Environmental
Geotechnical
Specialists

RGS

PHASE 1 ENVIRONMENTAL
DESK STUDY
REPORT

job number	date
C4483/24/E/6940	27.09.24

site address

Site of Former Preseverance House,
St Andrew's Road,
Huddersfield,
West Yorkshire, HD1 6RZ

written by	checked by
S.Hale	R.Palmer

issued by: S.Hale

Please consider the environment before printing this report.

Constructionline
A UK GOVERNMENT CERTIFICATION SERVICE

QMS ISO 9001 : 2015 REGISTERED

QMS ISO 14001 : 2015 REGISTERED

QMS ISO 45001 : 2018 REGISTERED

UKAS

<ENVIRONMENTAL><GEOTECHNICAL>

Contents

				Page
1.			Introduction	1
2.			Review and Summary of Published Data	2
	2.1		Historical Land Use	3
	2.2		Published Geology and Geological Hazards	4
	2.3		Construction Issues	5
		2.3.1	Foundation Construction	5
		2.3.2	Disposal of Site Materials	5
	2.4		Mining and Natural Cavities	6
		2.4.1	Coal Mining	6
		2.4.2	Non-Coal Mining	6
	2.5		Waste Management and Gas Monitoring	6
	2.6		Hydrogeology, Hydrology	7
	2.7		Sensitive Land Use	8
	2.8		Industrial Land Use and Potential Sources of Contamination	8
3.			Preliminary Qualitative Risk Assessment	9
	3.1		Conceptual Ground Model & Preliminary Qualitative Risk Assessment	9
4.			Intrusive Investigation	13
	4.1		Site Investigation Philosophy	13
	4.2		Site Specific Investigation	13
		4.2.1	Contamination Assessment	14
		4.2.2	Geotechnical Assessment	15
		4.2.3	Reporting	16
5.			References	17

Appendices

1.	Site Plans
2.	Historical Maps
3.	Groundsure Reports
4.	Photographs

Report on a Phase One Desk Study

Location:	Site of Former Perseverance House St Andrew's Road, Huddersfield, West Yorkshire, HD1 6RZ
For:	Arrow Commercial Centre (Huddersfield) Ltd
Consultants:	Northern Design Partnership
Report No.	C4483/24/E/6940 Report date: September 2024

For and on behalf of **Rogers Geotechnical Services Ltd**

Steven Hale BSc FGS Geo-environmental Technician	**Rob Palmer** MSc FGS ACIEH Engineering Director

1. Introduction

The site comprises an area of brownfield land located on St Andrew's Road, Huddersfield. The site is approximately 0.67 hectares in size and its National Grid reference is centred around 415117 416839.

It is understood that the development proposals currently comprise the construction of a new two storey office/workshop with associated detached store and works. In order to assist with this decision-making process, and any planning and construction aspects of the development, a phase one environmental desk study has been commissioned and is the subject of this report.

In accordance with issued guidance, a site walkover was conducted on the 16th September 2024 and the following observations were made:

General site description/current site use
The site comprises an area of disused brownfield land with two large shipping containers located to the southwest corner of the site.

Site boundaries/access
The site is accessible via St Andrew's Road, Huddersfield.

Topography
The site is relatively flat.

Surface cover of site
Hardstanding covered the majority of the site with some areas of rough ground.

Visible evidence of contamination/ contaminative sources
A number of spoil heaps of assumed demolition material were observed on the site.

Presence of vegetation and wildlife
A small amount of rough vegetation was present across the site. Vegetation seems to be healthy with no evidence of degradation. There were no obvious signs of invasive flora, fauna, nesting birds, burrowing animals or edible plants observed during the time of the site walkover.

Services
The status of underground services is unknown; however, a number of manholes were noted. There were no overhead services present within the site at the time of the walkover.

Site neighbours
The site is located within an industrial area with commercial properties located in all directions.

In order to ensure that the site is fully characterised and to comply with the Environment Act 1995[1], a Phase One Desk Study has been commissioned by Arrow Commercial Centre (Huddersfield) Ltd. The desk study is intended to assess the environmental impact of historical, current and future factors on the development. This report will present the data obtained and provide a conceptual ground model and preliminary risk assessment as well as discussing the scope of any intrusive investigation that may be required. This report does not consider ecological impacts (e.g. bats) or botanical risks (e.g. Japanese Knotweed).

2. Review and Summary of Published Data

As a part of this desk study the following data has been considered.

- Site Plan - Appendix 1
- Historical maps - Appendix 2
- Groundsure Reports - Appendix 3
- Photographs - Appendix 4

The data obtained from the above-mentioned sources has been summarised below[2].

[1]S57 of the Environment Act 1995 inserted the contaminated land regime into the Environmental Protection Act 1990 (Part 2A). The regime **'provides a risk-based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment'** See http://www.environment-agency.gov.uk/research/planning/40405.aspx. This places a duty on local authorities to inspect their areas for contaminated land and require its remediation using the 'suitable for use' approach. Much of this duty is discharged via the planning regime under the Town and Country Planning Act 1990 as historical land contamination is a 'material planning consideration.' The local authorities are required to secure the removal of unacceptable risks via remediation of the land, to therefore ensure the site is suitable for its new use. This is fulfilled via completion of a Phase One Environmental Desk Study, Phase Two Intrusive Investigation, Phase Three Remediation Strategy and Phase Four Validation Report. Therefore, as a minimum, once a site has been developed it should not be capable of being designated as 'contaminated land' under Part 2A of the Environmental Protection Act 1990, as inserted by the Environment Act 1995 (see also PPS 23 Planning and Pollution Control Section 8)

[2] This report is a summary only and reference must be made in full to the information provided in the Groundsure Report.

2.1 Historical Land Use

Table 1: Historical Land Use[3]

HISTORICAL MAPPING SUMMARY		
Map Dates	**On site**	**Within 100m**
1854	The Turn Bridge Chemical Works are present across the site.	Residential dwellings – 20m SW Aspley Mill – 50m SE River Colne – 80m SE Sir John Ramsden's Canal – 100m W Numerous works, mills and features in the surrounding area beyond 100m.
1888 – 1893	Tower Mills are now present to the northwest portion of the site. The Roydcroft Mills and Perseverance Iron Works are also present straddling the eastern boundary of the site.	Color Works – 20m N Water Royd Mill – 30m NE Turnbridge Dye Works – 50m W Turnbridge Machine Works – 80m NW Whitestone Iron Works – 90m NE Numerous works, mills and features in the surrounding area beyond 100m.
1905 – 1918	The site remains unchanged.	The surrounding land use within 100m of the site remains largely unchanged. Numerous works, mills and features are still present in the surrounding area beyond 100m.
1932	The site remains unchanged.	Engineering Works – 90m S Numerous works, mills and features are still present in the surrounding area beyond 100m.
1948	The site remains unchanged.	The Water Royd Mill, Color Works and Turnbridge Machine Works have all been demolished.
1956	The site remains unchanged.	The surrounding land use within 100m of the site remains largely unchanged. Numerous works, mills and features are still present in the surrounding area beyond 100m.
1959 – 1961	The site remains unchanged.	The southern half of the Turnbridge Dye Works have been demolished. The Aspley Mills are now labelled as Disused. Depot – Adjacent to the southern border of the site Works – 40m N
1965 – 1966	The site remains unchanged.	The surrounding land use within 100m of the site remains largely unchanged. Numerous works, mills and features are still present in the surrounding area beyond 100m.
1972 – 1975	An Engineering Works is now present to the north eastern corner of the site. An electrical sub station is now noted to the centre of the site. The remaining site land use remains largely unchanged.	The Turnbridge Dye Works located 50m W are now labelled a Welding Works. Residential dwellings located 20m SW have been demolished. Engineering Works – 60m NW Electrical Sub Station – 60m S
1981 – 1993	The site remains unchanged.	The surrounding land use within 100m of the site remains largely unchanged. Numerous works, mills and features are still present in the surrounding area beyond 100m.
2001	All previous structures present to the site have been demolished. A new rectangular building is now present to the west side of the site.	The surrounding land use within 100m of the site remains largely unchanged.
2003 - 2010	The site remains unchanged.	The surrounding land use within 100m of the site remains largely unchanged.
2024	The site remains unchanged.	A large building of unknow use is now present 20m W.

NB. All distances given are approximate only.

[3] See Appendix 3

2.2 Published Geology and Geological Hazards

Table 2: Geological Data for the Site

BGS MAPPING DATA			
Strata Type	**Strata Name**[4]	**Previous Name**[4]	**Description**[5]
Made Ground/Fill	N/A	N/A	Not indicated on site although previous construction may have resulted in the presence of made ground. Deposits of made ground present within 500m to the north and south.
Superficial Geology	Alluvium	Freshwater Alluvium	Soft to firm, normally compressible silty clay, but can contain layers of silt, sand, peat and basal gravel.
Solid Geology	Pennine Lower Coal Measures Formation	Grey Measures of Yorkshire and Nottingham	Interbedded grey mudstone, siltstone and pale grey sandstone, commonly with mudstones containing marine fossils in the lower part, and more numerous and thicker coal seams in the upper part.
GEOLOGICAL FEATURES			
Type	**Location**	**Features**	**Comments**
Mining Activity	On site	Coal mining	The study site is located within a coal mining area as defined by the Coal Authority.
	Within 250m	Non-coal Mining	There are no records of non-coal mining within 250m of the site.
Linear Features	30m NW	Fossil Horizon	No further information.
	40m W, 191m E, 227m W	Coal Seams	Inferred, not anticipated to affect the site.
	115m NE	Fault	Normal fault, inferred.
BGS BOREHOLE DATA			
Reference[6]	**Location**	**Strata Description**	**Depth**
SE11NW16	40m NW	Made ground Sandy clay Sand and gravel Sand and gravel with larger sandstone fragments Hard, black shale	2.59m 3.05m 3.61m 7.16m 7.92m
SE11NW437	90m NW	Made ground Firm, silty, very sandy CLAY Medium dense GRAVEL Black MUDSTONE	1.90m 2.80m 9.20m 10.30m

[4] Sources: British Geological Survey (NERC) Map Sheets 77; Huddersfield; Solid and Drift Edition, and Geology of Britain Viewer [*online resource from www.bgs.ac.uk*]
[5] Sources: British Geological Survey (NERC) Lexicon of Named Rock Units [*online resource from www.bgs.ac.uk*]
[6] http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html

NATURAL GROUND SUBSIDENCE & HAZARDS[7]	
Type	**Risk Rating**
Potential for shrinking or swelling clay ground stability	Very Low.
Potential for running sand ground stability	Low.
Potential for compressible ground stability	Moderate.
Potential for collapsible ground stability hazards	Negligible.
Potential for landslide ground stability	Very Low.
Potential for ground dissolution stability	Negligible.
Radon	The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level. No radon protective measures are necessary.

2.3 Construction Issues

2.3.1 Foundation Construction

On the basis of the prevailing geology, it is anticipated that shallow strip or spread foundations may not be suitable at this site. Indeed, should weak and variable ground be uncovered it may become necessary to consider the use of a piled foundation solution. It should be appreciated that an intrusive investigation will be required to validate this opinion. Moreover, it is possible that the superficial alluvial soils and undifferentiated strata within the Pennine Lower Coal Measures Formation may include very fine-grained rocks which are likely to have weathered to cohesive soils at or near the surface. Such soils could be sensitive to soil moisture variations and thus be susceptible to desiccation, for instance as result of tree root action or broken drainage.

2.3.2 Disposal of Site Materials

If made ground is present, then contamination/WAC testing will be required to establish the nature of the underlying soil before disposal to a licensed landfill site. However, it is anticipated that the naturally occurring soils would not be significantly contaminated, thus would probably be accepted by a waste disposal site catering for inert material.

[7] See Groundsure report

2.4 Mining and Natural Cavities

2.4.1 Coal Mining

The Groundsure Report states that the site is within an area that may be affected by coal mining. As such, a Coal Mining Risk Assessment was previously carried out by Rogers Geotechnical Services Ltd for the client with a reference number of C4483/24/E/6850.

2.4.2 Non-Coal Mining

The Groundsure Report notes no reports of non-coal mining within 250m of the site. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered.

2.5 Waste Management and Gas Monitoring

Table 3: Landfill Data and Artificial Ground, Recorded and Anticipated

ENVIRONMENT AGENCY, LOCAL AUTHORITY, BGS & HISTORIC LANDFILLS			
Waste Type	**Location**	**Comments**	**Monitoring Requirement**
Active Landfill	Within 250m	None recorded within 250m	-
Historic Landfill	198m NE	Golf Driving Range – Surrendered 31/12/1990 Type: Inert, industrial, commercial, household, special environmental permitting	N
Historic waste sites	27m NW	Cummings Turbo Technology	N
Licenced waste sites	Within 250m	None recorded within 250m	-
Waste Exemptions	42m NW	Cummings Turbo Technology – Storing and treating waste exemptions	N
	122m NW	Storing and treating waste exemptions	N
MADE GROUND & INFILLED GROUNDWORKINGS			
Description	**Location**	**Comments**	**Monitoring Requirement**
Records of Potentially Infilled Features	101m SE, 232m E, 239m NE & 242m NE	Unspecified Ground Workings	N
	100m W	Sir John Ramsden's Canal	N
	241m	Disused Canal	N

2.6 Hydrogeology, Hydrology

Table 4: Ground/Controlled Water Sensitivity and Flooding

ENVIRONMENT AGENCY AQUIFER DESIGNATION[8]		
Strata	**Designation**	**Description**
Superficial Geology On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.
Solid Geology On Site		
GROUNDWATER SENSITIVITY[9]		
Description	**Location**	**Details**
Source Protection Zone	Within 250m	None recorded within 250m.
Abstraction Licences	Within 250m	None recorded within 250m.
Records of Part A(2) and Part B Activities and Enforcements	71m S	Process: Coating Processes Status: Historical Permit
	90m S	Process: Non-ferrous Metal Foundry Processes Status: Historical Permit
	122m NW	Process: Rubber Status: Historical Permit
	144m S	Process: Respraying of Road Vehicles Status: Current Permit
	151m SW	Process: Respraying of Road Vehicles Status: Historical Permit
	197m SW	Process: Dry Cleaning Status: Current Permit
	204m SW	Process: Petrol Vapour Recovery Status: Historical Permit
	218m SE	Process: Timber Manufacture Status: Current Permit
Records of Licensed Discharge Consents	68m S	Effluent Type: trade discharges - unspecified.
	116m S, 118m S, 127m S, 127m S & 131m N	Effluent Type: sewage discharges.
High Soil Leaching Potential	On Site	Leaching class: High
CONTROLLED WATERS[10]		
Description	**Location**	**Details**
River Network Entries	80m SE	River Colne
	100m W	Sir John Ramsden's Canal
	175m E	Penny Spring Beck
Surface Water Features	Within 250m	3 surface water records present within 250m consisting of the River Colne, Sir Kohn Ramsden's Canal and the Penny Spring Beck.

POLLUTION INCIDENTS[11]			
Pollutant	**Receptor**	**Location**	**Date**
-	-	None recorded within 250m of the site.	-

ENVIRONMENT AGENCY FLOOD RISK[12]		
Description	**Location**	**Details**
Zone 2	On site	Fluvial/Tidal Models
Zone 3	On site	Fluvial Models
Flood Defences	Within 250m	None recorded within 250m.
Groundwater Flooding Area	On site	Low potential for groundwater flooding to occur.

[8] See Appendix 2
[9] See Appendix 2
[10] See Appendix 2
[11] See Appendix 2
[12] See Appendix 2

2.7 Sensitive Land Use

Table 5: Sensitive Land Uses within 250m		
REGISTERED SENSITIVE LAND USES [13]		
Description	**Location**	**Details**
Nitrate Vulnerable Zone	Within 250m	None recorded within 250m.
Green Belt Land	Within 250m	None recorded within 250m.

2.8 Industrial Land Use and Potential Sources of Contamination

In order for a conceptual site model and preliminary risk assessment to be completed the historical maps and Groundsure data requires analysis to identify any past or present activities on the site and in the area that may have the potential to cause contamination on the site. Guidance has been issued by the Environment Agency, NHBC and Chartered Institute of Environmental Health.[14] Within this document, annex 3 provides examples of important contaminants that are associated with individual uses of land. This data assists in the formulation of any chemical testing regime.

Those that we consider potentially contaminative according to the guidance are given below:

Table 6: Potentially Contaminative Sources		
HISTORICAL		
Land Use	**Location**	**Classification**
Historical construction	On site	Artificial/made ground.
Numerous works, mills and features within 250m of the site and beyond	Within 250m	Unspecified works/factories/features.
CURRENT		
Land Use	**Location**	**Classification**
Electricity Sub-station	2m NE & 97m W	Unspecified works/factories/features.
Polyseam Ltd	52m SW	
Pegasus Signs	53m S	
Aspley Business Park	61m S	
Travelling Crane	65m E	
Marko's Autos	53m S	Road vehicle fuelling, service and repair: garages and filling stations.

[13] See Appendix 2
[14] Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D Publication 66: 2008 Volume 1 and 2.

3. Preliminary Qualitative Risk Assessment

The potential of contamination hazards on the land has been identified and the risks associated with them are assessed in the following preliminary risk assessment in accordance with industry practice and the 'suitable for use' approach. This has been conducted using the source-pathway-receptor approach. This method dictates that there must be a risk contaminant produced at a 'source' in sufficient concentration to cause harm and there must be a 'pathway' for the contaminant to reach an identifiable 'receptor' for the linkage to be proved and a contamination hazard to be considered present. Not all substances are contaminants and not all contaminants are considered to be a risk. Indeed, DEFRA and The Environment Agency state that **'a contaminant is a substance which has the potential to cause harm, while a risk itself is considered to exist if such a substance is present in sufficient concentration to cause harm and a pathway exists for a receptor to be exposed to the substance.**'

R&D Publication 66: 2008 states that the groups at risk of harm (receptors) can be identified by the following categorisation:

1. Humans: site personnel, end users, visitors and adjacent land users.
2. The water environment – receptors: groundwater, surface water, coastal waters and artificial drainage.
3. Ecosystems: plants and animals.
4. Construction/building materials/services

In order to complete a conceptual site model and therefore a preliminary risk assessment, an appraisal of the sources of contamination, potential and actual, on and in the area of the site has therefore been completed with reference to this pollution linkage.[15]

3.1 Conceptual Ground Model & Preliminary Qualitative Risk Assessment

It is understood that the development proposals currently comprise the construction of a new two storey office/workshop with associated detached store and works. In view of the sensitivity of the end users it is considered that the soil screening values (SSVs) for a commercial end use should be employed.

The preliminary risk assessment has been evaluated with reference to the following ratings and definitions:

N/A - A source-pathway-receptor linkage is not considered to exist and therefore a risk assessment is not required.

Low - A pollution linkage is unlikely and/or the likelihood of harm occurring is low and of minor consequence.

Moderate - The linkage exists but further field or laboratory data is required to confirm that the contaminant has reached the receptor and the levels of contaminant are harmful.

High - The linkage exists and the available data indicates that significant harm may be caused and remedial action could be necessary.

[15] This assessment has been based on the information as to the proposed development that has been provided by the client. If the plans should change, the assessment should be re-evaluated.

Table 7: Conceptual Site Model and Preliminary Qualitative Risk Assessment				
CONCEPTUAL SITE MODEL			PRELIMINARY RISK ASSESSMENT	
Pathways	**Receptor**	**Linkage Present?**	**Risk Rating**	**Notes**
Direct contact/dermal absorption/soil ingestion	Operative	Yes – operatives are likely to come in contact with the soil.	Moderate	There are potential on and off-site sources of contamination that may have caused contamination of the site. Any on site sources of contamination could migrate to neighbouring properties. Further testing required to reach a firm conclusion.
	End User	Yes – end users are likely to come in contact with the soil.	Moderate	
	Neighbours	Yes – possible source on site and immediate neighbours are present.	Moderate	
Inhalation of Dust/Vapours	Operative	Yes – contact with soil likely during.	Moderate	There are potential on and off-site sources of contamination that may have caused contamination of the site. Any on site sources of contamination could migrate to neighbouring properties. Construction activities may create dust on and off site, which, if contaminated, could adversely affect operatives, end users and neighbours. In the event that harmful vapours are present they may accumulate in enclosed spaces, affecting operatives, end users and neighbours. Further testing required to reach a firm conclusion.
	End User	Yes – end users may come into contact with soil.	Moderate	
	Neighbours	Yes – neighbouring properties present and possible inhalation of dust during the works.	Moderate	
Ingestion of fruit/vegetables and/or waters	Operative	No – no edible plants or contained water sources in the area of the proposed new works.	N/A	No further action required.
	End User	No – there is no soft landscaping proposed as part of the new development.	N/A	
	Neighbours	No – there are no residential dwellings within 250m of the site.	N/A	

Migration of hazardous gases via permeable strata	Operative	Yes – possible off-site sources and potential source on site associated with historical construction.	Moderate	Possible source on site and within 250m. A programme of monitoring is recommended but is suggested to be limited to 4 readings over one month in the first instance. If a significant thickness of ground considered capable of producing harmful gases is revealed during the investigation works, the monitoring regime may require reassessment to consider a higher potential risk.
	End User		Moderate	
	Neighbours	Yes – possible source on site due to historical construction and superficial alluvial soils.	Moderate	It is not considered likely that any made ground that has been brought onto site for the construction of the demolished development will produce high levels of gas, thus presenting a significant risk of harm to this receptor. This should be re-assessed during any intrusive works should this be proven to the contrary. It should be appreciated that organic soils within the superficial alluvial soils noted to be present on site may be capable of producing harmful ground gases.
Spillage/loss/run off direct to receiving water	Controlled Waters	Yes – possible source on site and controlled waters within 250m.	Moderate	There are potential on and off-site sources of contamination that may have caused contamination of the site. Controlled waters within 250m. Secondary A aquifer underlies the site. Permeability of underlying geology should be assessed. Further testing required to reach a firm conclusion.
Migration via permeable unsaturated strata	Controlled Waters	Yes – possible source on site and Secondary A aquifer beneath the site.	Moderate	
Run off via drainage/sewers etc	Controlled Waters	Yes – possible source on site.	Moderate	
Direct contact with contaminated soils	Plants	No – soft landscaping areas are not part of the proposed developments.	N/A	No further action required.
Uptake via root system			N/A	
Direct contact with contaminated soils/	Building Materials	Yes – possible source on and off site and foundation and service installation materials may be affected by the site soil.	Moderate	There are potential on and off-site sources of contamination that may have caused contamination of the site. Further testing required to reach a firm conclusion.
Direct contact with contaminated groundwater				

Migration of mine gas via permeable strata	Operative End User	Yes – in an area affected by coal mining activity, however, the Coal Mining Risk Assessment (Ref: C4483/24/E/6850) considers that the site is not at risk.	Low	No further action required.
Exposure to Radon	Operative End User	No – not in a radon affected area.	N/A	The publication BR211 states that no protection measures are necessary.
Mining Instability	End User	Yes – The property is in an area where coal mining activity has been carried out, however, there are no recorded mines beneath the site.	Low	No further action required.
Unexploded Ordinance (UXO) Risk	Operative	Yes – the Zetica[16] online maps indicate that the site is at low risk from UXO.	Low	Unlikely to be affected by UXO.

Notes:

1. The above data and table is a qualitative assessment of the probable risks identified at this site, based on the information made available to us from the client, third party professional data and walkover survey.

2. Should any additional or new data come to light, the risk assessment should be revisited and any necessary changes made to any recommendations resulting from this study.

