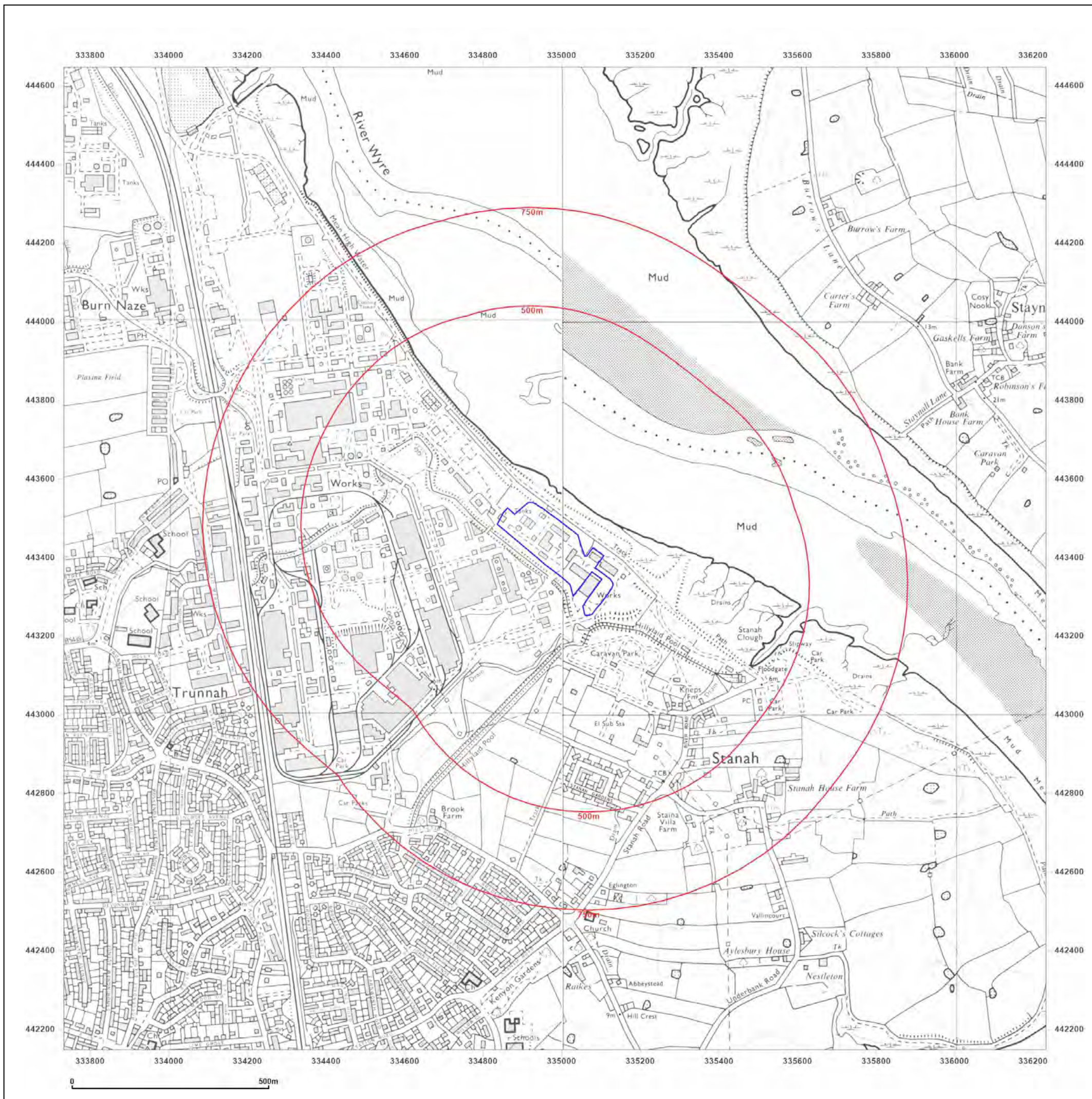


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

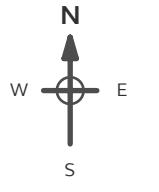
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 1992

**Scale:** 1:10,000

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



Surveyed 1981  
Revised 1992  
Edition N/A  
Copyright N/A  
Levelled N/A

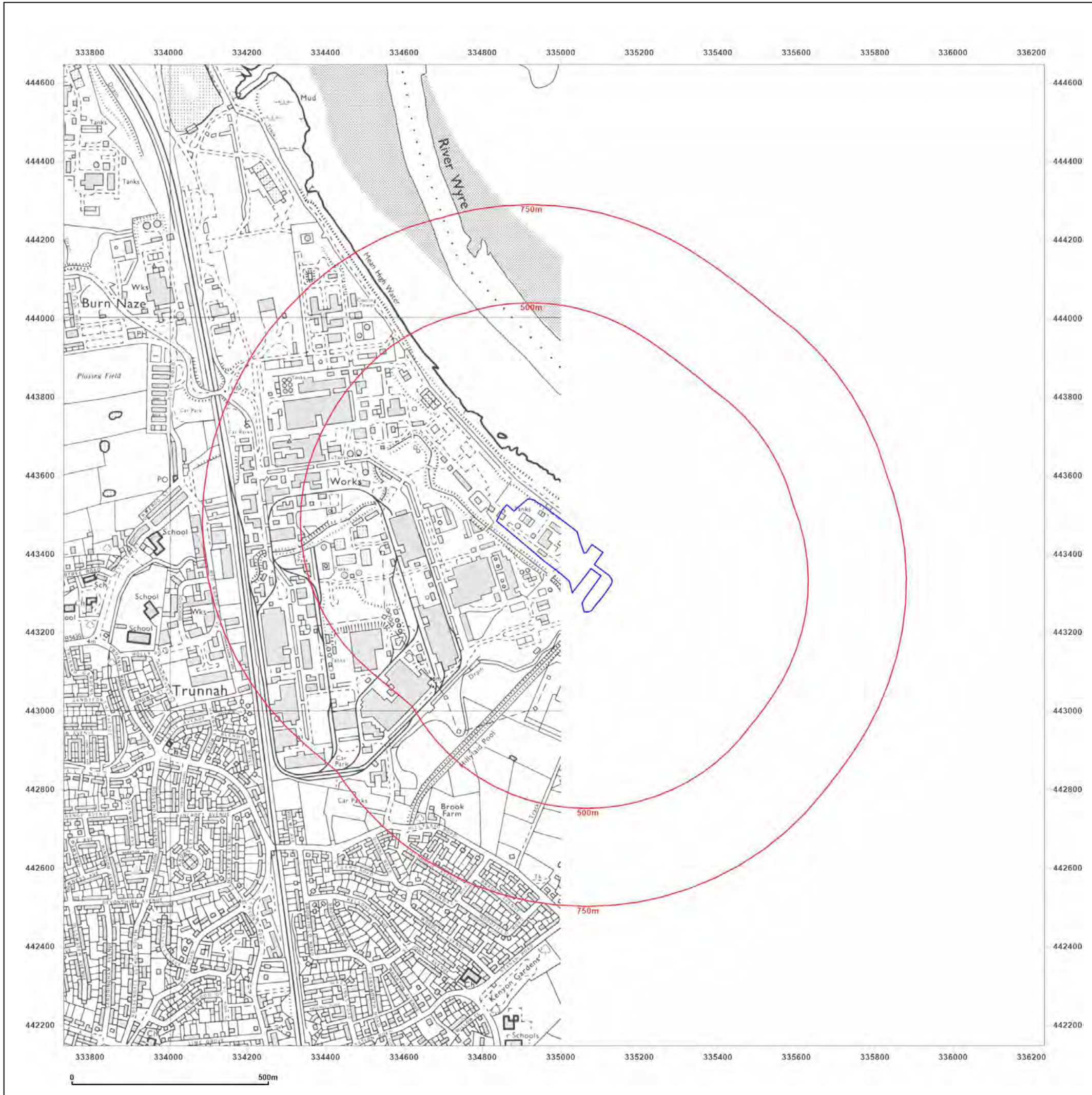