3. Where further testing is recommended as part of the risk assessment, this is in order to provide a quantitative assessment of any contamination issues. It should at all times be considered that uncertainties may remain, and therefore any testing regime and ground investigation philosophy should be ready to accommodate any necessary alterations should any data come to light or it become evident that it has not been previously considered.

[16] Pre-desk study assessment [*online resource from www.zeticauxo.com*].

4. Intrusive Investigation

4.1 Site Investigation Philosophy

The information from the Phase 1 Desk Study shows there are potential sources of contamination on the site and in the surrounding area. In view of the above, any intrusive investigation should be undertaken in accordance with the sampling strategies given in BS10175: 2011 +A2:2017 and CLR4:1994. These two sampling strategies may be classified as:

- Non-Targeted – using a defined sampling pattern (BS10175)
- Targeted – based on prior knowledge and professional judgement (CLR4)

These sampling strategies are considered in more detail below. However, it is emphasised that they can be used individually or in combination depending on the depth of site knowledge.

Non-Targeted Sampling

If no obvious 'hot spots' of contamination have been identified on a site, it would be recommended that a stratified random pattern of sampling points be considered. This work should be undertaken with reference to BS10175: 2011 +A2: 2017 *Investigation of potentially contaminated sites – Code of practice*: 7.6, and BS5930 2015 + A1:2020, *Code of practice for ground investigations.*

Targeted Sampling

If a possible 'hot spot' of contamination has been identified on a site, it is recommended that a herringbone pattern of sampling points be considered in the immediate vicinity. If strong evidence of contamination has then been identified, it is recommended that sampling be highly focused to reflect that evidence and the investigator's experience. This work should be undertaken with reference to CLR4, *Sampling Strategies for Contaminated Land, 1994*.

The density of sampling required is defined in BS10175: 2011: +A2: 2017: 7.7.2.2.3, which indicates that an *exploratory* investigation usually requires a lower density sample spacing than does a *main* investigation. The BS goes on to state that *the actual density should depend upon the confidence and robustness required of decisions that will be based on the information obtained. Thus, the area and depth of interest will be related to the contaminants present, the pathways and the receptors. Typical densities of sampling grids can vary from 25m to 50m centres for exploratory investigations, and 10m to 25m centres for main investigations.*

4.2 Site Specific Investigation

In view of the information provided above it is considered that an investigation of the site should include the following main elements.

4.2.1 Contamination Assessment

It may be appreciated that BS 10175 clause 7.7.2.2.3 suggests that the number of sampling points at the site should be based on a minimum of three testing locations or the size of the site with respect to the appropriate grid spacing, whichever the greater. On the basis of the site area being 0.67ha, the number of sampling points at the site should be considered with respect to the table below.

Table 8: Summary of Sampling Strategy

NUMBER OF SAMPLING POINTS					
	Soil	**Water**	**Asbestos**	**Standpipes**	**Standpipe Readings**
Exploratory Investigation 50m x 50m grid	3	-	3	3	A minimum of 4 readings over 1 month would be required as per risk assessment, however any regime must take into account the guidance detailed below.
Target Areas	Should be assessed during any investigation.				

Chemical testing should be undertaken on the above grid spacing and the following standard testing regime should be undertaken:

- **Metals** – Cd, Cr, Cu, Hg, Ni, Pb, Zn, V.
- **Semi Metals and Non-Metals** – As, Se, Free Cyanide and Phenols.
- **Hydrocarbons –** Polycyclic aromatic hydrocarbons (PAH EPA16), Total petroleum hydrocarbons (TPH CWG).
- **PCBs –** Polychlorinated Biphenyls.
- **Others** – pH, Organic Content.
- **Asbestos**

Sampling Method

Investigation should include the installation of three gas monitoring standpipes for subsequent monitoring. Furthermore, soils should be obtained for chemical sampling. The sampling strategy should employ the non-targeted strategy given above in the first instance, i.e. at least three sampling points, if it is anticipated that made ground is significant across the site. However, if the made ground at the site is thought to be localised to specific areas, then the targeted strategy should be used.

It should be possible to carry out the above work with a windowless sampling drilling rig, however, it may be more pragmatic to employ hand-held digging tools for a targeted strategy.

Gas Monitoring

The final gas monitoring regime should be undertaken in accordance with Table 4.2 of CIRIA C665: 2007: *Assessing risks posed by hazardous ground gasses to buildings.* In that document guidance for the frequency of monitoring is provided on tables 5.5a and 5.5b *Typical/idealised frequency and period of monitoring* on page 60. For convenience, these tables have been combined and reproduced below.

Table 9: Typical/idealised Frequency and Period of Monitoring					
Sensitivity of development	**Generation potential of source**				
	Very low	**Low**	**Moderate**	**High**	**Very High**
Low (commercial)	**4/1**	**6/2**	**6/3**	**12/6**	**12/12**
Moderate (flats)	6/2	6/3	9/6	12/12	24/24
High (residential + gardens)	6/3	9/6	12/6	24/12	24/24

Notes:

a) The first number is the minimum number of readings and the second number is the minimum period in months, for example 4/1 – four sets of readings over 1 month.

b) At least two sets of readings must be at low and falling atmospheric pressure (but not restricted to periods below 1000mb) known as worst case conditions.

c) The frequency and period stated are considered to represent typical minimum requirements. Depending on specific circumstances fewer or additional readings may be required (e.g. any such variation subject to site specific justification). The NHBC guidance is also recommending these periods/frequencies of monitoring.

d) Historical data can be used as part of the data set.

e) Not all sites will require gas monitoring. However, this would need to be confirmed with demonstrable evidence.

f) Placing high sensitivity end use on a high hazard site is not normally acceptable unless the source is removed or treated to reduce its gassing potential. Under such circumstances long-term monitoring may not be appropriate or required.

g) This guidance should be read in conjunction with BS 8576:2013 figure 6 which may justify fewer readings in the first instance, where the generation potential is considered to be very low to low. However, this should be undertaken pragmatically, and further readings obtained according to the above table, where a potentially significant source is identified and initial readings suggest that remedial measures are not necessary.

4.2.2 Geotechnical Assessment

In addition to the above contamination assessment which is likely to be required by planning authorities and insurance providers, the following investigation strategy could be considered:

Sampling Method

It is anticipated that a windowless sampling drilling rig will be able to gain sufficient data in regard to the near surface soils. However, should a significant thickness of weak and variable soil be encountered then deeper boreholes drilled by a light cable percussive rig may be required. Moreover, such equipment should be able to undertake Standard Penetration Testing (SPT) and/or Dynamic Probing.

Soakaway Design

Should soakaway data be required for drainage design, trialpits could be excavated and infiltration tests conducted. Alternatively, these tests could be undertaken within boreholes. It should be appreciated however that a significant thickness of made ground may be present which could preclude the use of soakaways.

Geotechnical Testing

An allowance for geotechnical testing of the soils should be included in any ground investigation.

4.2.3 Reporting

The above data will need to be formulated into a formal assessment that should include the following:

- Geotechnical recommendations.
- Contamination assessment.
- Contamination remediation strategy.
- Any recommendations for further work, if required and including validation reports where site remediation is necessary.

As soon is as practicable, and prior to the above, this Phase 1 report should be forwarded to the relevant authorities, in order to ensure they have sufficient time to review and discuss any issues.

5. References

- British Standards Institution (2015), BS5930 2015 + A1:2020: *Code of practice for site investigations*, B.S.I., London.
- British Standards Institution (2007), Amendment No 1 to BS5930: *Code of practice for ground investigations*, B.S.I., London.
- British Standards Institution (2011) +A2:2017, BS 10175: *Investigation of potentially contaminated sites – Code of Practice,* British Standards Institute.
- British Standards Institution (2013), BS 8576 Guidance on Investigations for Ground Gas – Permanent Gases and Volatile Organic Compounds.
- Department for Environment, Food and Rural Affairs and the Environment Agency, DEFRA R&D Publications, Environment Agency, Bristol.
- CLR 2, 1994, *Guidance on preliminary site inspection of contaminated land*, Volume 1.
- CLR 4, 1994, *Sampling Strategies for contaminated land*.
- R&D Publication 66: 2008 Guidance for the Safe Development of Housing on Land Affected by Contamination.
- CIRIA Report C665 (2007), Assessing risks posed by ground gasses in buildings.
- The Environment Agency: Groundwater source protection.

Appendix 1

Site Plans


B6432
Turnbridge Rd
Turnbridge Rd
St Andrew's Rd
B6432
Lincoln St
Arrow commercial centre
Kirklees Council Homes & Neighbourhoods
Protecta
Polyseam Ltd
Kirklees College Engineering Centre
Mattress Showroom
Marco's Hand Car Wash
Aspley Auto Centre
Markos Auto
Vehicle repair shop
H & E Fabrications
Silver St
At The Mill
Sandwich

Appendix 2

Historical Maps

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series Town Plan
Map date: **1890**
Scale: 1:500
Printed at: 1:1,000

N
W E
S

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

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

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

Map date: **1893**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1893
Revised 1893
Edition N/A
Copyright N/A
Levelled N/A

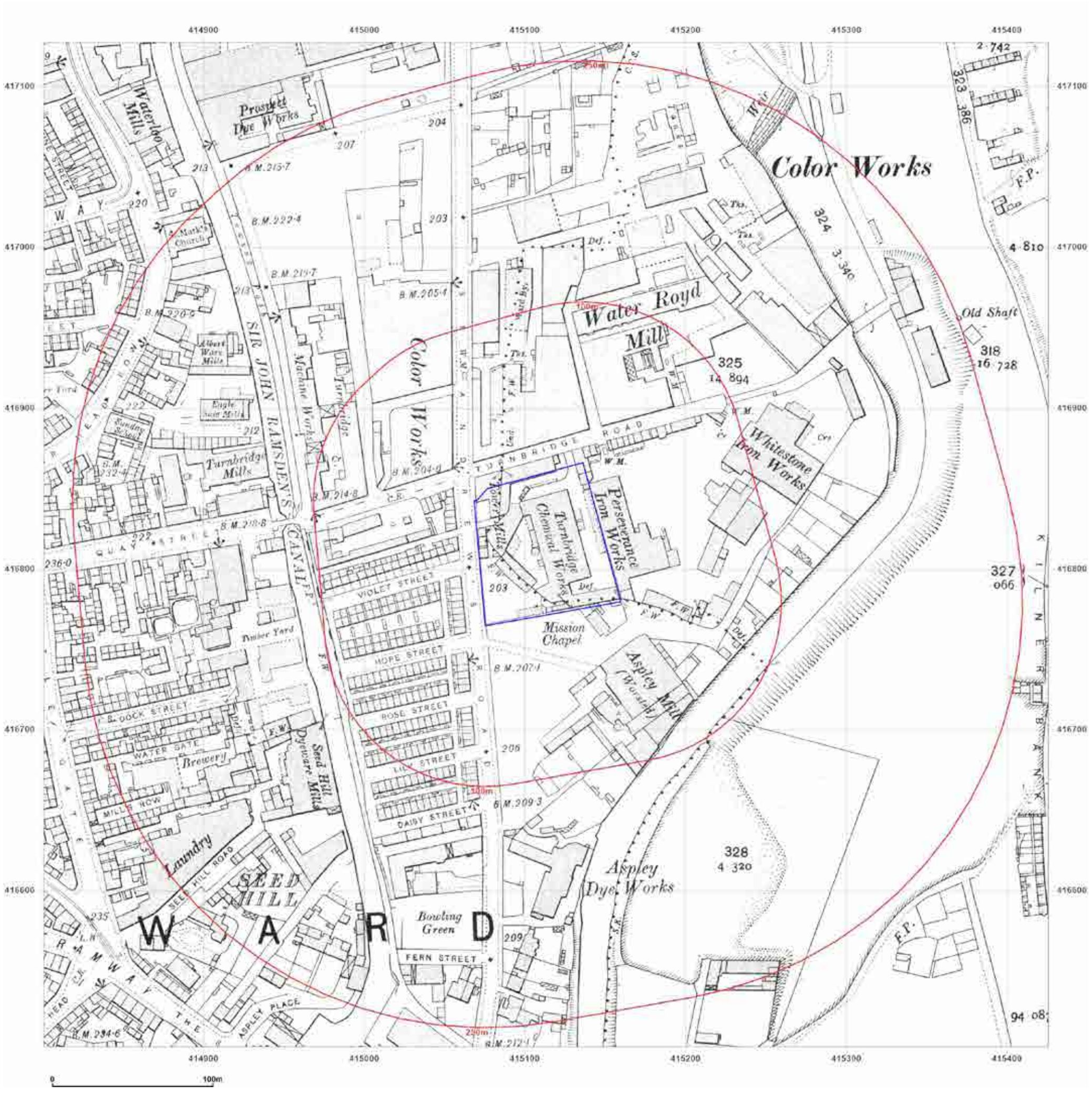
Surveyed 1893
Revised 1893
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

Map date: **1907**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series
Map date: **1918**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1918
Revised 1918
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1918
Revised 1918
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

Map date: **1932**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

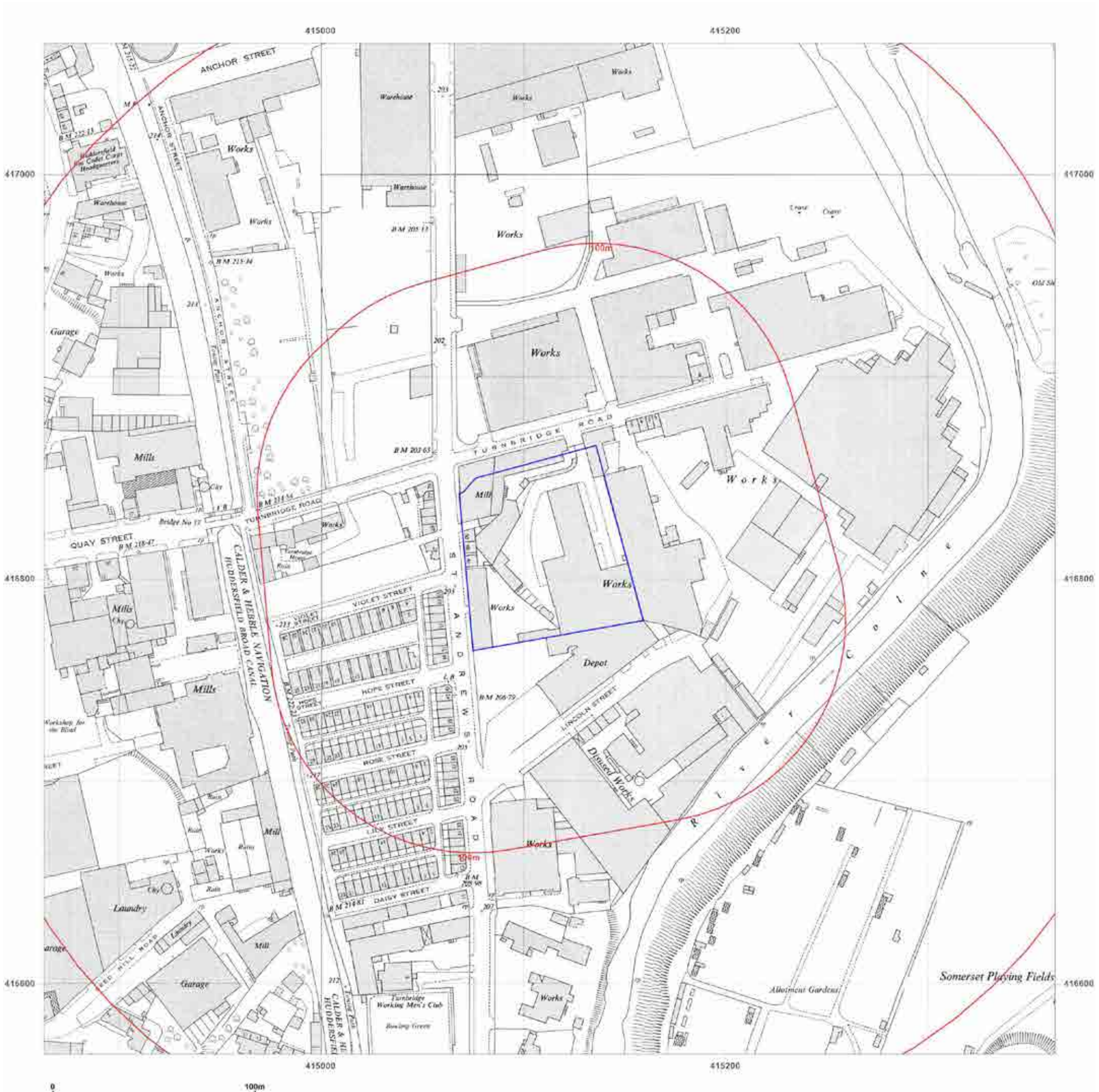
Surveyed 1932
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid

Map date: **1959-1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1958 Revised 1958 Edition N/A Copyright 1959 Levelled 1931	Surveyed 1958 Revised 1958 Edition N/A Copyright 1959 Levelled 1931
Surveyed 1959 Revised 1959 Edition N/A Copyright 1960 Levelled 1931	Surveyed 1958 Revised 1958 Edition N/A Copyright 1959 Levelled 1931

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid

Map date: **1960-1961**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1959
Revised 1959
Edition 1960
Copyright 1960
Levelled 1931

Surveyed 1959
Revised 1959
Edition 1961
Copyright 1961
Levelled 1931

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1960-1961**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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

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

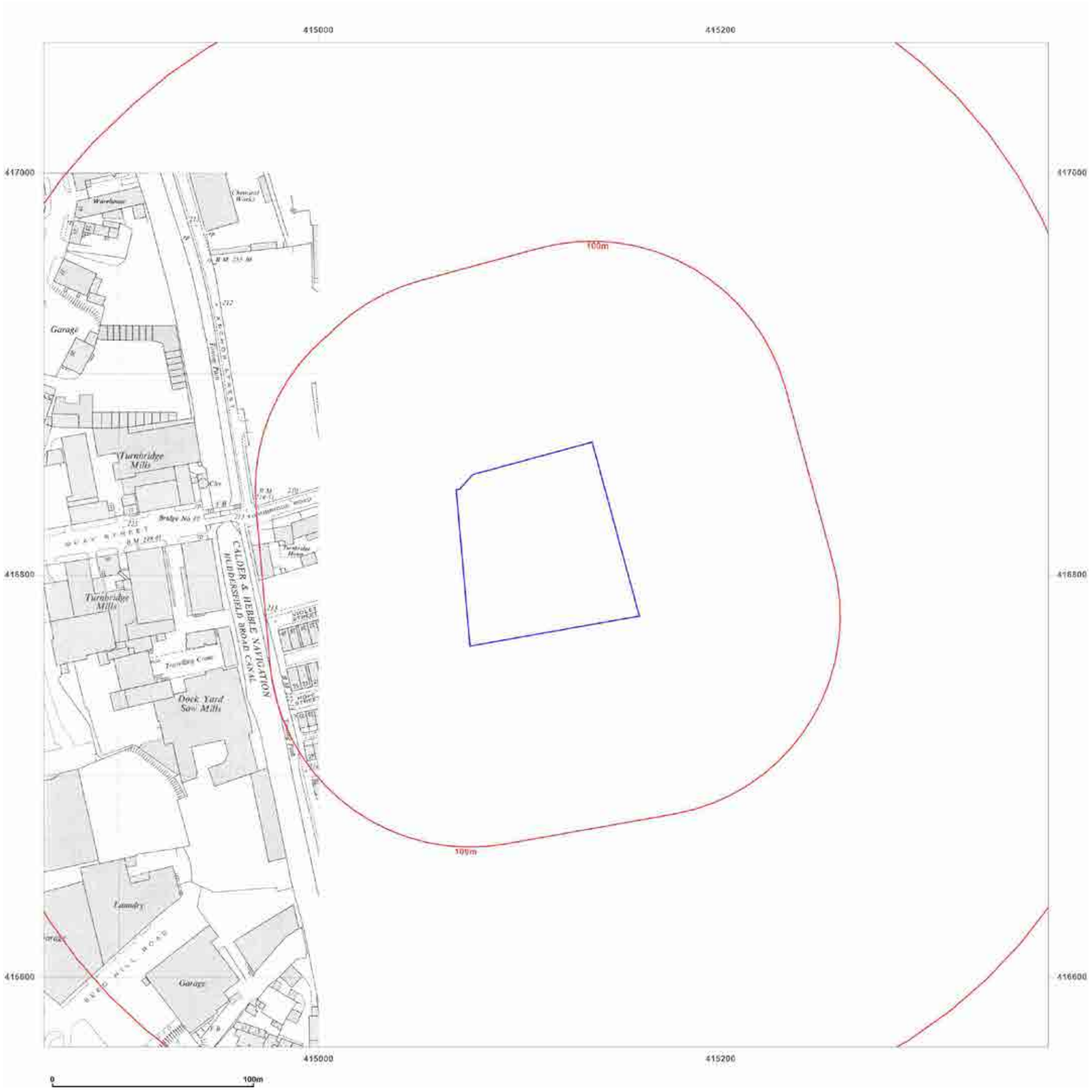
Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1966**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

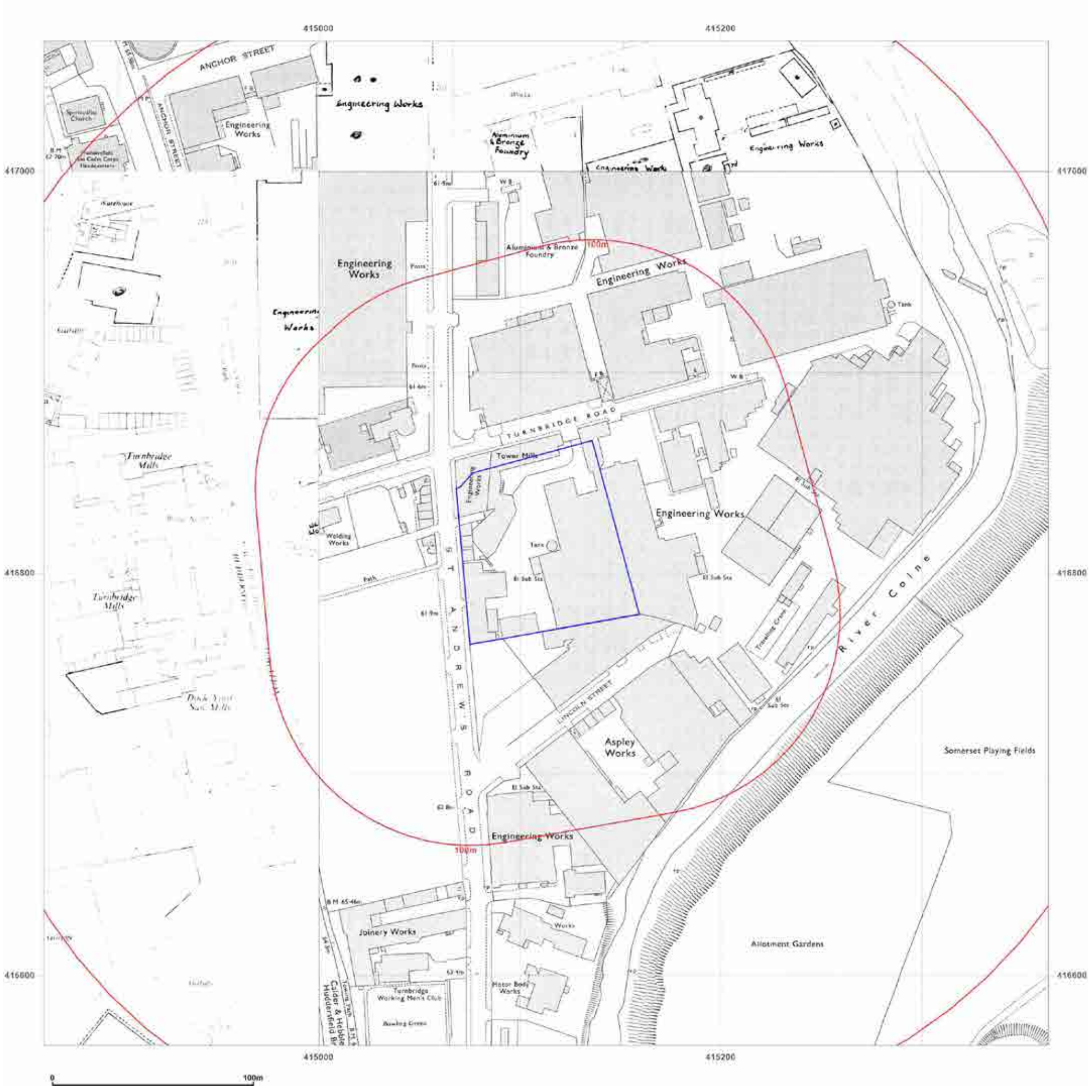
Surveyed 1959
Revised 1965
Edition N/A
Copyright 1966
Levelled 1959