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**

334982.9920421878,443421.54  
84771532

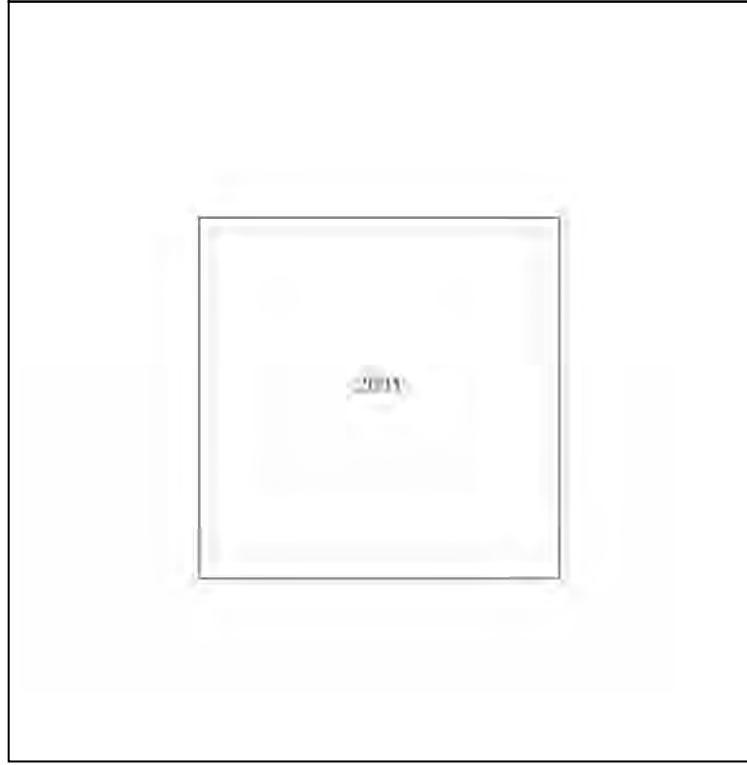
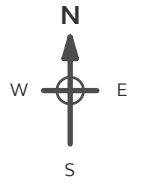
**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid

**Map date:** 2001

**Scale:** 1:10,000

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

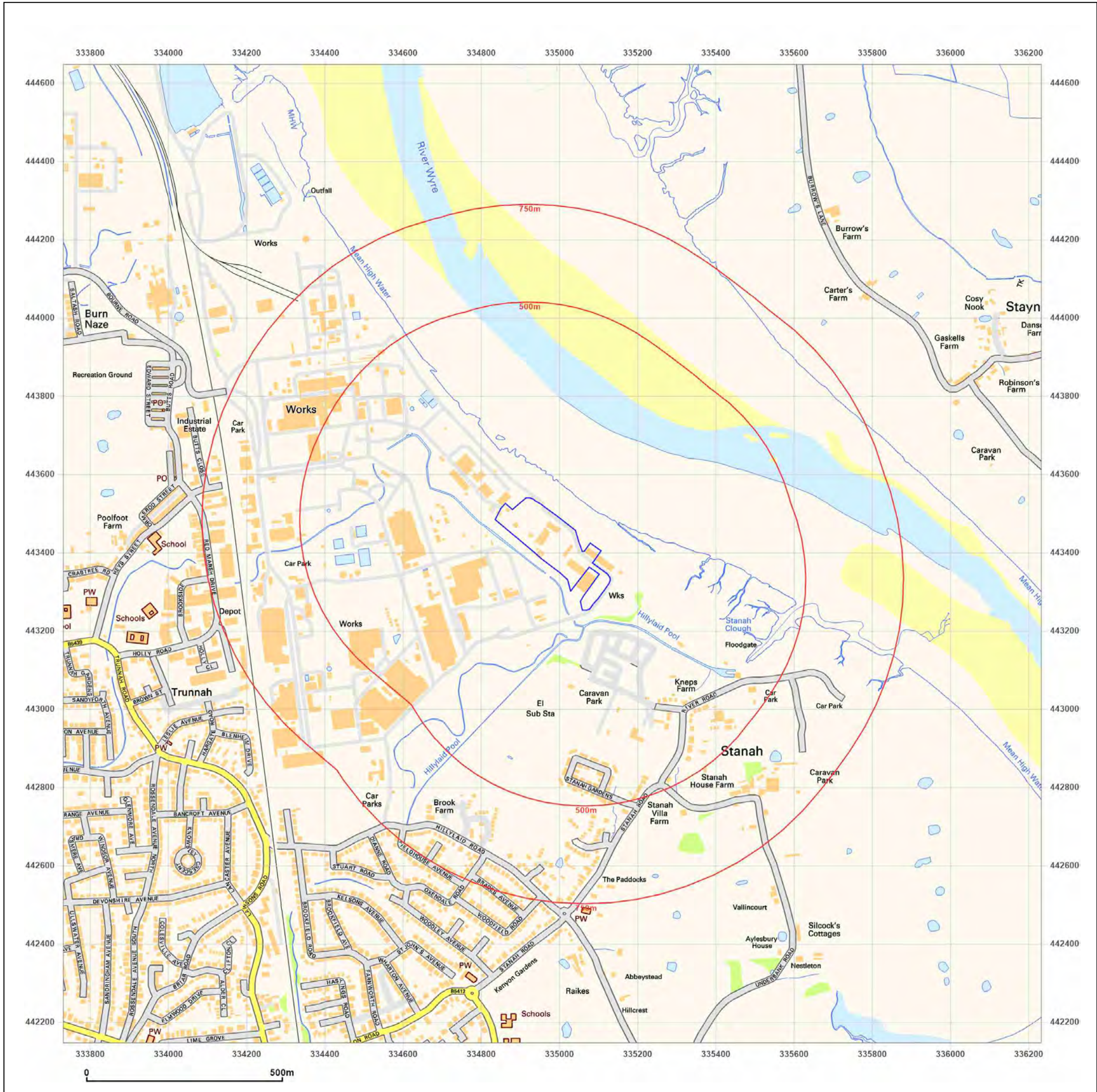


Produced by  
Groundsure Insights  
T: 08444 159000  
E: [info@groundsure.com](mailto:info@groundsure.com)  
W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