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1972-1975**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1958
Revised 1971
Edition N/A
Copyright 1972
Levelled 1959

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

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

Surveyed 1958
Revised 1971
Edition N/A
Copyright 1972
Levelled 1959

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1975-1978**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

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

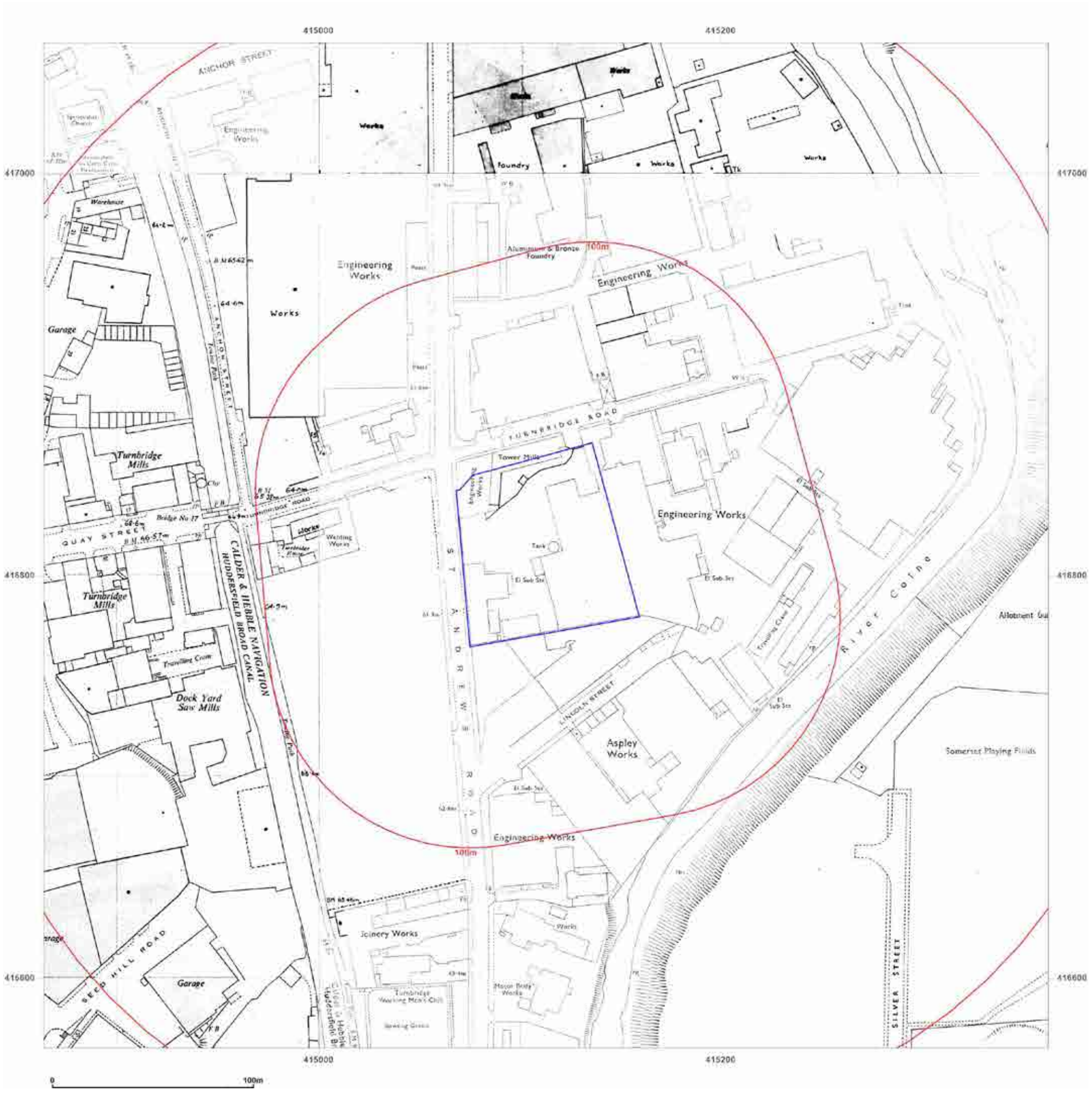
Surveyed N/A Revised N/A Edition N/A Copyright 1978 Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright N/A Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1981-1985**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed N/A Revised N/A Edition N/A Copyright 1981 Levelled 1959	Surveyed N/A Revised N/A Edition N/A Copyright 1985 Levelled 1959
Surveyed 1959 Revised 1985 Edition N/A Copyright 1985 Levelled 1959	Surveyed N/A Revised N/A Edition N/A Copyright 1984 Levelled 1959

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1984-1988**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1959
Revised 1984
Edition N/A
Copyright 1984
Levelled 1959

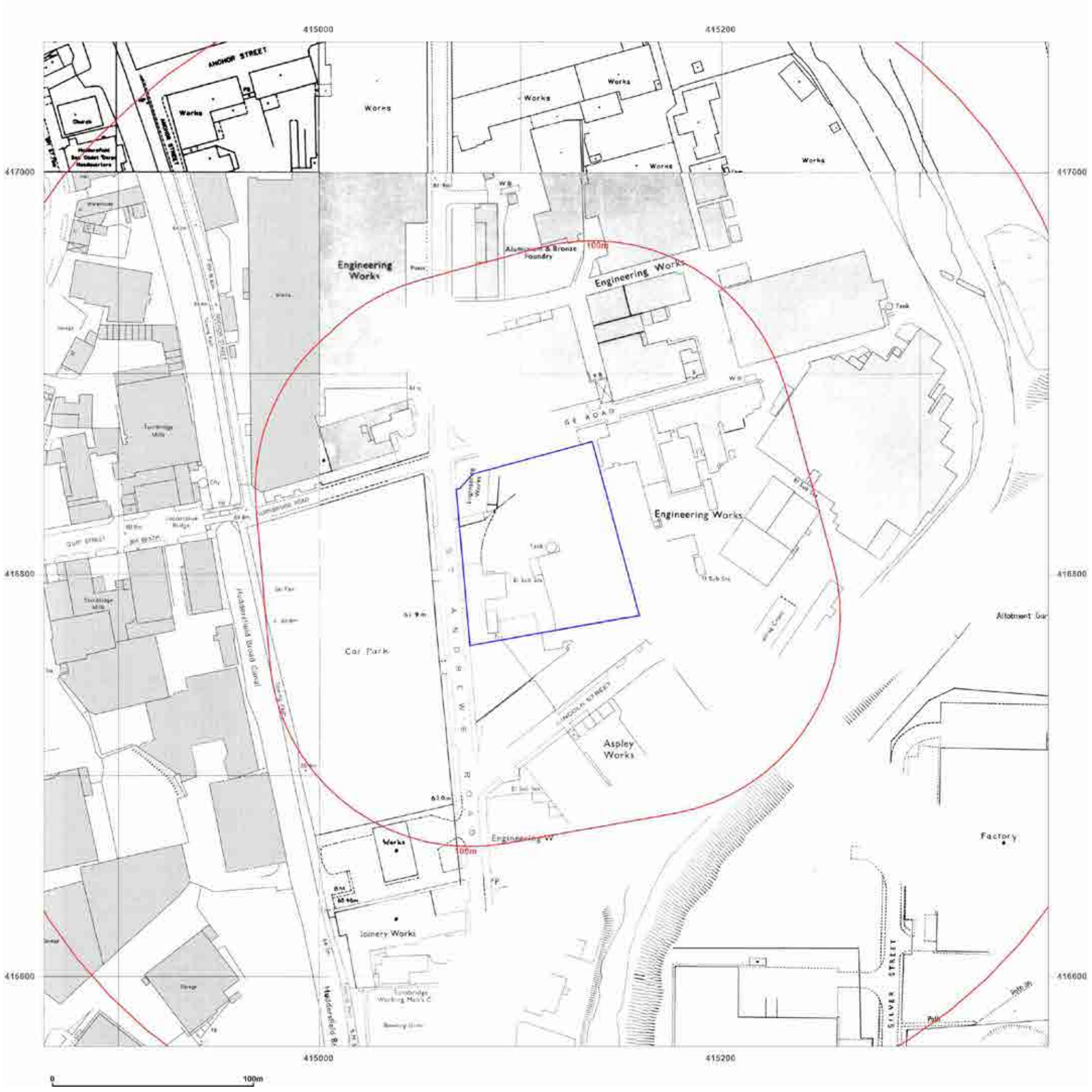
Surveyed 1959
Revised 1988
Edition N/A
Copyright 1988
Levelled 1959

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1988-1993**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

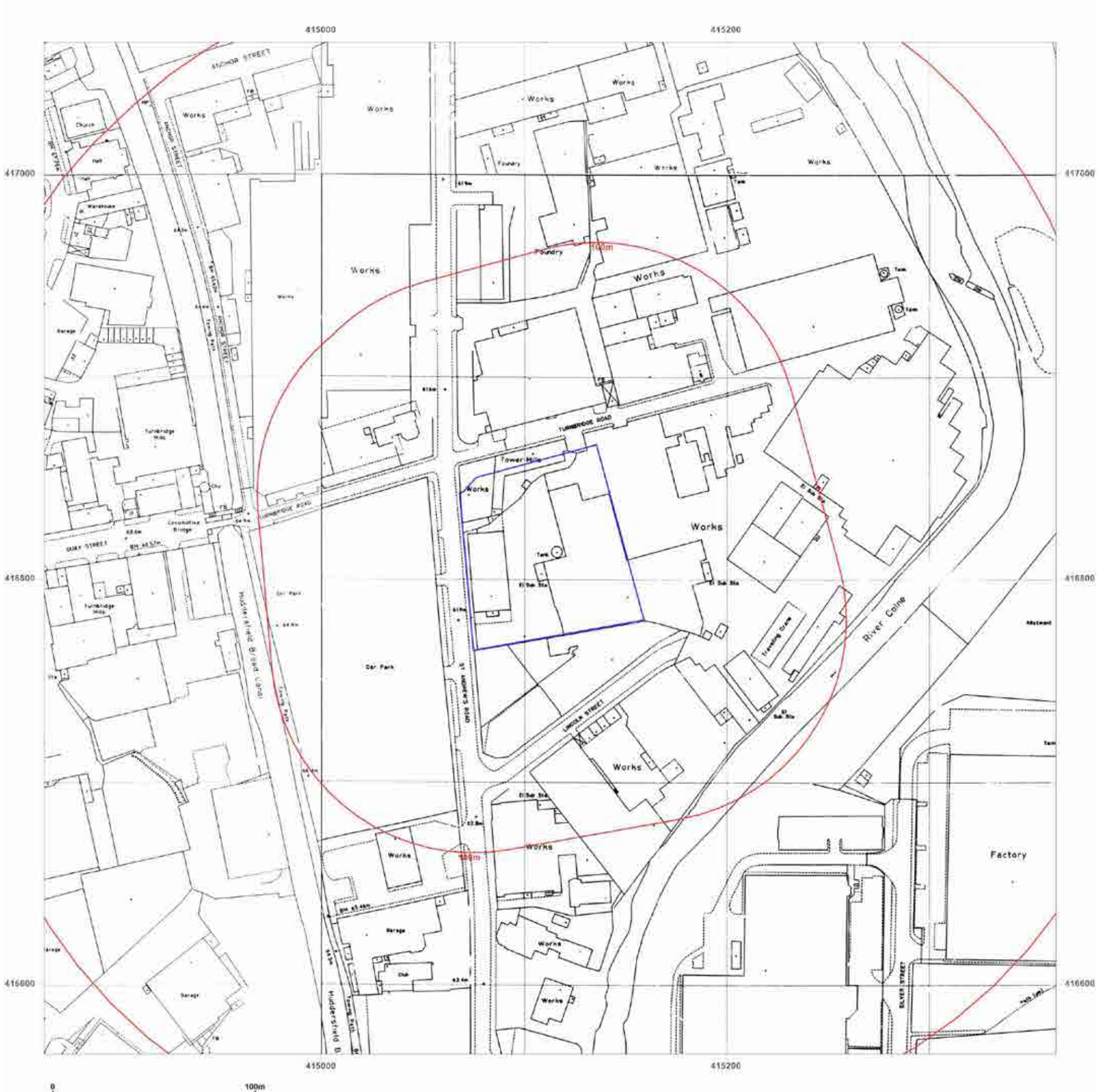
Surveyed 1992 Revised 1992 Edition N/A Copyright 1992 Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright 1993 Levelled N/A
Surveyed 1991 Revised 1991 Edition N/A Copyright 1991 Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright 1988 Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1993**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

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

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

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

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

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1993-1995**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1995
Levelled N/A

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

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

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

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1993-1995**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1995
Revised 1995
Edition N/A
Copyright 1995
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1995
Levelled N/A

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

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

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

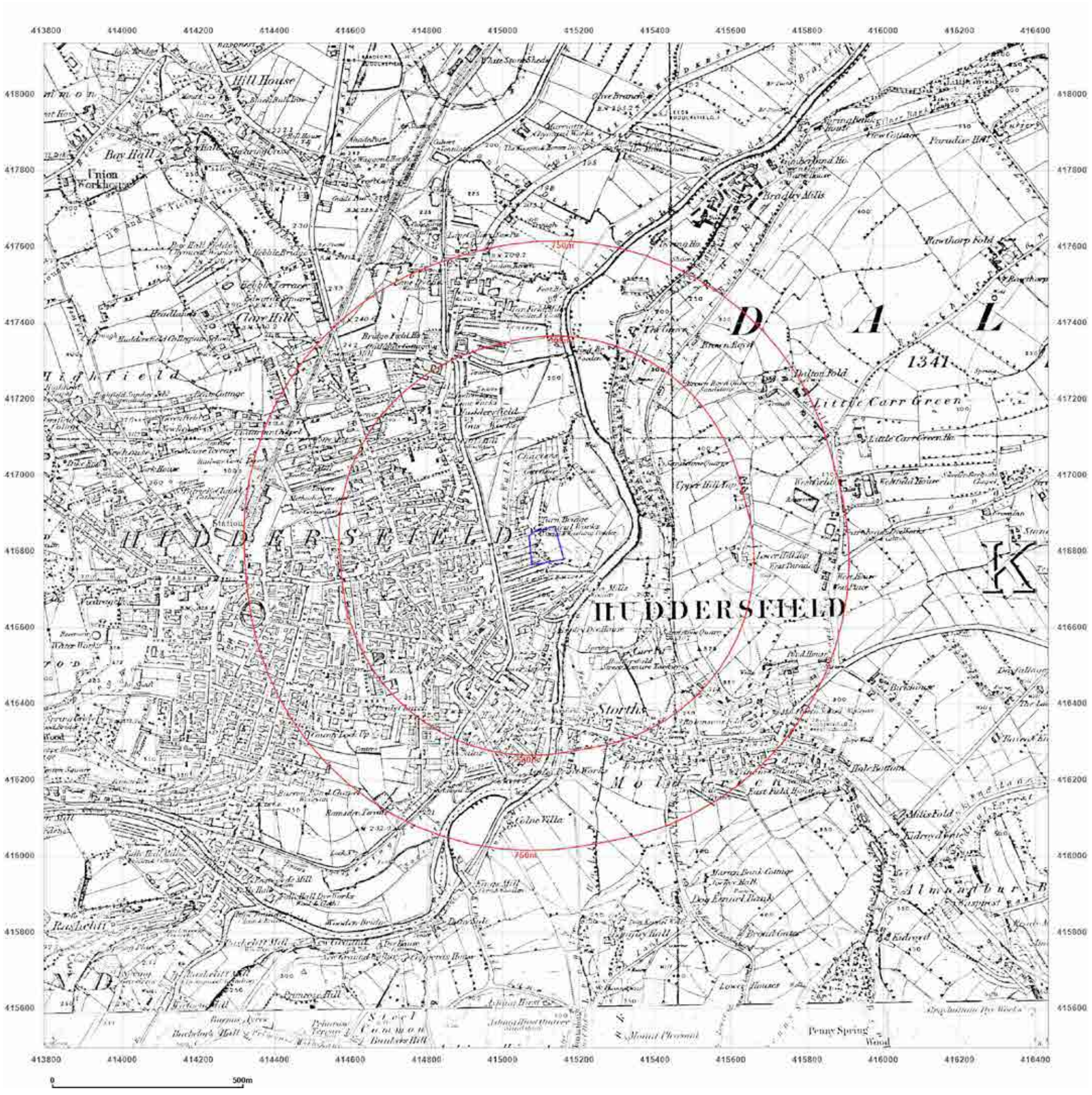
N
W E
S

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

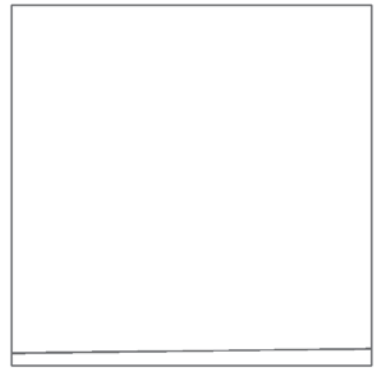
Map date: **1854**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1850
Revised N/A
Edition 1854
Copyright N/A
Levelled 1853



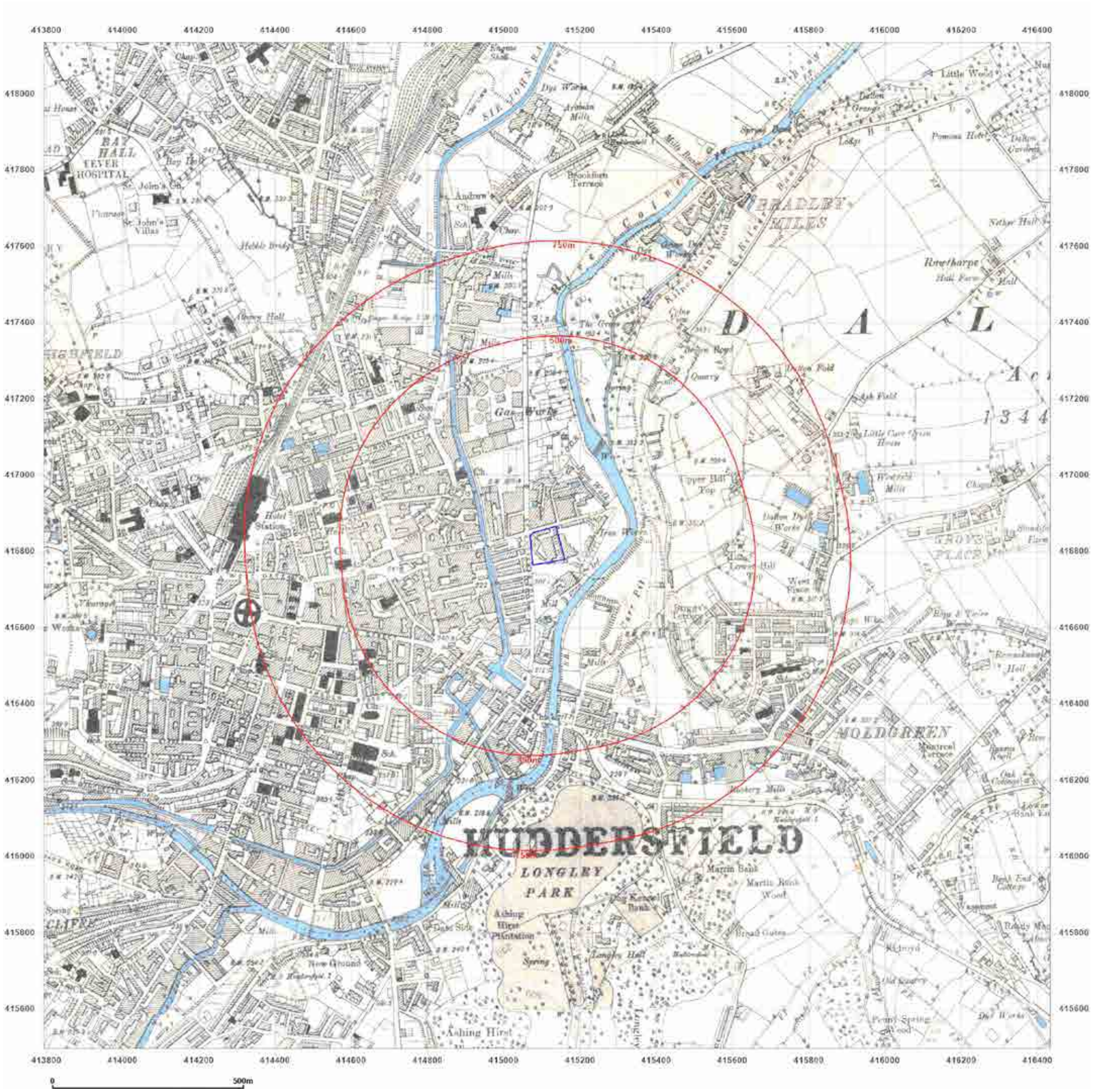
Surveyed 1851
Revised N/A
Edition 1854
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

Map date: **1888-1889**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1889
Revised 1889
Edition N/A
Copyright N/A
Levelled N/A