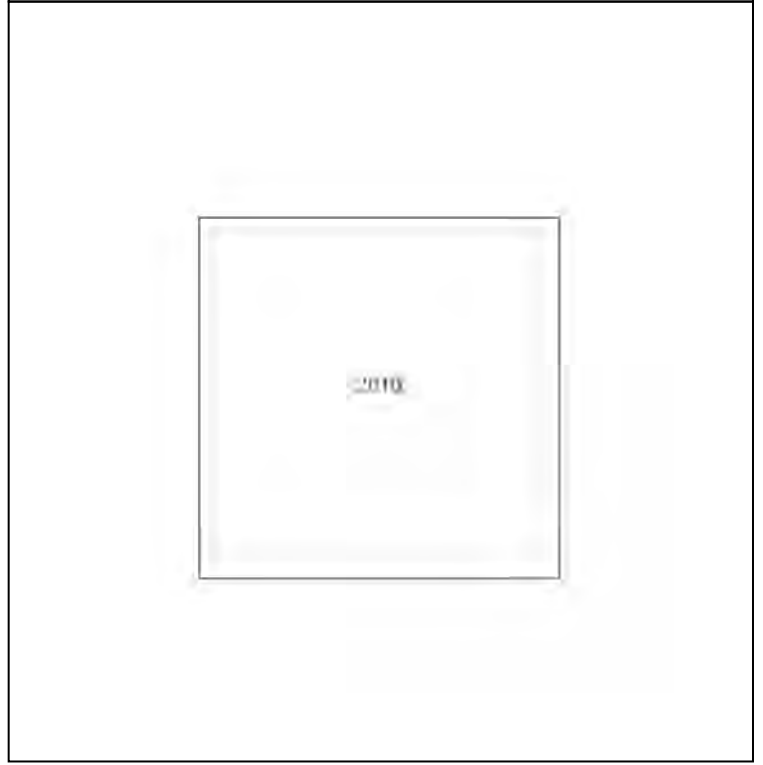
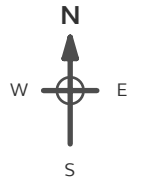
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 334982.9920421878,443421.54  
 84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid  
**Map date:** 2010  
**Scale:** 1:10,000  
**Printed at:** 1:10,000



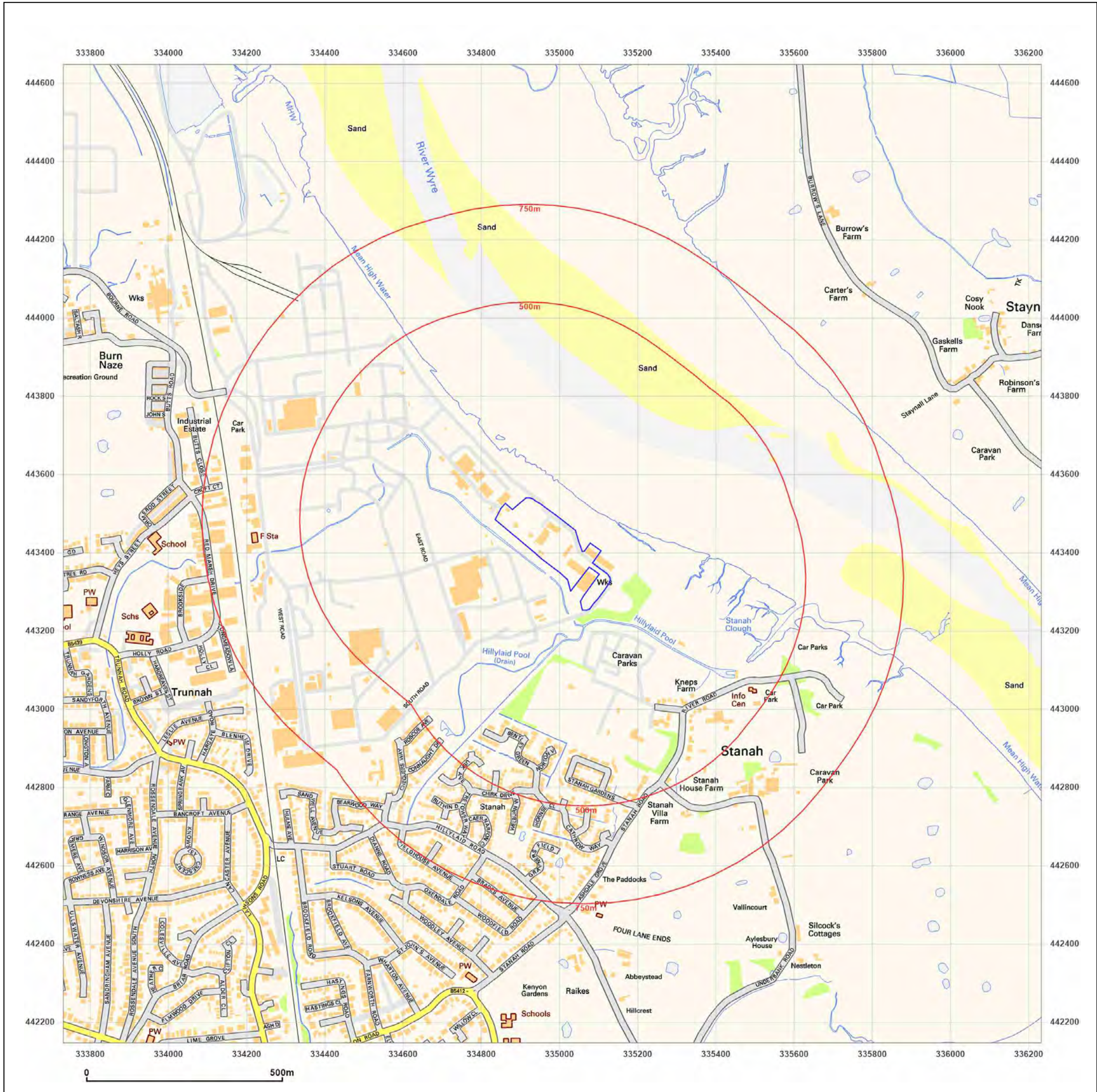
**Powered by**  

 Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

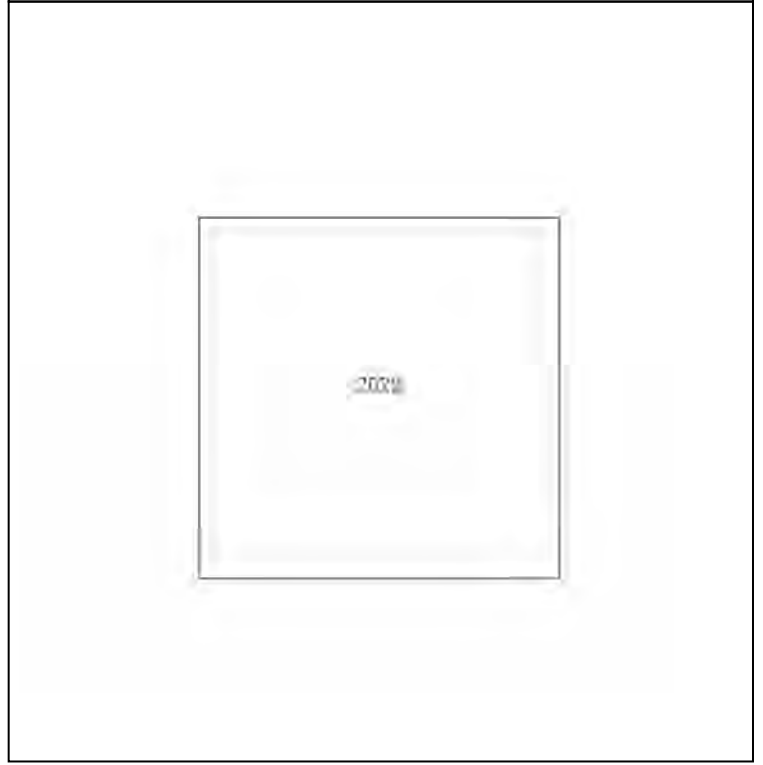
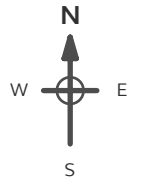
Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)