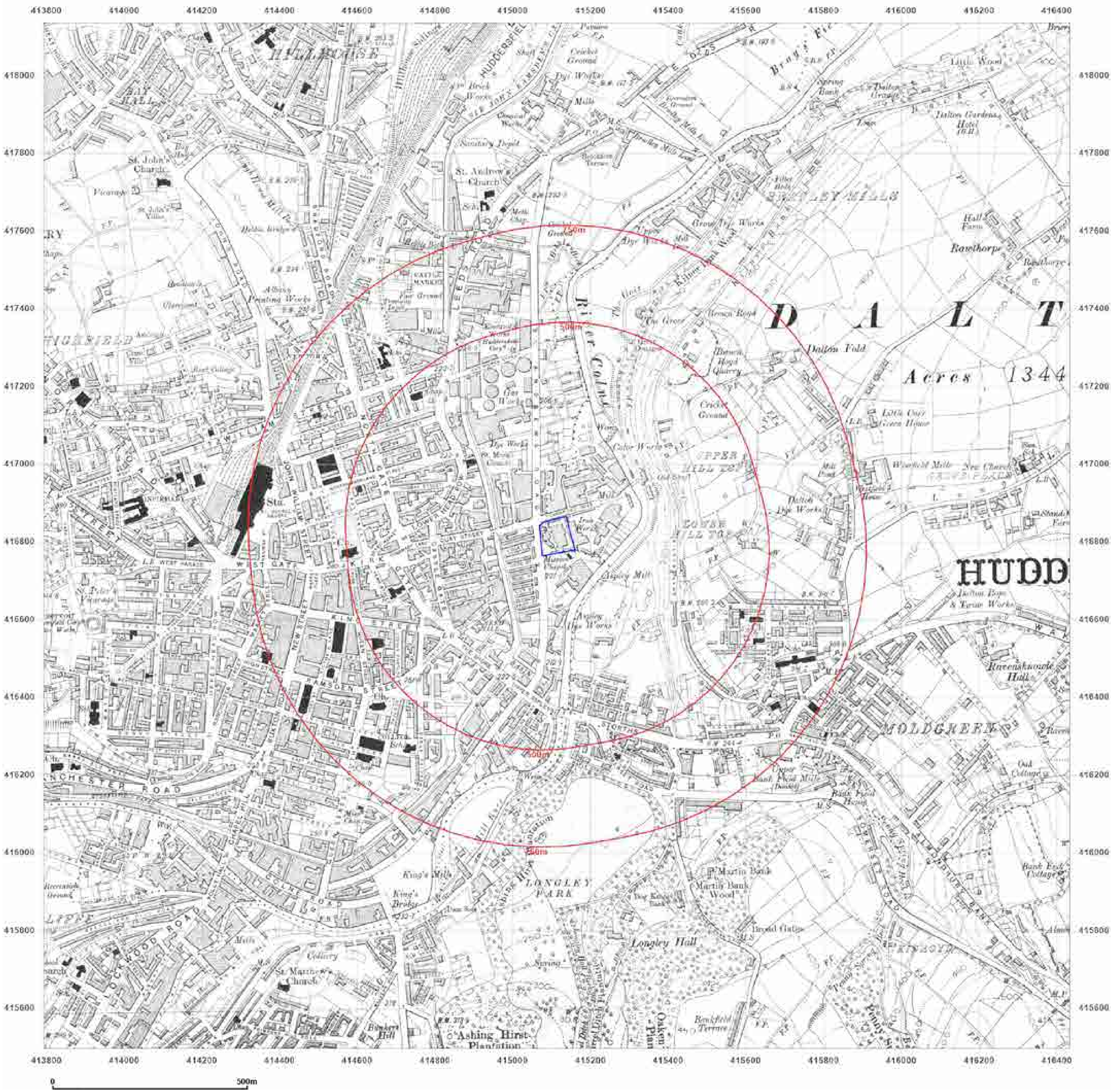
Surveyed 1888
Revised 1888
~~Edition N/A~~
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

Map date: **1905**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1889
Revised 1905
Edition N/A
Copyright N/A
Levelled N/A

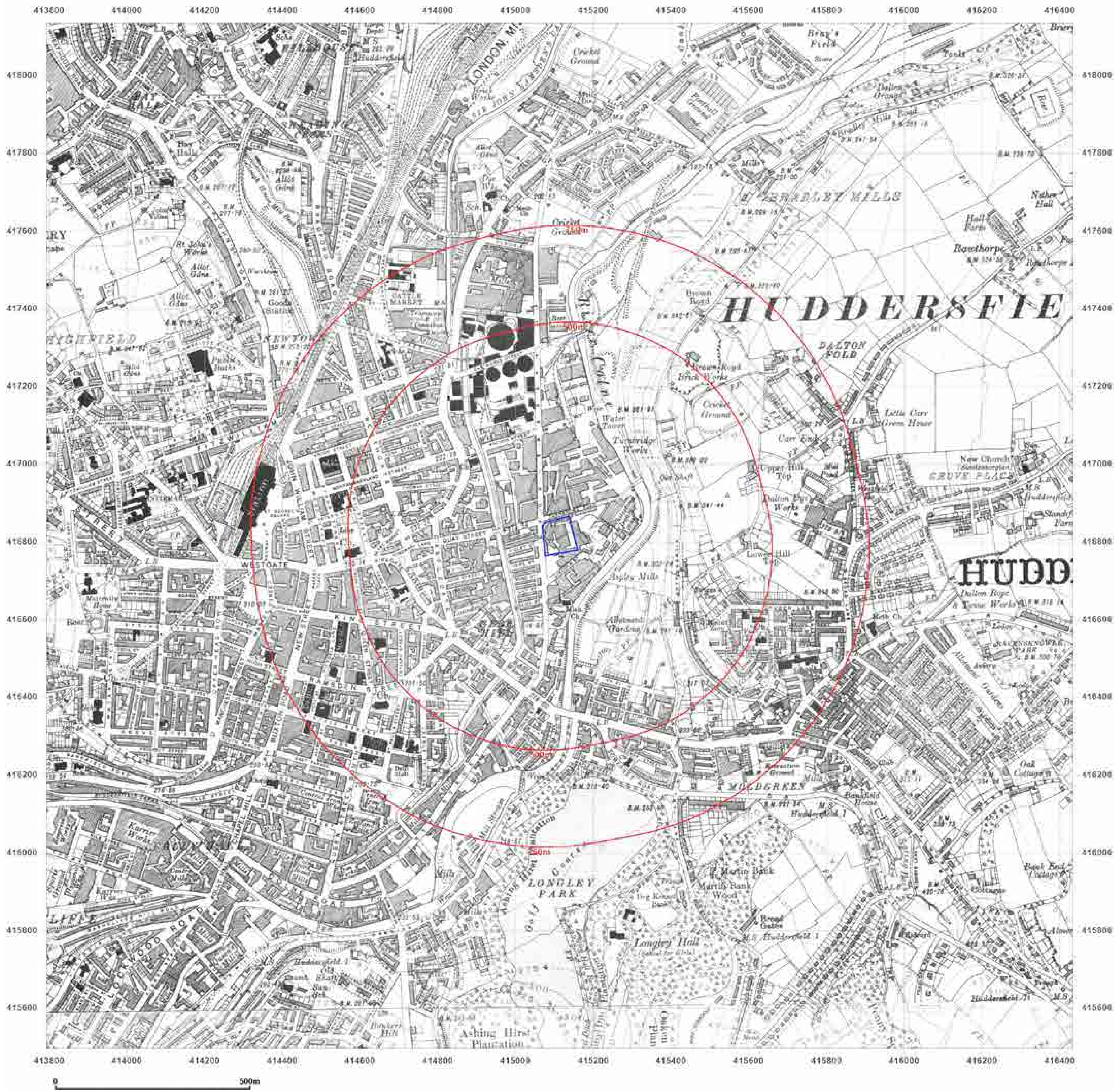
Surveyed 1888
Revised 1905
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

Map date: **1930-1931**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1851
Revised 1930
Edition 1930
Copyright N/A
Levelled 1931

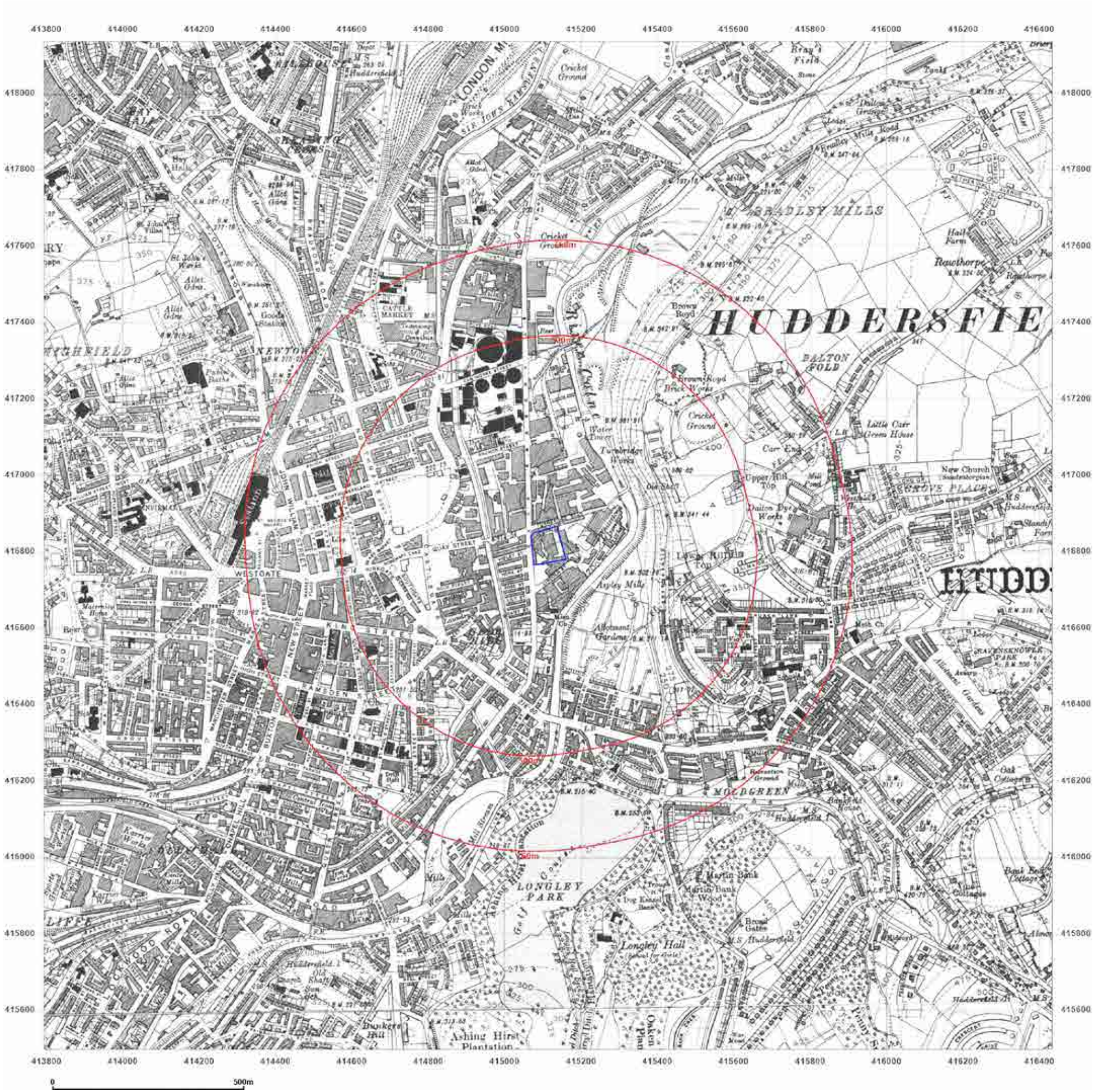
Surveyed 1851
Revised 1930
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1851
Revised 1938
Edition 1938
Copyright N/A
Levelled N/A

Surveyed 1851
Revised 1938
Edition 1938
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: County Series

Map date: **1948**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1851
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

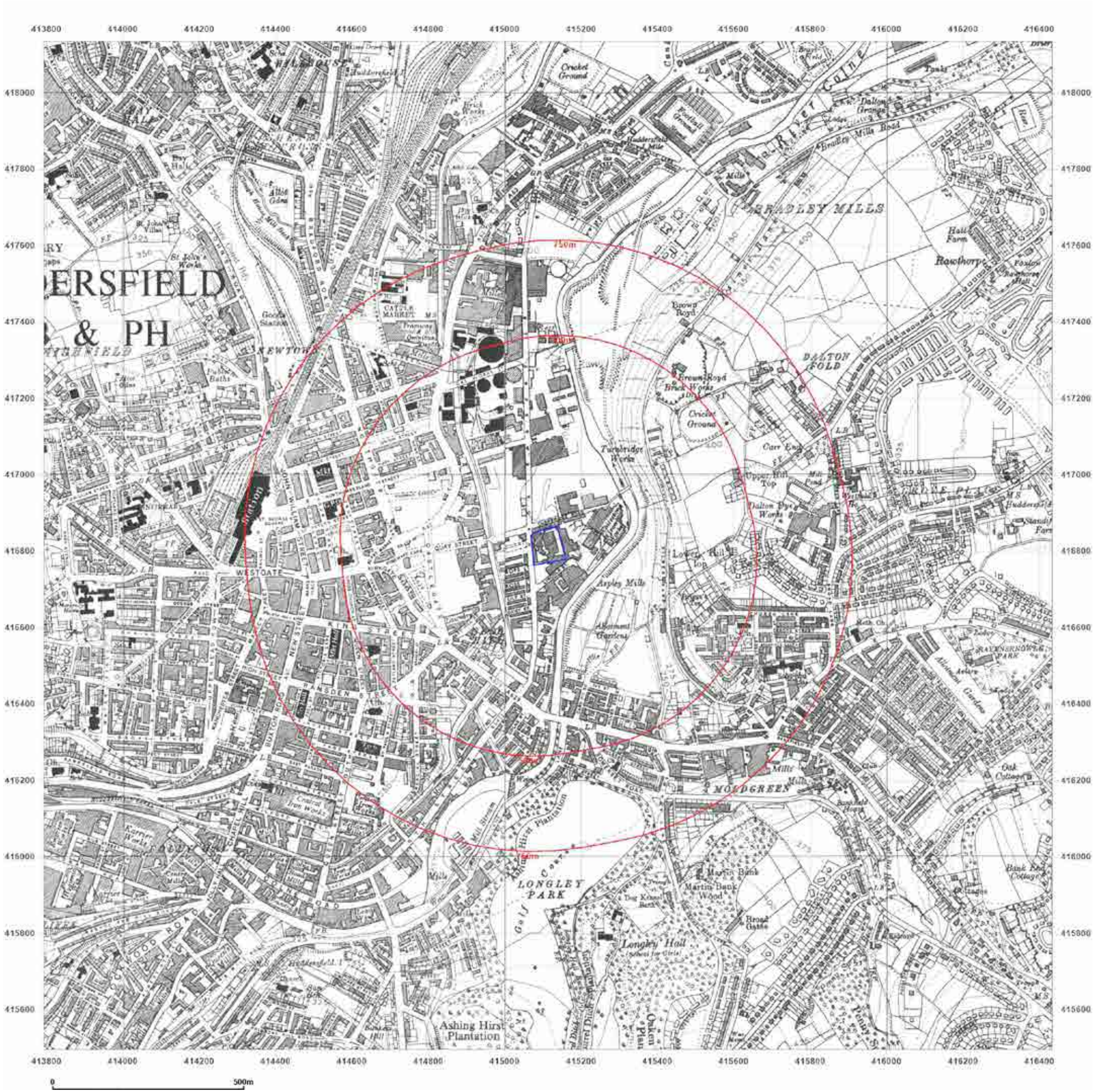
Surveyed 1851
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: Provisional
Map date: **1956**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1951
Revised 1951
Edition N/A
Copyright 1956
Levelled N/A

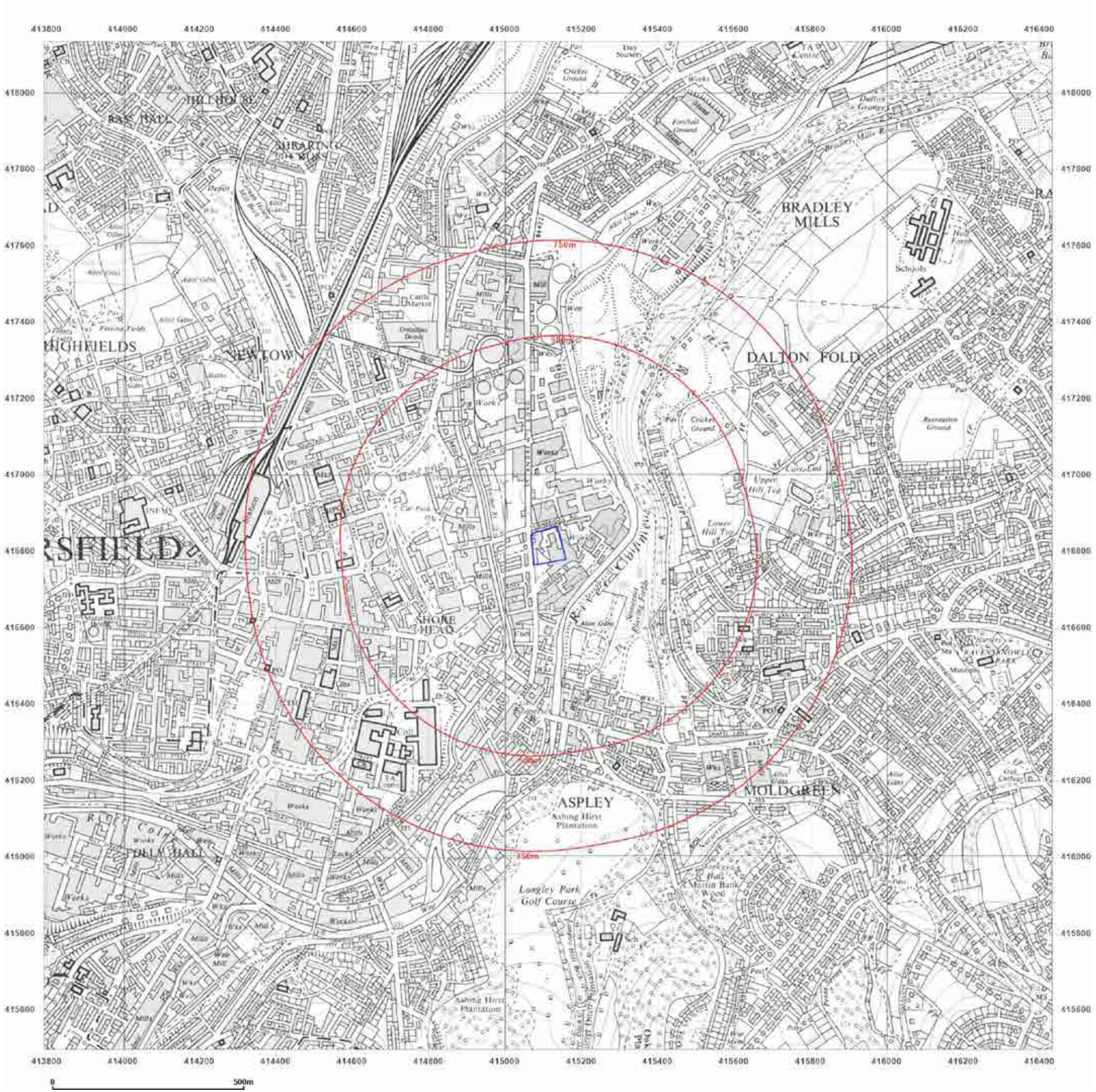
Surveyed 1951
Revised 1951
Edition N/A
Copyright 1956
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: Provisional
Map date: **1965-1966**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1966
Revised 1966
Edition N/A
Copyright N/A
Levelled N/A

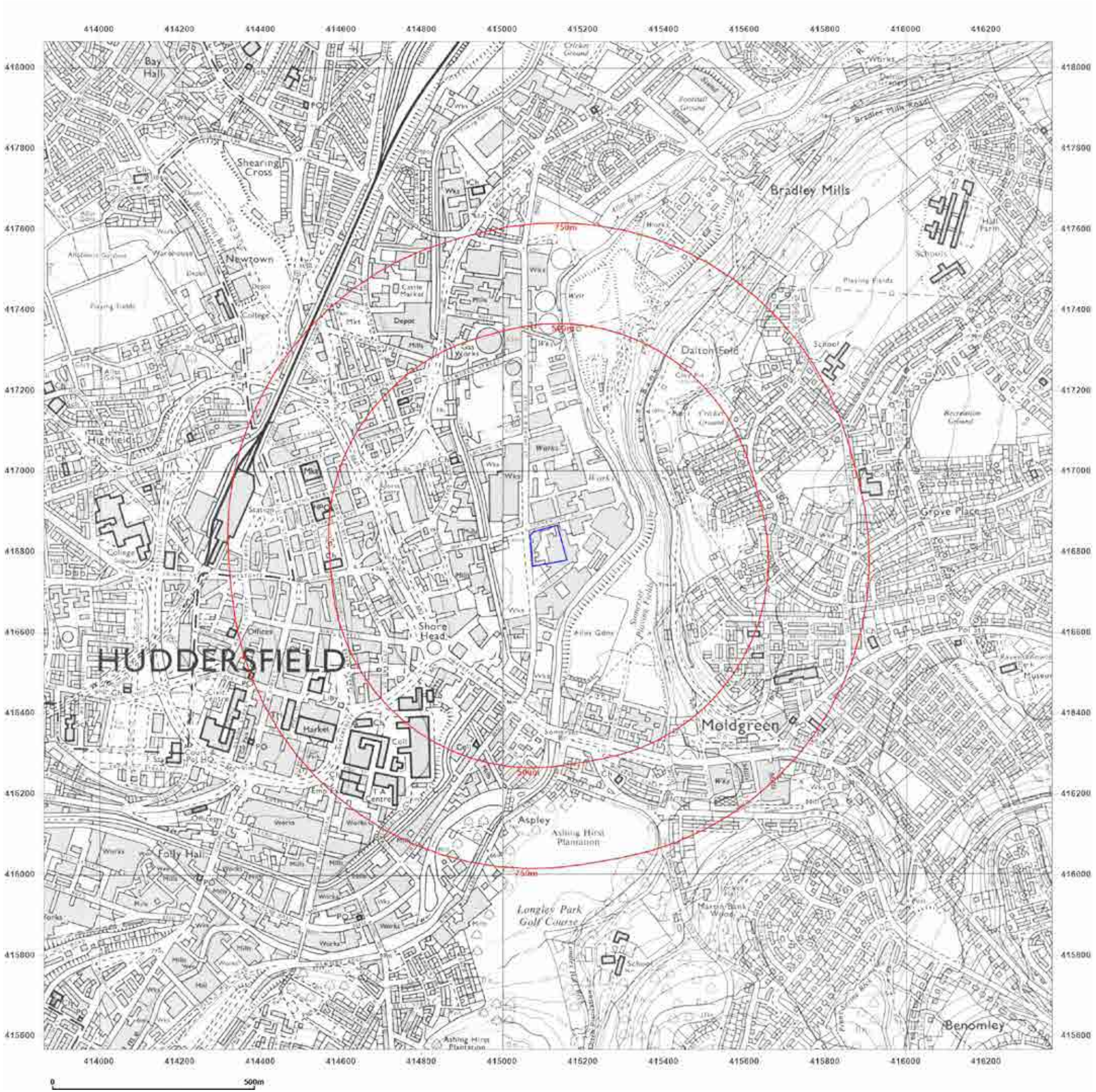
Surveyed 1965
Revised 1965
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1975**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S