**Site Details:**  
 334982.9920421878,443421.54  
 84771532

**Client Ref:** R3217-Hillhouse\_IBA  
**Report Ref:** GS-B8Q-KZT-IFI-F2A  
**Grid Ref:** 334982, 443397

**Map Name:** National Grid  
**Map date:** 2023  
**Scale:** 1:10,000  
**Printed at:** 1:10,000



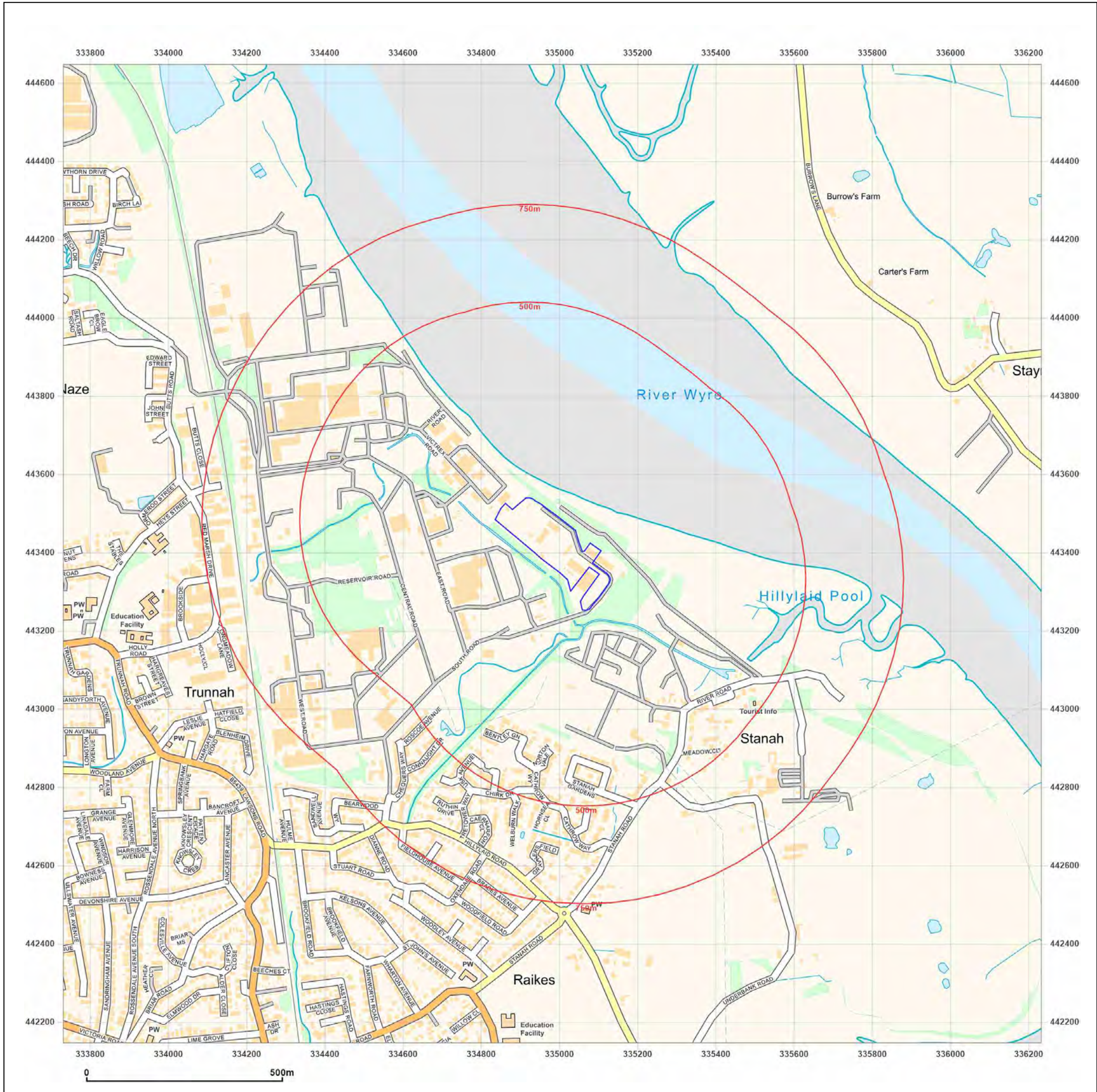
**Powered by**  


Produced by  
 Groundsure Insights  
 T: 08444 159000  
 E: [info@groundsure.com](mailto:info@groundsure.com)  
 W: [www.groundsure.com](http://www.groundsure.com)

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 December 2023

Map legend available at:  
[www.groundsure.com/sites/default/files/groundsure\\_legend.pdf](http://www.groundsure.com/sites/default/files/groundsure_legend.pdf)