Surveyed 1974
Revised 1975
Edition N/A
Copyright N/A
Levelled N/A

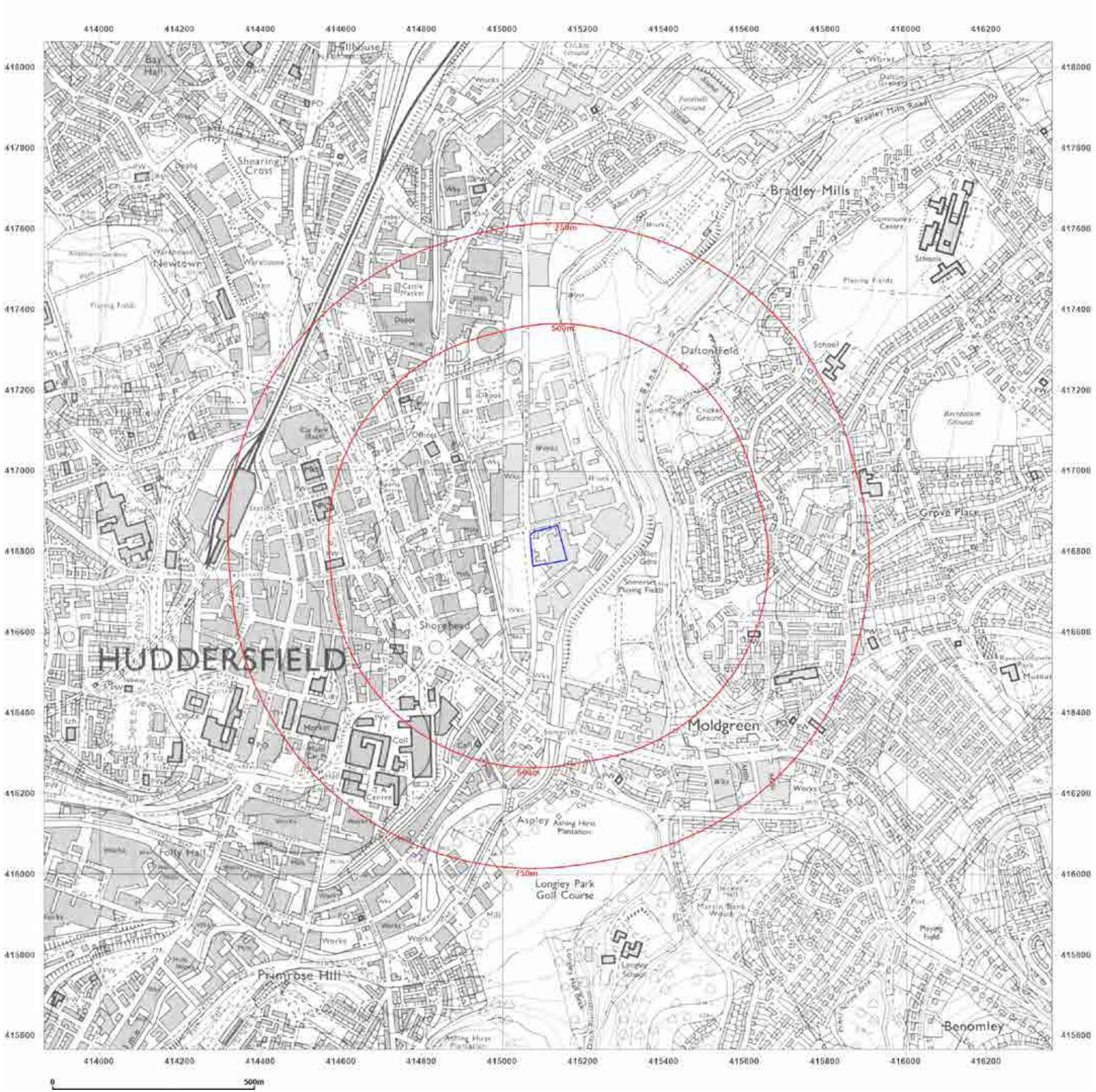
Surveyed 1974
Revised 1975
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **1985-1988**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S

Surveyed 1984
Revised 1985
Edition N/A
Copyright N/A
Levelled N/A

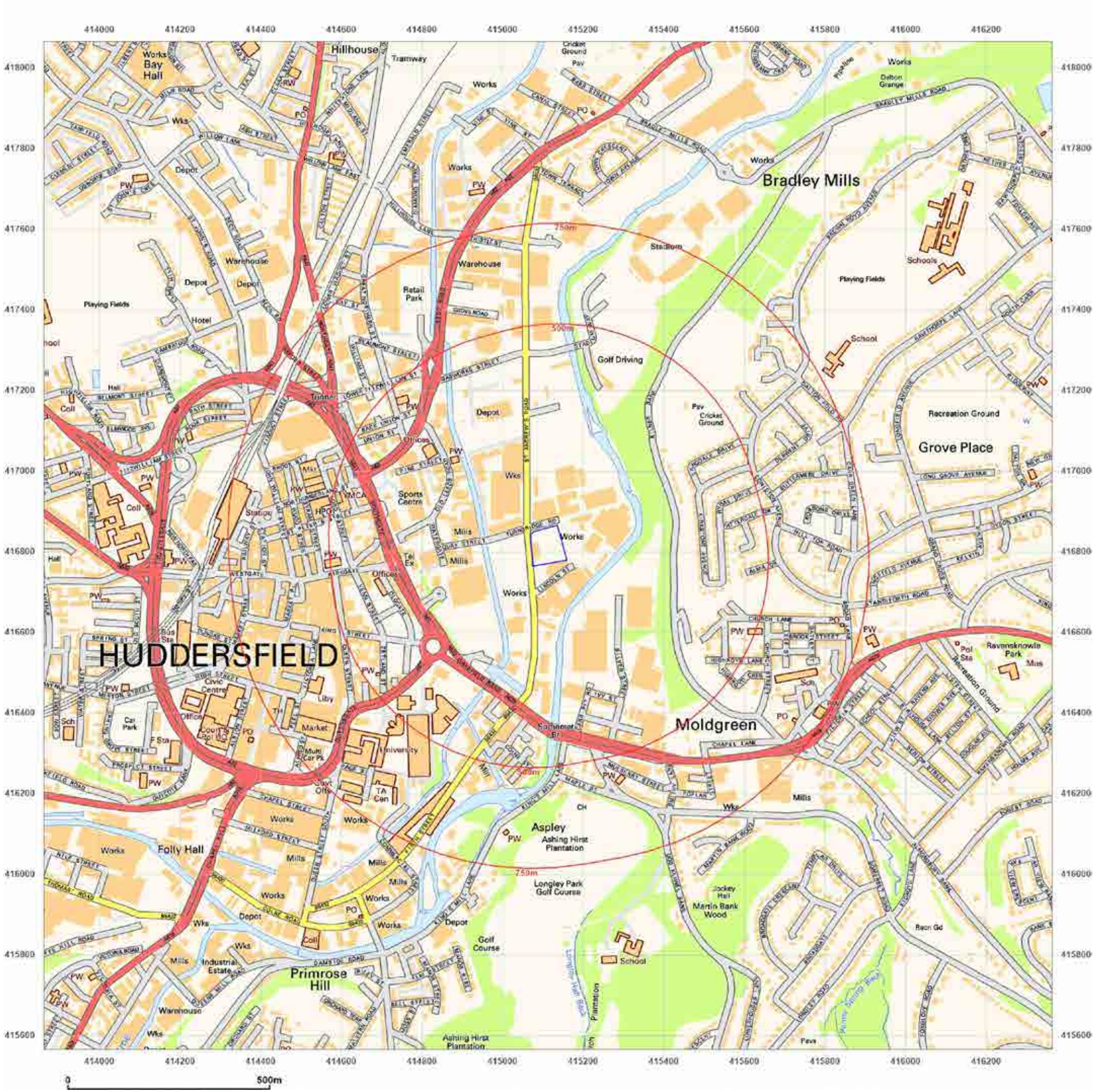
Surveyed 1984
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

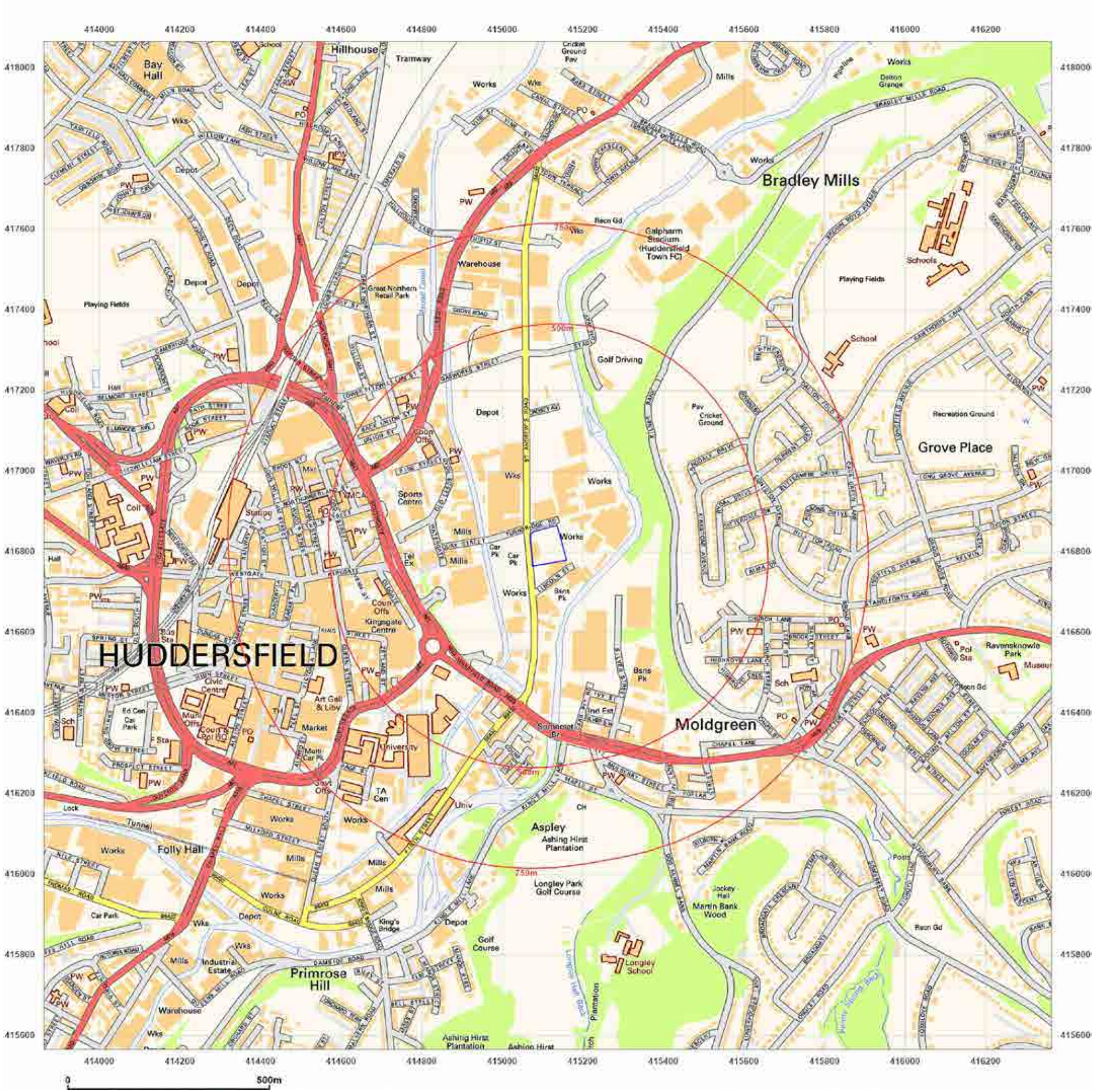
2001

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

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

N
W E
S

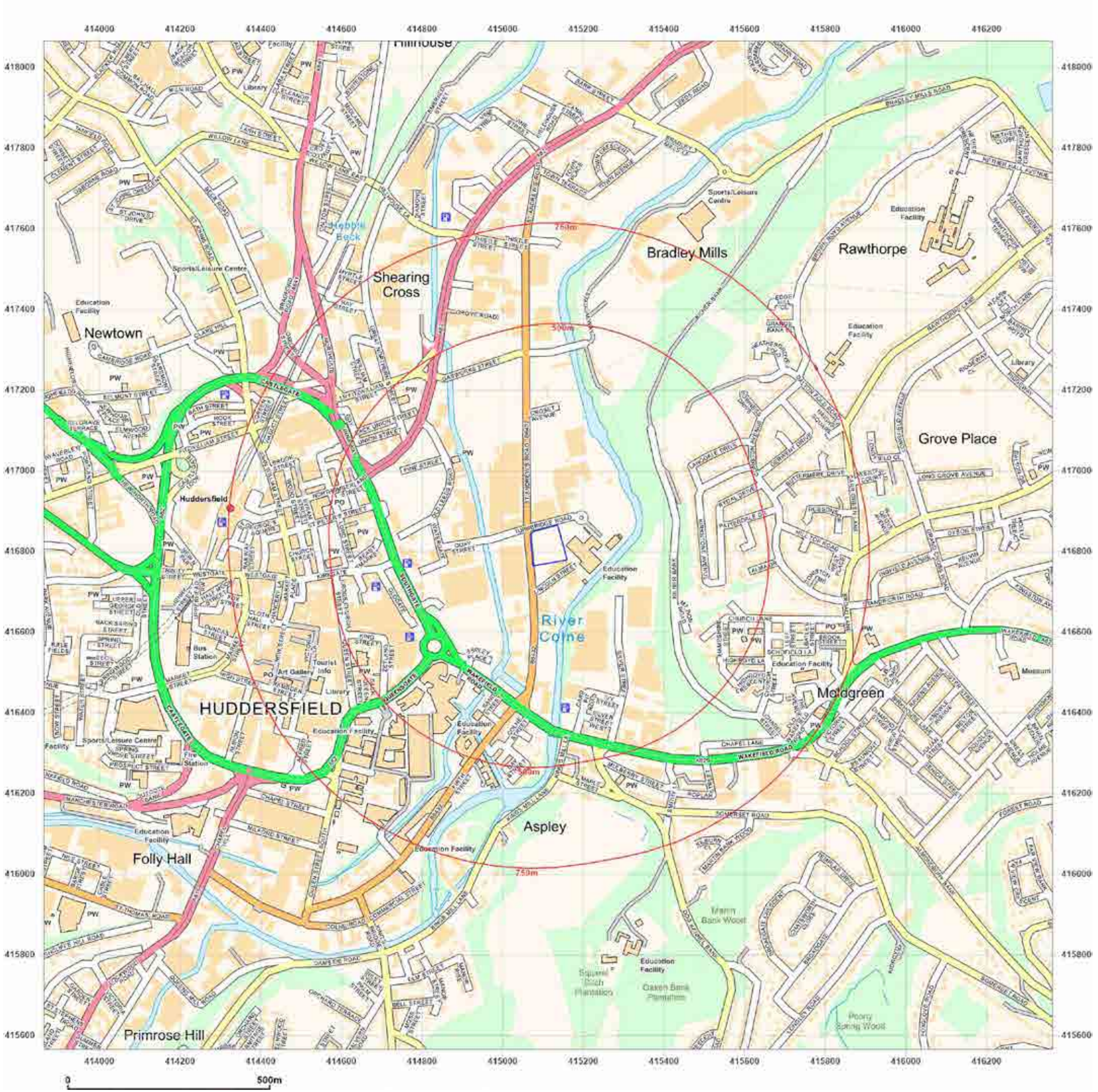
2010

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

ARROW COMMERCIAL CENTRE,
ARROW COMMERCIAL CENTRE,
ST ANDREW'S ROAD,
HUDDERSFIELD, HD1 6RZ

Client Ref: C4483_24_E_6940_PO-3045
Report Ref: GS-QIC-BG2-VX3-ZLS
Grid Ref: 415113, 416815

Map Name: National Grid
Map date: **2024**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S

2024

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 09 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Appendix 3

Groundsure Reports

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

ARROW COMMERCIAL CENTRE, ARROW COMMERCIAL CENTRE, ST ANDREW'S ROAD, HUDDERSFIELD, HD1 6RZ

Order Details

Date: 09/09/2024

Your ref: C4483_24_E_6940_PO-3045

Our Ref: GS-8H9-SNK-64A-KWI

Site Details

Location: 415117 416839

Area: 0.67 ha

Authority: Kirklees Council ↗

Summary of findings p. 2 >

OS MasterMap site plan p.13 >

Aerial image p. 9 >

Insight User Guide ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	5	16	36	77	-
19 >	1.2 >	Historical tanks >	4	0	27	55	-
23 >	1.3 >	Historical energy features >	1	1	13	39	-
25	1.4	Historical petrol stations	0	0	0	0	-
25 >	1.5 >	Historical garages >	0	0	21	26	-
27	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
28 >	2.1 >	Historical industrial land uses >	7	24	49	103	-
35 >	2.2 >	Historical tanks >	8	0	48	78	-
40 >	2.3 >	Historical energy features >	5	5	20	63	-
44	2.4	Historical petrol stations	0	0	0	0	-
44 >	2.5 >	Historical garages >	0	0	23	33	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
47	3.1	Active or recent landfill	0	0	0	0	-
47	3.2	Historical landfill (BGS records)	0	0	0	0	-
48	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
48 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	1	2	-
49 >	3.5 >	Historical waste sites >	0	1	0	5	-
50	3.6	Licensed waste sites	0	0	0	0	-
50 >	3.7 >	Waste exemptions >	0	5	16	4	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
53 >	4.1 >	Recent industrial land uses >	0	1	32	-	-
56 >	4.2 >	Current or recent petrol stations >	0	0	0	3	-
56	4.3	Electricity cables	0	0	0	0	-
56	4.4	Gas pipelines	0	0	0	0	-
56	4.5	Sites determined as Contaminated Land	0	0	0	0	-

57 >	4.6 >	Control of Major Accident Hazards (COMAH) >	0	0	0	2	-
57	4.7	Regulated explosive sites	0	0	0	0	-
57 >	4.8 >	Hazardous substance storage/usage >	0	0	0	2	-
58	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
58	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
58 >	4.11 >	Licensed pollutant release (Part A(2)/B) >	0	0	8	5	-
60 >	4.12 >	Radioactive Substance Authorisations >	0	0	0	4	-
61 >	4.13 >	Licensed Discharges to controlled waters >	0	0	9	18	-
65	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
65	4.15	Pollutant release to public sewer	0	0	0	0	-
65	4.16	List 1 Dangerous Substances	0	0	0	0	-
66	4.17	List 2 Dangerous Substances	0	0	0	0	-
66 >	4.18 >	Pollution Incidents (EA/NRW) >	0	0	0	3	-
66	4.19	Pollution inventory substances	0	0	0	0	-
67	4.20	Pollution inventory waste transfers	0	0	0	0	-
67	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
68 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
70 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
72 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
73	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
73	5.5	Groundwater vulnerability- local information	None (within 0m)				
74 >	5.6 >	Groundwater abstractions >	0	0	0	3	26
81 >	5.7 >	Surface water abstractions >	0	0	0	2	17
86 >	5.8 >	Potable abstractions >	0	0	0	0	7
88	5.9	Source Protection Zones	0	0	0	0	-
88	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
89 >	6.1 >	Water Network (OS MasterMap) >	0	0	10	-	-

90 >	6.2 >	Surface water features >	0	0	3	-	-
91 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
91 >	6.4 >	WFD Surface water bodies >	0	0	2	-	-
92 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	**River and coastal flooding >**	On site	0-50m	50-250m	250-500m	500-2000m
93 >	7.1 >	Risk of flooding from rivers and the sea >	Medium (within 50m)				
94	7.2	Historical Flood Events	0	0	0	-	-
94	7.3	Flood Defences	0	0	0	-	-
94	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
94	7.5	Flood Storage Areas	0	0	0	-	-
95 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
96 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	**Surface water flooding >**					
97 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	**Groundwater flooding >**					
99 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	**Environmental designations >**	On site	0-50m	50-250m	250-500m	500-2000m
100	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
101	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
101	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
101	10.4	Special Protection Areas (SPA)	0	0	0	0	0
101	10.5	National Nature Reserves (NNR)	0	0	0	0	0
102 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
102 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	2
102	10.8	Biosphere Reserves	0	0	0	0	0
103	10.9	Forest Parks	0	0	0	0	0
103	10.10	Marine Conservation Zones	0	0	0	0	0
103 >	10.11 >	Green Belt >	0	0	0	0	1
103	10.12	Proposed Ramsar sites	0	0	0	0	0

104	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
104	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
104	10.15	Nitrate Sensitive Areas	0	0	0	0	0
104	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
105 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
106	10.18	SSSI Units	0	0	0	0	0
Page	Section	**Visual and cultural designations** >	On site	0-50m	50-250m	250-500m	500-2000m
107	11.1	World Heritage Sites	0	0	0	-	-
108	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
108	11.3	National Parks	0	0	0	-	-
108 >	11.4 >	Listed Buildings >	0	0	4	-	-
109	11.5	Conservation Areas	0	0	0	-	-
109 >	11.6 >	Scheduled Ancient Monuments >	0	0	1	-	-
109	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations** >	On site	0-50m	50-250m	250-500m	500-2000m
110 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
111	12.2	Open Access Land	0	0	0	-	-
111	12.3	Tree Felling Licences	0	0	0	-	-
111	12.4	Environmental Stewardship Schemes	0	0	0	-	-
111	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	**Habitat designations** >	On site	0-50m	50-250m	250-500m	500-2000m
112 >	13.1 >	Priority Habitat Inventory >	0	0	5	-	-
113	13.2	Habitat Networks	0	0	0	-	-
113 >	13.3 >	Open Mosaic Habitat >	1	0	2	-	-
113	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	**Geology 1:10,000 scale** >	On site	0-50m	50-250m	250-500m	500-2000m
115 >	14.1 >	10k Availability >	Identified (within 500m)				
116 >	14.2 >	Artificial and made ground (10k) >	0	0	2	10	-
118 >	14.3 >	Superficial geology (10k) >	1	1	2	1	-

119	14.4	Landslip (10k)	0	0	0	0	-
120 >	14.5 >	Bedrock geology (10k) >	1	0	4	9	-
121 >	14.6 >	Bedrock faults and other linear features (10k) >	0	2	4	9	-
Page	Section	**Geology 1:50,000 scale** >	On site	0-50m	50-250m	250-500m	500-2000m
123 >	15.1 >	50k Availability >	Identified (within 500m)				
124 >	15.2 >	Artificial and made ground (50k) >	0	0	2	2	-
125	15.3	Artificial ground permeability (50k)	0	0	-	-	-
126 >	15.4 >	Superficial geology (50k) >	1	1	0	0	-
127 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
127	15.6	Landslip (50k)	0	0	0	0	-
127	15.7	Landslip permeability (50k)	None (within 50m)				
128 >	15.8 >	Bedrock geology (50k) >	1	0	2	8	-
129 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
129 >	15.10 >	Bedrock faults and other linear features (50k) >	0	1	3	5	-
Page	Section	**Boreholes** >	On site	0-50m	50-250m	250-500m	500-2000m
131 >	16.1 >	BGS Boreholes >	0	3	67	-	-
Page	Section	**Natural ground subsidence** >					
135 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
136 >	17.2 >	Running sands >	Low (within 50m)				
138 >	17.3 >	Compressible deposits >	Moderate (within 50m)				
140 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
141 >	17.5 >	Landslides >	Very low (within 50m)				
142 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	**Mining and ground workings** >	On site	0-50m	50-250m	250-500m	500-2000m
144 >	18.1 >	BritPits >	0	0	0	2	-
145 >	18.2 >	Surface ground workings >	0	0	13	-	-
146 >	18.3 >	Underground workings >	0	0	1	0	12
146	18.4	Underground mining extents	0	0	0	0	-
147	18.5	Historical Mineral Planning Areas	0	0	0	0	-

147	18.6	Non-coal mining	0	0	0	0	0
147	18.7	JPB mining areas	None (within 0m)				
147 >	**18.8 >**	**The Coal Authority non-coal mining >**	0	0	0	1	-
148	18.9	Researched mining	0	0	0	0	-
148 >	**18.10 >**	**Mining record office plans >**	0	0	0	2	-
148	18.11	BGS mine plans	0	0	0	0	-
148 >	**18.12 >**	**Coal mining >**	Identified (within 0m)				
149	18.13	Brine areas	None (within 0m)				
149	18.14	Gypsum areas	None (within 0m)				
149	18.15	Tin mining	None (within 0m)				
149	18.16	Clay mining	None (within 0m)				
Page	Section	**Ground cavities and sinkholes >**	On site	0-50m	50-250m	250-500m	500-2000m
150	19.1	Natural cavities	0	0	0	0	-
151 >	**19.2 >**	**Mining cavities >**	0	0	0	0	2
151	19.3	Reported recent incidents	0	0	0	0	-
151	19.4	Historical incidents	0	0	0	0	-
152	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon >**					
153 >	**20.1 >**	**Radon >**	Less than 1% (within 0m)				
Page	Section	**Soil chemistry >**	On site	0-50m	50-250m	250-500m	500-2000m
155 >	**21.1 >**	**BGS Estimated Background Soil Chemistry >**	1	1	-	-	-
155	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
155	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
156	22.1	Underground railways (London)	0	0	0	-	-
156	22.2	Underground railways (Non-London)	0	0	0	-	-
157	22.3	Railway tunnels	0	0	0	-	-
157 >	**22.4 >**	**Historical railway and tunnel features >**	0	4	7	-	-
158	22.5	Royal Mail tunnels	0	0	0	-	-

158	22.6	Historical railways	0	0	0	-	-
158	22.7	Railways	0	0	0	-	-
158	22.8	Crossrail 1	0	0	0	0	-
158	22.9	Crossrail 2	0	0	0	0	-
159	22.10	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 30/05/2021

Site Area: 0.67ha

Recent site history - 2018 aerial photograph

Capture Date: 01/07/2018

Site Area: 0.67ha

Recent site history - 2012 aerial photograph

Capture Date: 26/03/2012

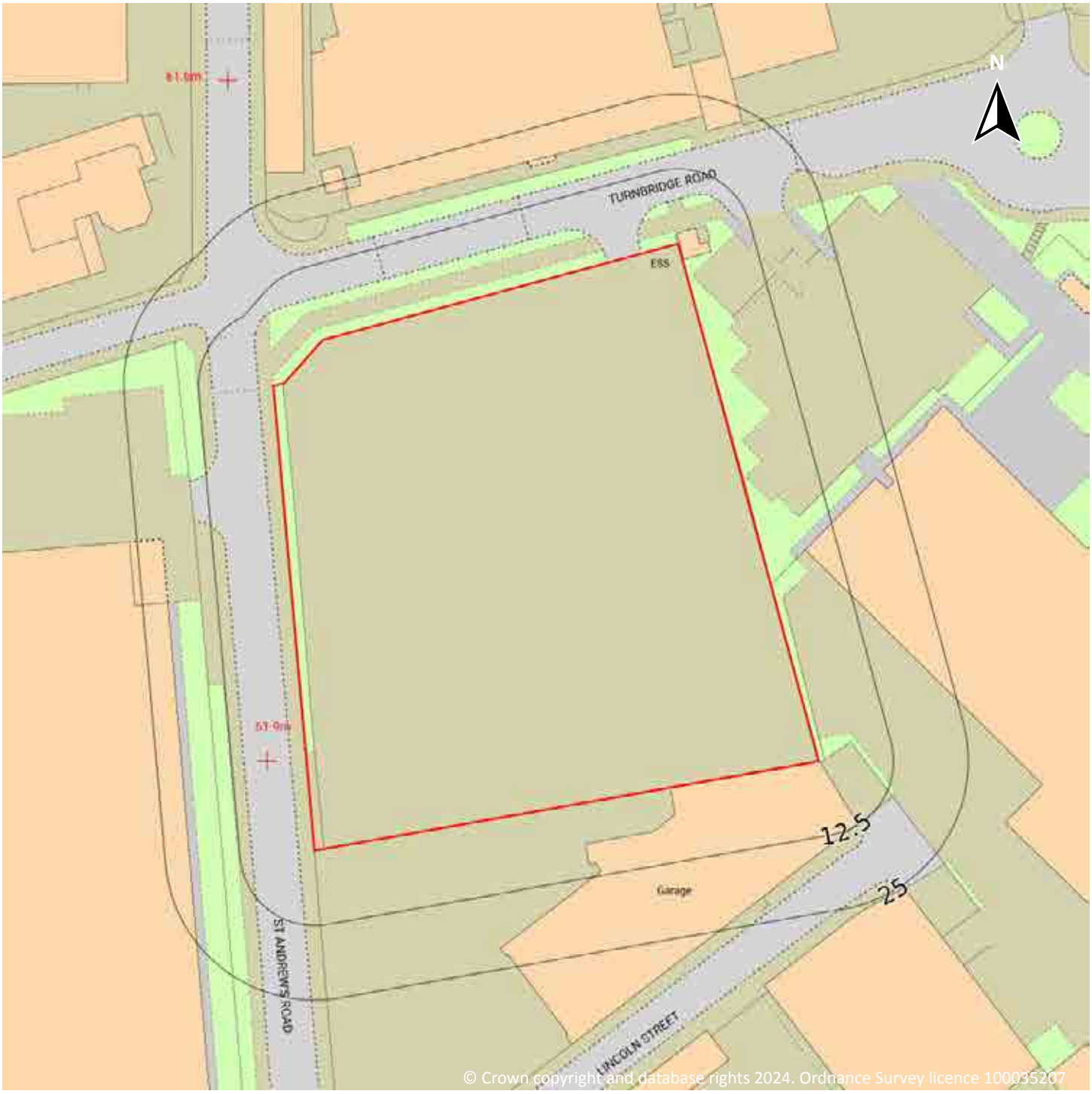
Site Area: 0.67ha

Recent site history - 2000 aerial photograph

Capture Date: 05/08/2000

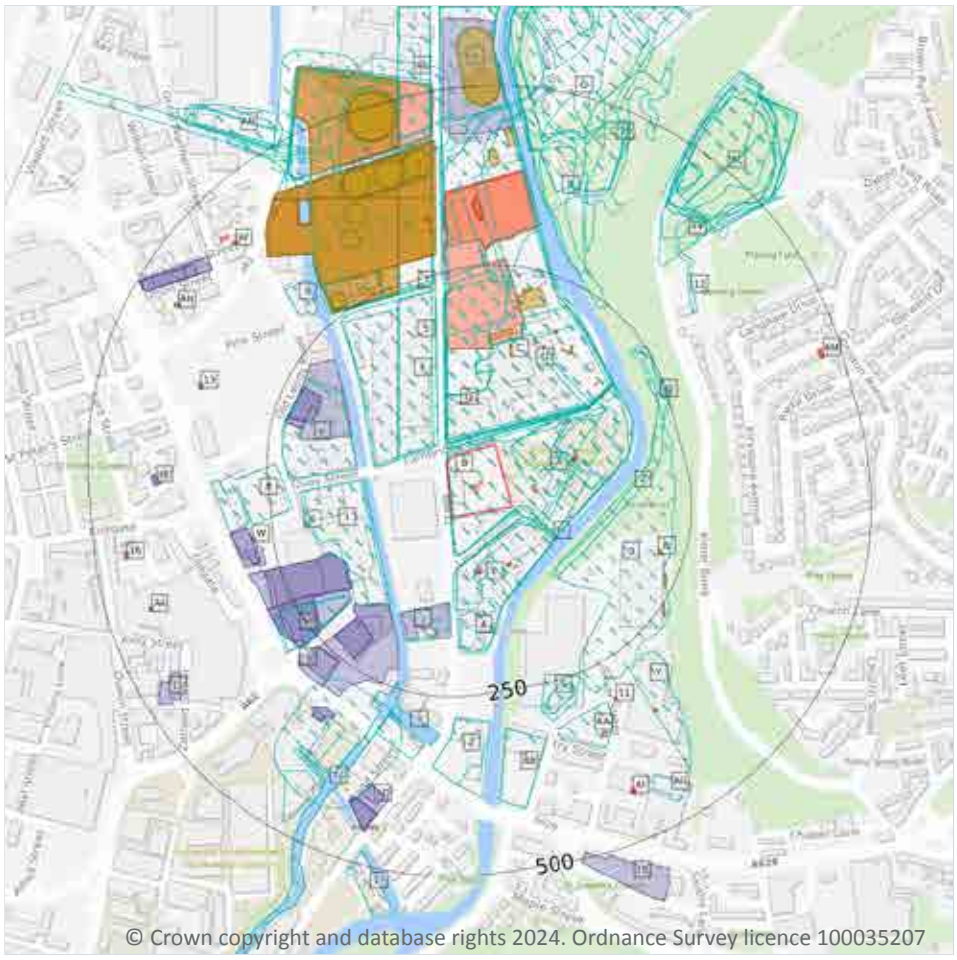
Site Area: 0.67ha

OS MasterMap site plan



Site Area: 0.67ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	134

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Iron Works**	**1956**	**1508707**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Iron Works**	**1938**	**1511425**
A	**On site**	**Iron Works**	**1889 - 1905**	**1549847**
A	**On site**	**Unspecified Commercial/Industrial**	**1975 - 1988**	**1576238**
A	**On site**	**Unspecified Works**	**1965**	**1579663**
C	16m N	Unspecified Works	1948	1500184
D	18m NW	Colour Works	1905	1433967
A	19m NE	Railway Sidings	1938 - 1948	1551869
D	19m N	Unspecified Works	1988	1495820
1	19m NW	Unspecified Works	1938	1494939
E	19m SE	Unspecified Mills	1956	1520381
E	19m SE	Unspecified Commercial/Industrial	1965 - 1988	1564619
D	21m N	Unspecified Works	1965 - 1975	1563134
A	22m NE	Railway Sidings	1956	1488306
C	24m N	Bridge Works	1956	1442992
E	25m SE	Unspecified Mills	1938 - 1948	1501382
F	26m NW	Unspecified Works	1975 - 1988	1546436
F	26m NW	Unspecified Commercial/Industrial	1956 - 1965	1567912
F	27m NW	Dye Works	1905	1475070
E	27m SE	Unspecified Mill	1889 - 1905	1543230
A	49m E	Unspecified Mill	1905	1448355
F	69m W	Unspecified Works	1975 - 1985	1557239
A	73m NE	Iron Works	1948	1572111
D	78m N	Unspecified Works	1988	1485006
D	78m N	Unspecified Works	1965 - 1975	1557247
2	101m SE	Unspecified Ground Workings	1905	1502930
3	104m SE	Unspecified Pit	1889	1450066
I	109m SW	Unspecified Mills	1985	1507204
I	114m SW	Unspecified Mills	1966 - 1975	1567068

ID	Location	Land use	Dates present	Group ID
J	120m S	Unspecified Works	1975 - 1988	1566284
K	125m W	Unspecified Mills	1966	1494525
K	125m W	Unspecified Mills	1975 - 1985	1523761
D	130m NE	Rope Walk	1889	1469937
4	133m S	Dye Works	1905	1475063
M	182m SW	Laundry	1948 - 1956	1496591
M	186m SW	Laundry	1938	1556157
O	216m N	Railway Sidings	1938	1547649
P	220m W	Dairy	1985	1441862
O	226m N	Railway Sidings	1948	1511860
Q	232m E	Unspecified Ground Workings	1956	1543172
R	237m N	Gas Works	1889 - 1905	1529353
R	238m N	Unspecified Commercial/Industrial	1948	1507926
S	238m S	Unspecified Mills	1889	1445984
O	239m NE	Unspecified Ground Workings	1965 - 1975	1580151
R	240m N	Unspecified Commercial/Industrial	1938	1570655
C	240m N	Unspecified Tank	1938	1472518
R	241m N	Unspecified Depot	1985	1445234
R	241m NW	Unspecified Works	1966	1545773
T	241m NW	Dye Works	1938 - 1948	1511288
O	241m N	Unspecified Works	1965 - 1975	1508212
U	241m S	Disused Canal	1985	1540587
U	241m S	Disused Canal	1975	1548877
R	242m NW	Railway Sidings	1966	1538231
T	243m N	Dye Works	1956	1554164
R	243m N	Unspecified Commercial/Industrial	1956 - 1988	1509250
Q	246m NE	Unspecified Old Shaft	1938	1567719
Q	247m NE	Unspecified Old Shaft	1905	1446415

ID	Location	Land use	Dates present	Group ID
T	256m NW	Unspecified Tank	1966	1472517
S	257m SE	Refuse Heap	1948 - 1956	1495518
S	260m S	Unspecified Heap	1938	1563869
8	267m NE	Unspecified Heap	1905	1466735
U	270m SW	Unspecified Wharf	1956	1516998
X	271m S	Unspecified Wharf	1938	1518445
9	276m NW	Unspecified Mill	1966	1448424
R	276m N	Railway Sidings	1956	1522070
R	276m N	Unspecified Commercial/Industrial	1956	1560092
Y	277m SE	Unspecified Pit	1965 - 1975	1547486
R	279m NW	Railway Sidings	1938	1489634
Z	280m S	Unspecified Works	1965	1518683
Z	280m S	Unspecified Works	1975 - 1988	1572897
P	283m W	Telephone Exchange	1975 - 1985	1513310
R	288m NW	Railway Sidings	1948	1531197
X	291m S	Unspecified Wharf	1948	1526274
10	297m NE	Refuse Heap	1965 - 1975	1492645
AA	301m SE	Unspecified Pit	1889	1450336
AB	303m S	Unspecified Works	1965	1460225
AB	303m S	Unspecified Commercial/Industrial	1975 - 1988	1481997
R	316m NW	Unspecified Tanks	1889	1443543
R	319m NW	Gasometers	1905	1445686
R	320m N	Unspecified Tank	1948 - 1956	1560983
R	323m N	Unspecified Tank	1938	1515291
U	327m SW	Unspecified Wharf	1948	1524975
O	330m N	Refuse Heap	1948	1546106
R	330m N	Railway Sidings	1956	1556341
12	331m NE	Unspecified Ground Workings	1948	1439085

ID	Location	Land use	Dates present	Group ID
AC	340m NE	Clay Pit	1975	1453657
O	362m N	Refuse Heap	1938	1552174
AC	371m NE	Unspecified Quarry	1988	1499319
O	374m N	Refuse Heap	1956	1500910
R	377m N	Gasometers	1889 - 1905	1533846
14	382m NE	Unspecified Heap	1965	1466734
R	382m N	Unspecified Tanks	1948	1443541
R	386m N	Unspecified Tank	1966	1500586
R	386m N	Unspecified Tank	1956	1512637
R	386m N	Unspecified Tank	1938	1484071
U	386m SW	Unspecified Wharf	1938	1536387
R	388m N	Unspecified Tank	1956	1533455
R	388m N	Unspecified Tank	1966	1541354
R	390m N	Unspecified Tank	1956	1482920
R	390m N	Unspecified Tank	1965 - 1988	1551279
U	406m SW	Unspecified Heap	1966 - 1975	1509015
AC	407m NE	Unspecified Quarry	1889 - 1905	1558880
R	412m N	Electricity Works	1905	1442987
AC	412m NE	Disused Brick Works	1956	1453312
AC	413m NE	Brick Works	1948	1576973
AC	416m NE	Brick Works	1938	1555809
AC	421m NE	Unspecified Quarry	1956	1533579
AG	422m SE	Unspecified Works	1965	1460226
AC	424m NE	Unspecified Pit	1938	1557554
AC	430m NE	Unspecified Pit	1965	1566046
AC	431m NE	Refuse Heap	1948	1536701
R	433m NW	Unspecified Ground Workings	1889	1439255
R	435m N	Gas Works	1975	1474968

ID	Location	Land use	Dates present	Group ID
R	435m N	Unspecified Works	1985	1571574
AC	437m NE	Refuse Heap	1938	1579774
AC	441m NE	Refuse Heap	1956	1512898
R	443m N	Unspecified Tank	1905	1472516
AL	445m N	Unspecified Commercial/Industrial	1975 - 1988	1489553
AL	445m N	Unspecified Commercial/Industrial	1965	1501481
R	452m N	Unspecified Tanks	1948	1443542
R	453m N	Gasometer	1975	1436986
R	453m N	Unspecified Tank	1985	1498218
AJ	456m N	Unspecified Mill	1965	1448422
AJ	456m N	Unspecified Works	1975	1482941
AJ	456m N	Unspecified Commercial/Industrial	1956	1528044
R	457m N	Unspecified Tank	1956 - 1966	1498703
R	459m N	Unspecified Tank	1938	1573312
AJ	476m N	Unspecified Tanks	1965 - 1975	1494203
17	480m S	Unspecified Mills	1975 - 1985	1550851
R	486m NW	Unspecified Mills	1889	1445975
AN	493m NW	Unspecified Mill	1966	1448423
AN	496m NW	Unspecified Mills	1948	1504618
AN	496m NW	Unspecified Mills	1905	1552953
AN	497m NW	Unspecified Mills	1975 - 1985	1486864

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**86**

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 un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
B	**On site**	**Unspecified Tank**	**1893**	**237590**
B	**On site**	**Unspecified Tank**	**1972 - 1993**	**248669**
B	**On site**	**Unspecified Tank**	**1907**	**254245**
B	**On site**	**Unspecified Tank**	**1932**	**254768**
G	65m N	Tanks	1918	233765
G	66m N	Tanks	1907	233771
E	76m SE	Unspecified Tank	1918 - 1959	259171
E	77m S	Unspecified Tank	1893	250545
E	81m SE	Unspecified Tank	1932	239856
D	90m NE	Unspecified Tank	1893	237589
D	124m N	Tanks	1918	233772
D	142m N	Tanks	1932	233773
D	148m NE	Unspecified Tank	1993 - 1995	246772
D	148m NE	Unspecified Tank	1997	249294
D	149m NE	Unspecified Tank	1932	237591
D	149m NE	Unspecified Tank	1985	260572
D	161m NE	Tanks	1907	233769
D	161m NE	Unspecified Tank	1972 - 1997	249793
D	162m NE	Unspecified Tank	1918 - 1932	258741
D	163m NE	Unspecified Tank	1993 - 1997	260777
D	168m NE	Tanks	1907	233766
5	174m N	Unspecified Tank	1893	237613
D	175m NE	Unspecified Tank	1918	237588
D	176m NE	Tanks	1907	233770
C	189m N	Tanks	1907 - 1918	246656
N	212m E	Unspecified Tank	1988 - 1997	255272
C	215m N	Unspecified Tank	1985 - 1995	253422

ID	Location	Land use	Dates present	Group ID
N	231m SE	Unspecified Tank	1988 - 1997	262339
7	238m N	Unspecified Tank	1907 - 1918	256655
R	239m NW	Gas Works	1972	255335
N	250m SE	Unspecified Tank	1993 - 1997	249676
T	252m NW	Unspecified Tank	1959 - 1972	245624
T	258m NW	Unspecified Tank	1959 - 1960	258379
T	258m NW	Unspecified Tank	1972	237608
T	258m NW	Gasometer	1972	237197
T	259m NW	Unspecified Tank	1959 - 1960	248268
T	266m NW	Tanks	1932	233788
R	277m N	Gas Works	1907	250298
R	277m N	Gas Works	-	233365
V	290m SW	Unspecified Tank	1985	239880
R	309m N	Unspecified Tank	1907	254976
R	312m N	Unspecified Tank	1893	246806
R	320m N	Unspecified Tank	1907 - 1932	251224
R	322m NW	Gasometer	1893 - 1907	258732
R	324m N	Tanks	1907	249302
R	326m N	Tanks	1893	249023
R	326m N	Tanks	1918 - 1932	252553
R	339m NW	Unspecified Tank	1984 - 1992	249357
AB	341m S	Unspecified Tank	1972	239844
Y	344m SE	Unspecified Tank	1988 - 1995	246024
Y	344m SE	Unspecified Tank	1983	254989
R	350m NW	Gasometer	1893 - 1907	256427
R	355m N	Gas Works	1907	257905
R	362m NW	Unspecified Tank	1893	237612
R	379m N	Unspecified Tank	1890	237626

ID	Location	Land use	Dates present	Group ID
R	380m N	Gasometer	1890	237198
R	381m N	Gasometers	1907	252544
R	381m N	Tanks	1932	254880
R	381m N	Gasometers	1893	262055
R	381m NW	Gasometer	1890	250021
R	382m N	Unspecified Tank	1890	237625
R	383m N	Tanks	1959	261967
R	383m N	Unspecified Tank	1960	237610
R	383m N	Gasometer	1890	237199
U	383m SW	Unspecified Tank	1907	239846
R	385m N	Unspecified Tank	1960	237609
R	385m N	Unspecified Tank	1890	237624
R	386m N	Unspecified Tank	1960	237611
R	387m N	Gasholder	1985	236571
O	388m N	Tanks	1932	233767
R	404m NW	Tanks	1893	233709
R	405m N	Gas Holder	-	233366
R	416m NW	Tanks	1907 - 1932	261287
O	416m N	Tanks	1932	233768
R	420m NW	Unspecified Tank	1890	237622
AG	424m SE	Unspecified Tank	1983	239879
R	434m N	Gas Works	1972 - 1981	245972
R	438m N	Unspecified Tank	1907 - 1918	251896
R	439m N	Tanks	1907 - 1932	258609
R	452m N	Unspecified Tank	1932 - 1959	250784
R	452m N	Gas Holder	1995 - 1998	251865
R	453m N	Unspecified Tank	1960	255857
R	453m N	Gasholder	1972	246135

ID	Location	Land use	Dates present	Group ID
R	454m N	Gasholder	1981 - 1992	254886
AJ	472m N	Unspecified Tank	1960	237587
AJ	472m N	Tanks	1959	233776

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**54**

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 un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
B	**On site**	**Electricity Substation**	**1972 - 1993**	**152937**
A	34m E	Electricity Substation	1972 - 1993	156240
H	72m SE	Electricity Substation	1988	154784
H	72m SE	Electricity Substation	1984	155260
H	72m SE	Electricity Substation	1972	148718
H	73m SE	Electricity Substation	1997	146499
H	73m SE	Electricity Substation	1993	160394
E	77m S	Electricity Substation	1972 - 1988	155830
E	80m S	Electricity Substation	1993 - 1997	160083
A	97m E	Electricity Substation	1993 - 1997	148960
A	98m E	Electricity Substation	1984 - 1988	160505
A	99m E	Electricity Substation	1972	161379
C	134m N	Electricity Transformer Station	1995	152671
6	201m W	Electricity Substation	1991	143011
R	239m NW	Gas Works	1972	151987

ID	Location	Land use	Dates present	Group ID
T	258m NW	Gasometer	1972	141972
O	269m N	Electricity Transformer Station	1993	153301
W	275m W	Electricity Substation	1985	143017
R	277m N	Corporation Gas Works	1890 - 1893	147423
R	277m N	Gas Works	1907	150254
R	277m N	Gas Works	-	141739
11	302m SE	Electricity Substation	1997	143669
O	314m N	Electricity Substation	1985	156927
O	315m N	Electricity Substation	1993 - 1995	157967
R	322m NW	Gasometer	1893 - 1907	151808
AA	338m SE	Electricity Substation	1983 - 1988	147630
R	350m NW	Gasometer	1893 - 1907	151004
13	355m W	Electricity Substation	1991 - 1993	156232
R	355m N	Gas Works	1907	162122
R	380m N	Gasometer	1890	141910
R	381m N	Gasometers	1907	154723
R	381m N	Gasometers	1893	159597
R	381m NW	Gasometer	1890	158885
R	383m N	Gasometer	1890	141911
R	387m N	Gasholder	1985	142086
R	405m N	Gas Holder	-	141740
AF	421m NW	Electricity Substation	1981 - 1992	159615
AF	422m NW	Electricity Substation	1972	147579
AI	426m SE	Electricity Substation	1988 - 1995	161950
AI	427m SE	Electricity Substation	1983	146434
AI	427m SE	Electricity Substation	1972	151865
AH	431m NW	Electricity Substation	1972 - 1998	160432
R	432m N	Electricity Works	1907	144681

ID	Location	Land use	Dates present	Group ID
R	434m N	Gas Works	1972 - 1981	161953
AK	435m W	Electricity Substation	1991	161440
AF	436m NW	Electricity Substation	1995 - 1998	155253
AK	436m W	Electricity Substation	1993	159980
AK	437m W	Electricity Substation	1985	159873
R	452m N	Gas Holder	1995 - 1998	149814
R	453m N	Gasholder	1972	156146
16	454m W	Electricity Substation	1991 - 1993	148165
R	454m N	Gasholder	1981 - 1992	146404
AM	469m E	Electricity Substation	1978 - 1986	149278
AM	469m E	Electricity Substation	1993	158055

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 un-grouped 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	47

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 un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
J	119m S	Garage	1993 - 1997	50059
K	137m W	Garage	1985	52214
L	150m SW	Garage	1966	52235
L	150m SW	Garage	1985	50474
M	160m SW	Garage	1960	47979
M	160m SW	Garage	1966	48184
M	160m SW	Garage	1985	51653
M	161m SW	Garage	1961	48174
M	176m SW	Garage	1985	51504
L	190m SW	Garage	1991	51753
K	192m NW	Garage	1961	47274
L	193m SW	Garage	1961	51102
L	193m SW	Garage	1960	47180
K	193m NW	Garage	1991 - 1993	47507
K	193m NW	Garage	1960	50535
K	193m NW	Garage	1966	51906
M	196m SW	Garage	1991	49276
M	214m SW	Garage	1991	48304
M	214m SW	Garage	1966	50699
M	225m SW	Garage	1960	49647
M	226m SW	Garage	1961	49965
V	254m SW	Garage	1985	46770
V	257m SW	Garage	1991	49906
W	267m W	Garage	1966 - 1985	47104
W	273m W	Garage	1991	51560
W	274m W	Garage	1993	50753
U	317m SW	Garage	1960	46397
U	317m SW	Garage	1966	47080

ID	Location	Land use	Dates present	Group ID
U	328m SW	Garage	1961	46421
AD	388m S	Garage	1993	49134
AD	389m S	Garage	1989	46723
AE	402m W	Garage	1960	49495
AE	402m W	Garage	1966	50967
AE	403m W	Garage	1961	47718
AD	411m S	Garage	1989	51605
AD	412m S	Garage	1966	49681
AD	413m S	Garage	1961	51655
AD	413m S	Garage	1960	51505
AD	414m S	Garage	1993	46225
AH	422m NW	Garage	1959 - 1960	50972
AH	422m NW	Garage	1995 - 1998	52056
AH	432m NW	Garage	1972	48308
AJ	434m N	Garage	1993 - 1995	50685
15	435m SW	Garage	1966	45647
AH	443m NW	Garage	1981 - 1992	47922
AH	444m NW	Garage	1959 - 1960	47493
18	492m S	Garage	1972	45644

This data is sourced from Ordnance Survey / Groundsure.