## **APPENDIX C**

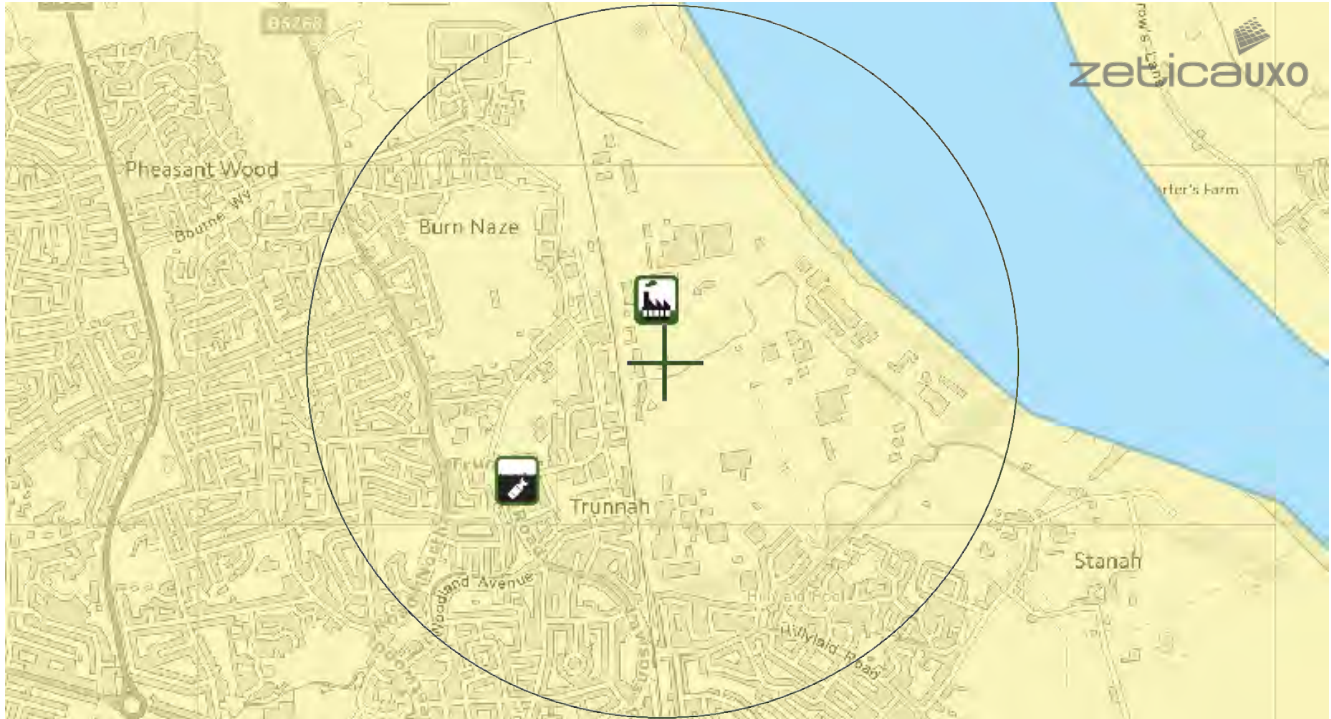
### **UXO Screening Report**

# UNEXPLODED BOMB RISK MAP



## SITE LOCATION

Location: FY5 4QD,  
Map Centre: 334307,443454



## LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- military
- industry
- UXO find
- transport
- dock
- Luftwaffe targets
- utilities
- Bombing decoy
- other

### How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment\* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment\* is necessary.

### What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

**Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.**

### If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

### If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

\*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

ENGINEERING  CONSULTING

**FICHTNER**

Consulting Engineers Limited

Kingsgate (Floor 3), Wellington Road North,  
Stockport, Cheshire, SK4 1LW,  
United Kingdom

t: +44 (0)161 476 0032

f: +44 (0)161 474 0618

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