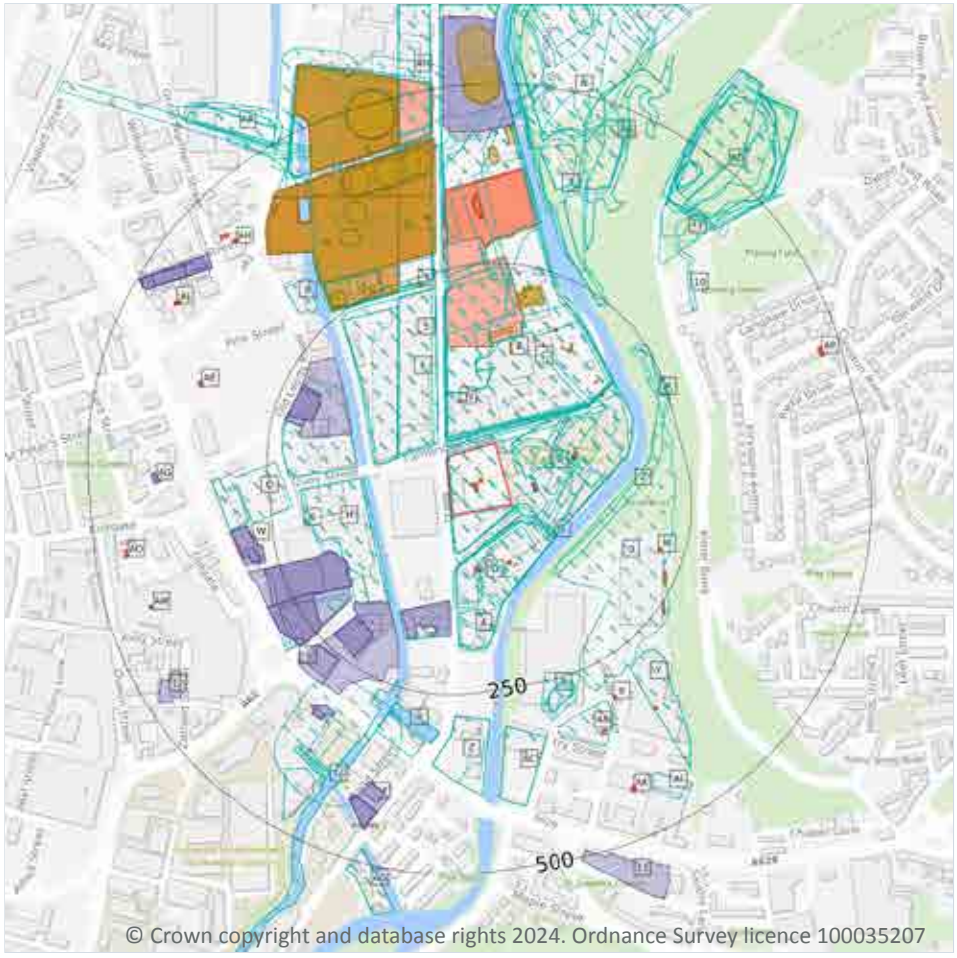
1.6 Historical military land

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



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	183

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 28 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Commercial/Industrial**	**1988**	**1576238**
A	**On site**	**Unspecified Works**	**1965**	**1579663**
A	**On site**	**Iron Works**	**1889**	**1549847**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Iron Works**	**1905**	**1549847**
A	**On site**	**Iron Works**	**1956**	**1508707**
A	**On site**	**Unspecified Commercial/Industrial**	**1975**	**1576238**
A	**On site**	**Iron Works**	**1938**	**1511425**
B	16m N	Unspecified Works	1948	1500184
C	18m NW	Colour Works	1905	1433967
A	19m NE	Railway Sidings	1948	1551869
C	19m N	Unspecified Works	1988	1495820
1	19m NW	Unspecified Works	1938	1494939
D	19m SE	Unspecified Commercial/Industrial	1988	1564619
D	19m SE	Unspecified Commercial/Industrial	1965	1564619
D	19m SE	Unspecified Mills	1956	1520381
D	19m SE	Unspecified Commercial/Industrial	1975	1564619
A	20m NE	Railway Sidings	1938	1551869
C	21m N	Unspecified Works	1975	1563134
A	22m NE	Railway Sidings	1956	1488306
C	23m N	Unspecified Works	1965	1563134
B	24m N	Bridge Works	1956	1442992
D	25m SE	Unspecified Mills	1938	1501382
E	26m NW	Unspecified Works	1988	1546436
E	26m NW	Unspecified Commercial/Industrial	1965	1567912
E	26m NW	Unspecified Commercial/Industrial	1956	1567912
E	26m NW	Unspecified Works	1975	1546436
D	26m SE	Unspecified Mills	1948	1501382
E	27m NW	Dye Works	1905	1475070
D	27m SE	Unspecified Mill	1905	1543230
D	32m SE	Unspecified Mill	1889	1543230
A	49m E	Unspecified Mill	1905	1448355

ID	Location	Land Use	Date	Group ID
E	69m W	Unspecified Works	1975	1557239
E	69m W	Unspecified Works	1985	1557239
A	73m NE	Iron Works	1948	1572111
C	78m N	Unspecified Works	1988	1485006
C	78m N	Unspecified Works	1965	1557247
C	78m N	Unspecified Works	1975	1557247
2	101m SE	Unspecified Ground Workings	1905	1502930
3	104m SE	Unspecified Pit	1889	1450066
H	109m SW	Unspecified Mills	1985	1507204
H	114m SW	Unspecified Mills	1975	1567068
H	114m SW	Unspecified Mills	1966	1567068
I	120m S	Unspecified Works	1988	1566284
I	120m S	Unspecified Works	1975	1566284
J	125m W	Unspecified Mills	1975	1523761
J	125m W	Unspecified Mills	1985	1523761
J	125m W	Unspecified Mills	1966	1494525
C	130m NE	Rope Walk	1889	1469937
4	133m S	Dye Works	1905	1475063
L	182m SW	Laundry	1956	1496591
L	186m SW	Laundry	1938	1556157
L	193m SW	Laundry	1948	1496591
N	216m N	Railway Sidings	1938	1547649
O	220m W	Dairy	1985	1441862
N	226m N	Railway Sidings	1948	1511860
P	232m E	Unspecified Ground Workings	1956	1543172
Q	237m N	Gas Works	1905	1529353
Q	238m N	Unspecified Commercial/Industrial	1948	1507926
R	238m S	Unspecified Mills	1889	1445984

ID	Location	Land Use	Date	Group ID
N	239m NE	Unspecified Ground Workings	1975	1580151
Q	240m N	Unspecified Commercial/Industrial	1938	1570655
B	240m N	Unspecified Tank	1938	1472518
Q	241m N	Unspecified Depot	1985	1445234
Q	241m NW	Unspecified Works	1966	1545773
T	241m NW	Dye Works	1948	1511288
N	241m N	Unspecified Works	1965	1508212
N	241m N	Unspecified Works	1975	1508212
U	241m S	Disused Canal	1975	1548877
U	241m S	Disused Canal	1985	1540587
N	242m NE	Unspecified Ground Workings	1965	1580151
Q	242m NW	Railway Sidings	1966	1538231
T	243m N	Dye Works	1956	1554164
Q	243m N	Unspecified Commercial/Industrial	1988	1509250
Q	243m N	Unspecified Commercial/Industrial	1965	1509250
Q	243m N	Unspecified Commercial/Industrial	1956	1509250
Q	243m N	Unspecified Commercial/Industrial	1975	1509250
T	244m NW	Dye Works	1938	1511288
P	246m NE	Unspecified Old Shaft	1938	1567719
P	246m NE	Unspecified Old Shaft	1938	1567719
P	247m NE	Unspecified Old Shaft	1905	1446415
T	256m NW	Unspecified Tank	1966	1472517
R	257m SE	Refuse Heap	1956	1495518
R	260m S	Unspecified Heap	1938	1563869
R	260m S	Unspecified Heap	1938	1563869
R	263m S	Refuse Heap	1948	1495518
7	267m NE	Unspecified Heap	1905	1466735
U	270m SW	Unspecified Wharf	1956	1516998

ID	Location	Land Use	Date	Group ID
X	271m S	Unspecified Wharf	1938	1518445
X	271m S	Unspecified Wharf	1938	1518445
Q	273m N	Gas Works	1889	1529353
8	276m NW	Unspecified Mill	1966	1448424
Q	276m N	Railway Sidings	1956	1522070
Q	276m N	Unspecified Commercial/Industrial	1956	1560092
Y	277m SE	Unspecified Pit	1965	1547486
Y	277m SE	Unspecified Pit	1975	1547486
Q	279m NW	Railway Sidings	1938	1489634
Z	280m S	Unspecified Works	1988	1572897
Z	280m S	Unspecified Works	1965	1518683
Z	280m S	Unspecified Works	1975	1572897
O	283m W	Telephone Exchange	1975	1513310
O	283m W	Telephone Exchange	1985	1513310
Q	288m NW	Railway Sidings	1948	1531197
X	291m S	Unspecified Wharf	1948	1526274
AA	297m NE	Refuse Heap	1965	1492645
AA	297m NE	Refuse Heap	1975	1492645
AB	301m SE	Unspecified Pit	1889	1450336
AC	303m S	Unspecified Commercial/Industrial	1988	1481997
AC	303m S	Unspecified Works	1965	1460225
AC	303m S	Unspecified Commercial/Industrial	1975	1481997
Q	316m NW	Unspecified Tanks	1889	1443543
Q	319m NW	Gasometers	1905	1445686
Q	320m N	Unspecified Tank	1948	1560983
Q	323m N	Unspecified Tank	1938	1515291
Q	324m N	Unspecified Tank	1956	1560983
U	327m SW	Unspecified Wharf	1948	1524975

ID	Location	Land Use	Date	Group ID
N	330m N	Refuse Heap	1948	1546106
Q	330m N	Railway Sidings	1956	1556341
10	331m NE	Unspecified Ground Workings	1948	1439085
AD	340m NE	Clay Pit	1975	1453657
N	362m N	Refuse Heap	1938	1552174
N	362m N	Refuse Heap	1938	1552174
AD	371m NE	Unspecified Quarry	1988	1499319
N	374m N	Refuse Heap	1956	1500910
Q	377m N	Gasometers	1889	1533846
11	382m NE	Unspecified Heap	1965	1466734
Q	382m N	Unspecified Tanks	1948	1443541
Q	382m N	Gasometers	1905	1533846
Q	386m N	Unspecified Tank	1956	1512637
Q	386m N	Unspecified Tank	1966	1500586
Q	386m N	Unspecified Tank	1938	1484071
U	386m SW	Unspecified Wharf	1938	1536387
U	386m SW	Unspecified Wharf	1938	1536387
Q	388m N	Unspecified Tank	1956	1533455
Q	388m N	Unspecified Tank	1966	1541354
Q	390m N	Unspecified Tank	1988	1551279
Q	390m N	Unspecified Tank	1965	1551279
Q	390m N	Unspecified Tank	1956	1482920
Q	390m N	Unspecified Tank	1975	1551279
U	406m SW	Unspecified Heap	1975	1509015
U	406m SW	Unspecified Heap	1966	1509015
AD	407m NE	Unspecified Quarry	1889	1558880
Q	412m N	Electricity Works	1905	1442987
AD	412m NE	Disused Brick Works	1956	1453312

ID	Location	Land Use	Date	Group ID
AD	413m NE	Unspecified Quarry	1905	1558880
AD	413m NE	Brick Works	1948	1576973
AD	416m NE	Brick Works	1938	1555809
AD	416m NE	Brick Works	1938	1555809
AD	421m NE	Unspecified Quarry	1956	1533579
AI	422m SE	Unspecified Works	1965	1460226
AD	424m NE	Unspecified Pit	1938	1557554
AD	424m NE	Unspecified Pit	1938	1557554
AD	430m NE	Unspecified Pit	1965	1566046
AD	431m NE	Refuse Heap	1948	1536701
Q	433m NW	Unspecified Ground Workings	1889	1439255
Q	435m N	Gas Works	1975	1474968
Q	435m N	Unspecified Works	1985	1571574
AD	437m NE	Refuse Heap	1938	1579774
AD	437m NE	Refuse Heap	1938	1579774
AD	441m NE	Refuse Heap	1956	1512898
Q	443m N	Unspecified Tank	1905	1472516
AN	445m N	Unspecified Commercial/Industrial	1988	1489553
AN	445m N	Unspecified Commercial/Industrial	1965	1501481
AN	445m N	Unspecified Commercial/Industrial	1956	1560092
AN	445m N	Unspecified Commercial/Industrial	1975	1489553
Q	452m N	Unspecified Tanks	1948	1443542
Q	453m N	Gasometer	1975	1436986
Q	453m N	Unspecified Tank	1985	1498218
AL	456m N	Unspecified Mill	1965	1448422
AL	456m N	Unspecified Commercial/Industrial	1956	1528044
AL	456m N	Unspecified Works	1975	1482941
Q	457m N	Unspecified Tank	1956	1498703

ID	Location	Land Use	Date	Group ID
Q	457m N	Unspecified Tank	1966	1498703
Q	459m N	Unspecified Tank	1938	1573312
AL	476m N	Unspecified Tanks	1965	1494203
AL	476m N	Unspecified Tanks	1975	1494203
AQ	480m S	Unspecified Mills	1975	1550851
AQ	480m S	Unspecified Mills	1985	1550851
Q	486m NW	Unspecified Mills	1889	1445975
AR	493m NW	Unspecified Mill	1966	1448423
AR	496m NW	Unspecified Mills	1948	1504618
AR	496m NW	Unspecified Mills	1905	1552953
AR	497m NW	Unspecified Mills	1975	1486864
AR	497m NW	Unspecified Mills	1985	1486864

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**134**

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 28 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Tank**	**1893**	**237590**
A	**On site**	**Unspecified Tank**	**1907**	**254245**
A	**On site**	**Unspecified Tank**	**1932**	**254768**
A	**On site**	**Unspecified Tank**	**1993**	**248669**
A	**On site**	**Unspecified Tank**	**1972**	**248669**
A	**On site**	**Unspecified Tank**	**1984**	**248669**
A	**On site**	**Unspecified Tank**	**1988**	**248669**
A	**On site**	**Unspecified Tank**	**1988**	**248669**

ID	Location	Land Use	Date	Group ID
F	65m N	Tanks	1918	233765
F	66m N	Tanks	1907	233771
D	76m SE	Unspecified Tank	1959	259171
D	77m S	Unspecified Tank	1893	250545
D	77m S	Unspecified Tank	1918	259171
D	81m SE	Unspecified Tank	1932	239856
C	90m NE	Unspecified Tank	1893	237589
C	124m N	Tanks	1918	233772
C	142m N	Tanks	1932	233773
C	148m NE	Unspecified Tank	1997	249294
C	148m NE	Unspecified Tank	1993	246772
C	149m NE	Unspecified Tank	1932	237591
C	149m NE	Unspecified Tank	1985	260572
C	149m NE	Unspecified Tank	1995	246772
C	149m NE	Unspecified Tank	1993	246772
C	161m NE	Tanks	1907	233769
C	161m NE	Unspecified Tank	1997	249793
C	161m NE	Unspecified Tank	1993	249793
C	162m NE	Unspecified Tank	1918	258741
C	162m NE	Unspecified Tank	1932	258741
C	162m NE	Unspecified Tank	1972	249793
C	162m NE	Unspecified Tank	1984	249793
C	162m NE	Unspecified Tank	1988	249793
C	162m NE	Unspecified Tank	1988	249793
C	163m NE	Unspecified Tank	1997	260777
C	163m NE	Unspecified Tank	1993	260777
C	168m NE	Tanks	1907	233766
5	174m N	Unspecified Tank	1893	237613

ID	Location	Land Use	Date	Group ID
C	175m NE	Unspecified Tank	1918	237588
C	176m NE	Tanks	1907	233770
B	189m N	Tanks	1918	246656
B	192m N	Tanks	1907	246656
M	212m E	Unspecified Tank	1988	255272
M	212m E	Unspecified Tank	1988	255272
M	213m E	Unspecified Tank	1997	255272
M	213m E	Unspecified Tank	1993	255272
B	215m N	Unspecified Tank	1995	253422
B	215m N	Unspecified Tank	1993	253422
B	216m N	Unspecified Tank	1985	253422
M	231m SE	Unspecified Tank	1988	262339
M	231m SE	Unspecified Tank	1988	262339
M	232m SE	Unspecified Tank	1997	262339
M	232m SE	Unspecified Tank	1993	262339
S	238m N	Unspecified Tank	1918	256655
S	238m N	Unspecified Tank	1907	256655
Q	239m NW	Gas Works	1972	255335
M	250m SE	Unspecified Tank	1997	249676
M	250m SE	Unspecified Tank	1993	249676
T	252m NW	Unspecified Tank	1959	245624
T	252m NW	Unspecified Tank	1972	245624
T	253m NW	Unspecified Tank	1960	245624
T	258m NW	Unspecified Tank	1960	258379
T	258m NW	Unspecified Tank	1972	237608
T	258m NW	Unspecified Tank	1959	258379
T	258m NW	Gasometer	1972	237197
T	259m NW	Unspecified Tank	1959	248268

ID	Location	Land Use	Date	Group ID
T	260m NW	Unspecified Tank	1960	248268
T	266m NW	Tanks	1932	233788
Q	277m N	Gas Works	1907	250298
Q	277m N	Gas Works	-	233365
V	290m SW	Unspecified Tank	1985	239880
Q	309m N	Unspecified Tank	1907	254976
Q	312m N	Unspecified Tank	1893	246806
Q	320m N	Unspecified Tank	1907	251224
Q	320m N	Unspecified Tank	1918	251224
Q	320m N	Unspecified Tank	1932	251224
Q	322m NW	Gasometer	1893	258732
Q	322m NW	Gasometer	1907	258732
Q	324m N	Tanks	1907	249302
Q	326m N	Tanks	1893	249023
Q	326m N	Tanks	1918	252553
Q	326m N	Tanks	1932	252553
Q	339m NW	Unspecified Tank	1984	249357
Q	341m NW	Unspecified Tank	1992	249357
AC	341m S	Unspecified Tank	1972	239844
Y	344m SE	Unspecified Tank	1995	246024
Y	344m SE	Unspecified Tank	1988	246024
Y	344m SE	Unspecified Tank	1983	254989
Q	350m NW	Gasometer	1893	256427
Q	350m NW	Gasometer	1907	256427
Q	355m N	Gas Works	1907	257905
Q	362m NW	Unspecified Tank	1893	237612
Q	379m N	Unspecified Tank	1890	237626
Q	380m N	Gasometer	1890	237198

ID	Location	Land Use	Date	Group ID
Q	381m N	Gasometers	1907	252544
Q	381m N	Tanks	1932	254880
Q	381m N	Gasometers	1893	262055
Q	381m NW	Gasometer	1890	250021
Q	382m N	Unspecified Tank	1890	237625
Q	383m N	Tanks	1959	261967
Q	383m N	Unspecified Tank	1960	237610
Q	383m N	Gasometer	1890	237199
U	383m SW	Unspecified Tank	1907	239846
Q	384m NW	Gasometer	1890	250021
Q	384m N	Tanks	1959	261967
Q	385m N	Unspecified Tank	1960	237609
Q	385m N	Unspecified Tank	1890	237624
Q	386m N	Unspecified Tank	1960	237611
Q	387m N	Gasholder	1985	236571
N	388m N	Tanks	1932	233767
Q	404m NW	Tanks	1893	233709
Q	405m N	Gas Holder	-	233366
Q	416m NW	Tanks	1907	261287
Q	416m NW	Tanks	1918	261287
Q	416m NW	Tanks	1932	261287
N	416m N	Tanks	1932	233768
Q	420m NW	Unspecified Tank	1890	237622
AI	424m SE	Unspecified Tank	1983	239879
Q	434m N	Gas Works	1981	245972
Q	435m N	Gas Works	1972	245972
Q	438m N	Unspecified Tank	1907	251896
Q	439m N	Tanks	1907	258609

ID	Location	Land Use	Date	Group ID
Q	439m N	Unspecified Tank	1918	251896
Q	440m N	Tanks	1918	258609
Q	440m N	Tanks	1932	258609
Q	452m N	Unspecified Tank	1932	250784
Q	452m N	Gas Holder	1995	251865
Q	452m N	Gas Holder	1998	251865
Q	453m N	Unspecified Tank	1960	255857
Q	453m N	Unspecified Tank	1959	250784
Q	453m N	Gasholder	1972	246135
Q	454m N	Gasholder	1981	254886
Q	454m N	Gasholder	1992	254886
Q	454m N	Gasholder	1984	254886
AL	472m N	Unspecified Tank	1960	237587
AL	472m N	Tanks	1959	233776

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**93**

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 28 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Electricity Substation**	**1993**	**152937**
A	**On site**	**Electricity Substation**	**1972**	**152937**
A	**On site**	**Electricity Substation**	**1984**	**152937**
A	**On site**	**Electricity Substation**	**1988**	**152937**
A	**On site**	**Electricity Substation**	**1988**	**152937**
A	34m E	Electricity Substation	1993	156240

ID	Location	Land Use	Date	Group ID
A	34m E	Electricity Substation	1972	156240
A	35m E	Electricity Substation	1984	156240
A	35m E	Electricity Substation	1988	156240
A	35m E	Electricity Substation	1988	156240
G	72m SE	Electricity Substation	1984	155260
G	72m SE	Electricity Substation	1988	154784
G	72m SE	Electricity Substation	1972	148718
G	73m SE	Electricity Substation	1997	146499
G	73m SE	Electricity Substation	1993	160394
D	77m S	Electricity Substation	1984	155830
D	77m S	Electricity Substation	1988	155830
D	77m S	Electricity Substation	1988	155830
D	78m S	Electricity Substation	1972	155830
D	80m S	Electricity Substation	1997	160083
D	80m S	Electricity Substation	1993	160083
A	97m E	Electricity Substation	1997	148960
A	97m E	Electricity Substation	1993	148960
A	98m E	Electricity Substation	1984	160505
A	98m E	Electricity Substation	1988	160505
A	98m E	Electricity Substation	1988	160505
A	99m E	Electricity Substation	1972	161379
B	134m N	Electricity Transformer Station	1995	152671
6	201m W	Electricity Substation	1991	143011
Q	239m NW	Gas Works	1972	151987
T	258m NW	Gasometer	1972	141972
N	269m N	Electricity Transformer Station	1993	153301
W	275m W	Electricity Substation	1985	143017
Q	277m N	Corporation Gas Works	1893	147423

ID	Location	Land Use	Date	Group ID
Q	277m N	Gas Works	1907	150254
Q	277m N	Gas Works	-	141739
9	302m SE	Electricity Substation	1997	143669
N	314m N	Electricity Substation	1985	156927
N	315m N	Electricity Substation	1995	157967
N	315m N	Electricity Substation	1993	157967
Q	322m NW	Gasometer	1893	151808
Q	322m NW	Gasometer	1907	151808
AB	338m SE	Electricity Substation	1983	147630
AB	339m SE	Electricity Substation	1988	147630
Q	350m NW	Gasometer	1893	151004
Q	350m NW	Gasometer	1907	151004
Q	353m N	Corporation Gas Works	1890	147423
AE	355m W	Electricity Substation	1991	156232
Q	355m N	Gas Works	1907	162122
Q	355m N	Corporation Gas Works	1893	147423
AE	355m W	Electricity Substation	1993	156232
Q	380m N	Gasometer	1890	141910
Q	381m N	Gasometers	1907	154723
Q	381m N	Gasometers	1893	159597
Q	381m NW	Gasometer	1890	158885
Q	383m N	Gasometer	1890	141911
Q	384m NW	Gasometer	1890	158885
Q	384m NW	Corporation Gas Works	1890	147423
Q	387m N	Gasholder	1985	142086
Q	405m N	Gas Holder	-	141740
AH	421m NW	Electricity Substation	1981	159615
AH	421m NW	Electricity Substation	1992	159615

ID	Location	Land Use	Date	Group ID
AH	421m NW	Electricity Substation	1984	159615
AH	422m NW	Electricity Substation	1972	147579
AK	426m SE	Electricity Substation	1995	161950
AK	427m SE	Electricity Substation	1983	146434
AK	427m SE	Electricity Substation	1988	161950
AK	427m SE	Electricity Substation	1972	151865
AJ	431m NW	Electricity Substation	1981	160432
AJ	431m NW	Electricity Substation	1992	160432
AJ	431m NW	Electricity Substation	1984	160432
AJ	431m NW	Electricity Substation	1995	160432
AJ	431m NW	Electricity Substation	1998	160432
AJ	432m NW	Electricity Substation	1972	160432
Q	432m N	Electricity Works	1907	144681
Q	434m N	Gas Works	1981	161953
Q	435m N	Gas Works	1972	161953
AM	435m W	Electricity Substation	1991	161440
AH	436m NW	Electricity Substation	1995	155253
AH	436m NW	Electricity Substation	1998	155253
AM	436m W	Electricity Substation	1993	159980
AM	437m W	Electricity Substation	1985	159873
Q	452m N	Gas Holder	1995	149814
Q	452m N	Gas Holder	1998	149814
Q	453m N	Gasholder	1972	156146
AO	454m W	Electricity Substation	1993	148165
Q	454m N	Gasholder	1981	146404
Q	454m N	Gasholder	1992	146404
Q	454m N	Gasholder	1984	146404
AO	454m W	Electricity Substation	1991	148165

ID	Location	Land Use	Date	Group ID
AP	469m E	Electricity Substation	1978	149278
AP	469m E	Electricity Substation	1993	158055
AP	469m E	Electricity Substation	1986	149278

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	**56**

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

Features are displayed on the Past land use - un-grouped map on **page 28 >**

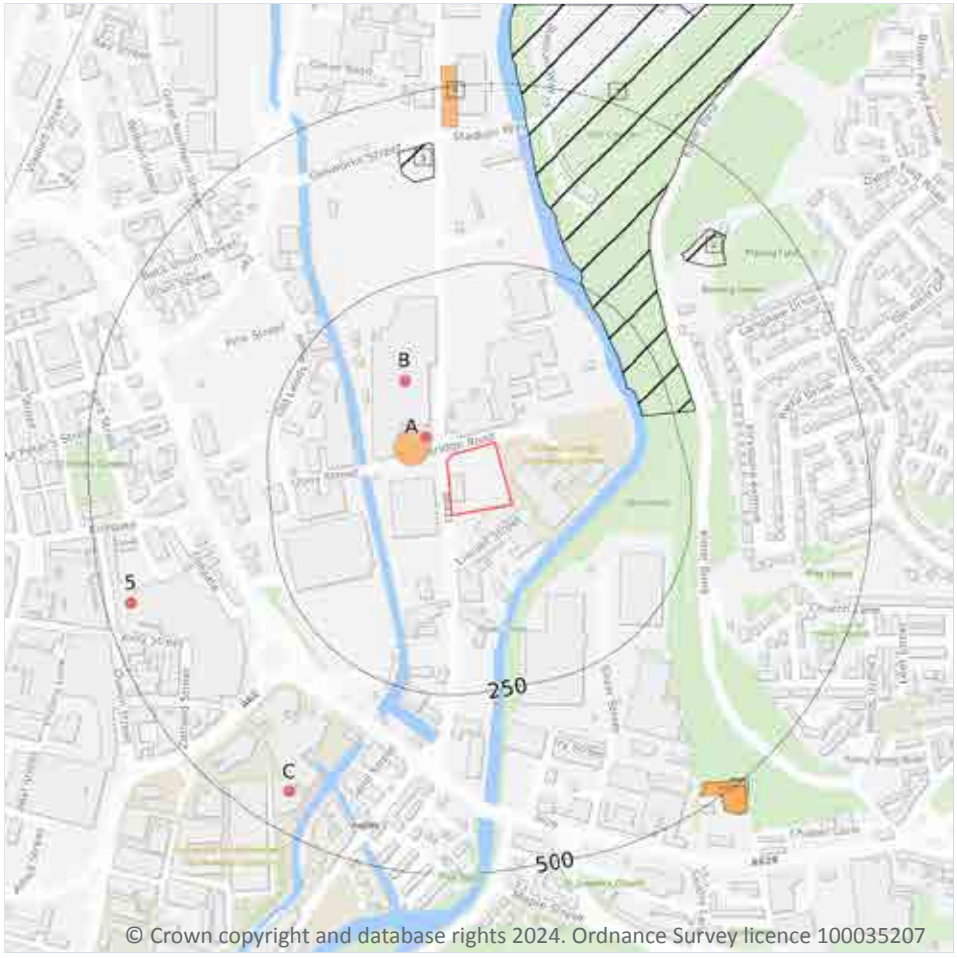
ID	Location	Land Use	Date	Group ID
I	119m S	Garage	1997	50059
I	119m S	Garage	1993	50059
J	137m W	Garage	1985	52214
K	150m SW	Garage	1966	52235
K	150m SW	Garage	1985	50474
L	160m SW	Garage	1960	47979
L	160m SW	Garage	1966	48184
L	160m SW	Garage	1985	51653
L	161m SW	Garage	1961	48174
L	176m SW	Garage	1985	51504

ID	Location	Land Use	Date	Group ID
K	190m SW	Garage	1991	51753
J	192m NW	Garage	1961	47274
K	193m SW	Garage	1961	51102
K	193m SW	Garage	1960	47180
J	193m NW	Garage	1960	50535
J	193m NW	Garage	1991	47507
J	193m NW	Garage	1966	51906
J	194m NW	Garage	1993	47507
L	196m SW	Garage	1991	49276
L	214m SW	Garage	1991	48304
L	214m SW	Garage	1966	50699
L	225m SW	Garage	1960	49647
L	226m SW	Garage	1961	49965
V	254m SW	Garage	1985	46770
V	257m SW	Garage	1991	49906
W	267m W	Garage	1966	47104
W	267m W	Garage	1985	47104
W	273m W	Garage	1991	51560
W	274m W	Garage	1993	50753
U	317m SW	Garage	1960	46397
U	317m SW	Garage	1966	47080
U	328m SW	Garage	1961	46421
AF	388m S	Garage	1993	49134
AF	389m S	Garage	1989	46723
AG	402m W	Garage	1960	49495
AG	402m W	Garage	1966	50967
AG	403m W	Garage	1961	47718
AF	411m S	Garage	1989	51605

ID	Location	Land Use	Date	Group ID
AF	412m S	Garage	1966	49681
AF	413m S	Garage	1961	51655
AF	413m S	Garage	1960	51505
AF	414m S	Garage	1993	46225
AJ	422m NW	Garage	1959	50972
AJ	422m NW	Garage	1995	52056
AJ	422m NW	Garage	1998	52056
AJ	429m NW	Garage	1960	50972
AJ	432m NW	Garage	1972	48308
AL	434m N	Garage	1995	50685
AL	434m N	Garage	1993	50685
12	435m SW	Garage	1966	45647
AJ	443m NW	Garage	1981	47922
AJ	443m NW	Garage	1992	47922
AJ	443m NW	Garage	1984	47922
AJ	444m NW	Garage	1960	47493
AJ	444m NW	Garage	1959	47493
13	492m S	Garage	1972	45644

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Historical waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	3

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 47 >**

ID	Location	Details		
1	198m NE	Site Address: Golf Driving Range, Lower Kilner Bank, off Bradley Mills Road, Huddersfield Licence Holder Address: Civic Centre, Huddersfield	Waste Licence: Yes Site Reference: 4700/0435 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 24/05/1984 Licence Surrender: 31/12/1990	Operator: - Licence Holder: Kirklees Metropolitan Borough Council First Recorded - Last Recorded: -
2	367m NE	Site Address: Brown Royd Quarry, Off Kilner Bank, Dalton, Huddersfield Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: Elliotts Bricks Limited Licence Holder: - First Recorded 25/03/1965 Last Recorded: -
3	379m N	Site Address: NEGAS Holder Station, Gas Works Street, Huddersfield Licence Holder Address: New York Road, Leeds	Waste Licence: Yes Site Reference: 4700/0505 Waste Type: Inert, Industrial, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 19/04/1985 Licence Surrender: 30/04/1994	Operator: - Licence Holder: North East Gas First Recorded 30/04/1985 Last Recorded: 31/08/1989

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

3.5 Historical waste sites

Records within 500m	6

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 47 >**

ID	Location	Address	Further Details	Date
A	27m NW	Site Address: Cummings Turbo Technology, St. Andrews Road, HUDDERSFIELD, West Yorkshire, HD1 6RA	Type of Site: Waste Management Area (Alterations) Planning application reference: 2011/62/91414/W2 Description: Scheme comprises construction of canopy over bay 12 waste management area. Construction - canopy roof. An application (ref: 2011/62/91414/W2) for detailed planning permission was granted by Kirklees B.C. A detailed planning application has been granted Data source: Historic Planning Application Data Type: Point	13/11/2011
4	443m N	Site Address: N/A	Type of Site: Refuse Destructor Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1932
D	471m SE	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1995
D	472m SE	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1988
D	490m SE	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1972
D	490m SE	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1983

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	25

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 47 >**

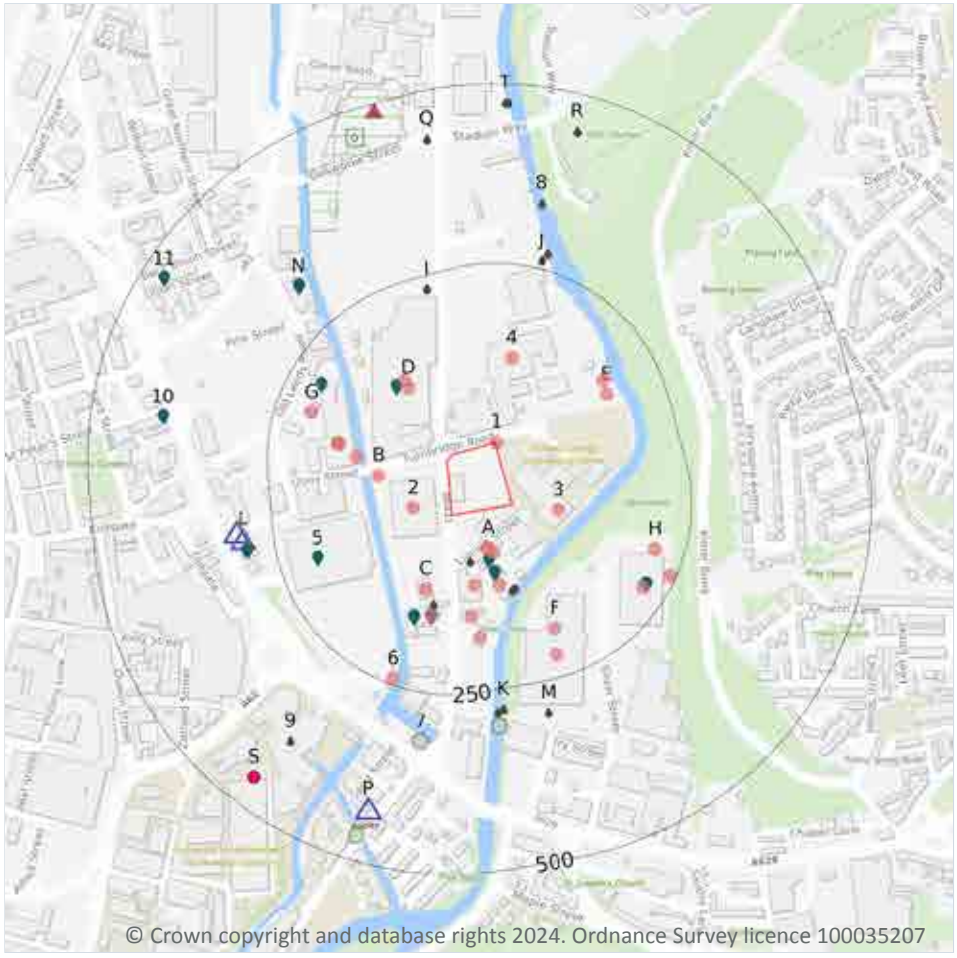
ID	Location	Site	Reference	Category	Sub-Category	Description
A	42m NW	Cummins Turbo Technologies St. Andrews Road Huddersfield Hd1 6ra	EPR/RF0602HJ/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in secure containers
A	42m NW	Cummins Turbo Technologies St. Andrews Road Huddersfield Hd1 6ra	EPR/RF0602HJ/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place
A	42m NW	Cummins Turbo Technologies St. Andrews Road Huddersfield Hd1 6ra	EPR/RF0602HJ/A001	Treating waste exemption	Non-agricultural waste only	Crushing waste fluorescent tubes
A	42m NW	Cummins Turbo Technologies St. Andrews Road Huddersfield Hd1 6ra	EPR/RF0602HJ/A001	Treating waste exemption	Non-agricultural waste only	Preparatory treatments (baling, sorting, shredding etc)
A	42m NW	Cummins Turbo Technologies St. Andrews Road Huddersfield Hd1 6ra	EPR/RF0602HJ/A001	Treating waste exemption	Non-agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX358146	Treating waste exemption	Not on a farm	Recovery of scrap metal
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX358146	Storing waste exemption	Not on a farm	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX358146	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX358146	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX358146	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX231967	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX231967	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX231967	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX231967	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX231967	Treating waste exemption	Not on a farm	Recovery of scrap metal
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX088310	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX088310	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX088310	Treating waste exemption	Not on a farm	Crushing waste fluorescent tubes
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX088310	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX088310	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	122m NW	St. Andrews Road, Huddersfield, Hd1 6ra	WEX088310	Treating waste exemption	Not on a farm	Recovery of scrap metal
C	448m SW	Queensgate, Huddersfield, Hd1 3dh	WEX045657	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
C	448m SW	Queensgate Huddersfield Hd1 3dh	WEX012776	Treating waste exemption	Not on a farm	Screening and blending of waste

ID	Location	Site	Reference	Category	Sub-Category	Description
C	448m SW	Queensgate, Huddersfield, Hd1 3dh	WEX031534	Disposing of waste exemption	Not on a farm	Depositing samples of waste for the purposes of testing or analysing them
5	465m W	Unit 19 Kingsgate Shopping Centre West Yorkshire Hd1 2qb	EPR/PE5342MS/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

- Recent industrial land uses
- Current or recent petrol stations
- Control of Major Accident Hazards
- Hazardous substance storage/usage
- Licensed pollutant release (Part A(2)/B)
- Radioactive Substance Authorisations
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	33

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 53 >**

ID	Location	Company	Address	Activity	Category
1	2m NE	Electricity Sub Station	West Yorkshire, HD1	Electrical Features	Infrastructure and Facilities
2	52m SW	Polyseam Ltd	15, St Andrew's Road, Huddersfield, West Yorkshire, HD1 6SB	Adhesives and Sealants	Industrial Products
A	53m S	Pegasus Signs	Aspley Business Park, Lincoln Street, Huddersfield, West Yorkshire, HD1 6RX	Signs	Industrial Products

ID	Location	Company	Address	Activity	Category
A	53m S	Marko's Autos	Unit 7 Aspley Business Park, Lincoln Street, Huddersfield, West Yorkshire, HD1 6RX	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	61m S	Aspley Business Park	West Yorkshire, HD1	Business Parks and Industrial Estates	Industrial Features
3	65m E	Travelling Crane	West Yorkshire, HD1	Travelling Cranes and Gantries	Industrial Features
B	97m W	Electricity Sub Station	West Yorkshire, HD1	Electrical Features	Infrastructure and Facilities
A	102m S	Works	West Yorkshire, HD1	Unspecified Works Or Factories	Industrial Features
A	107m S	Coach Travel Services	Unit 5 Aspley Business Park, Lincoln Street, Huddersfield, West Yorkshire, HD1 6RX	Vehicle Hire and Rental	Hire Services
C	109m SW	Works	West Yorkshire, HD1	Unspecified Works Or Factories	Industrial Features
D	111m NW	Works	West Yorkshire, HD1	Unspecified Works Or Factories	Industrial Features
4	120m N	Works	West Yorkshire, HD1	Unspecified Works Or Factories	Industrial Features
D	122m NW	Cummins Turbo Technologies	St Andrew's Road, Huddersfield, West Yorkshire, HD1 6RA	Engines	Industrial Products
B	126m W	Chimney	West Yorkshire, HD1	Chimneys	Industrial Features
C	142m S	G W Bodyshop Ltd	9a, St Andrews Road, Huddersfield, West Yorkshire, HD1 6SB	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	143m S	Works	West Yorkshire, HD1	Unspecified Works Or Factories	Industrial Features
B	152m W	S C M Turbomotive Ltd	Turnbridge Mills, Quay Street, Huddersfield, West Yorkshire, HD1 6QT	Engines	Industrial Products
B	153m W	Aura Print Ltd	Suite 4 Turnbridge Mills, Quay Street, Huddersfield, West Yorkshire, HD1 6QX	Published Goods	Industrial Products
B	153m W	C H P	Turnbridge Mills, Quay Street, Huddersfield, West Yorkshire, HD1 6QT	Published Goods	Industrial Products

ID	Location	Company	Address	Activity	Category
B	153m W	Voodoo S M S	Turnbridge Mills, Quay Street, Huddersfield, West Yorkshire, HD1 6QT	Radar and Telecommunications Equipment	Industrial Products
B	153m W	Corpro Solutions	Turnbridge Mills, Quay Street, Huddersfield, West Yorkshire, HD1 6QT	Radar and Telecommunications Equipment	Industrial Products
B	153m W	The Foil Company	Floor 2 Turnbridge Mills, Huddersfield, West Yorkshire, HD1 6QT	Published Goods	Industrial Products
B	153m W	Hewitt & Booth	Turnbridge Mills, Quay Street, Huddersfield, West Yorkshire, HD1 6QX	Cleaning Equipment and Supplies	Industrial Products
E	169m NE	Tank	West Yorkshire, HD1	Tanks (Generic)	Industrial Features
E	174m NE	Tank	West Yorkshire, HD1	Tanks (Generic)	Industrial Features
A	175m S	Works	West Yorkshire, HD1	Unspecified Works Or Factories	Industrial Features
F	182m SE	J T Ellis & Co Ltd	Crown Works, Silver Street, Moldgreen, Huddersfield, West Yorkshire, HD5 9BA	General Construction Supplies	Industrial Products
G	200m NW	Frank Key	29, Old Leeds Road, Huddersfield, West Yorkshire, HD1 1SG	Construction and Tool Hire	Hire Services
H	209m E	Tank	West Yorkshire, HD5	Tanks (Generic)	Industrial Features
H	216m SE	Factory	West Yorkshire, HD5	Unspecified Works Or Factories	Industrial Features
F	219m SE	Factory	West Yorkshire, HD5	Unspecified Works Or Factories	Industrial Features
6	242m SW	Works	West Yorkshire, HD1	Unspecified Works Or Factories	Industrial Features
H	242m SE	Tank	West Yorkshire, HD5	Tanks (Generic)	Industrial Features

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	3

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 53 >**

ID	Location	Company	Address	LPG	Status
L	293m W	OBSOLETE	A62, Southgate, Huddersfield, West Yorkshire, HD1 6QR	Not Applicable	Obsolete
L	302m W	SAINSBURYS	Southgate, Shorehead, Huddersfield, West Yorkshire, HD1 6QR	No	Open
P	425m S	OBSOLETE	Firth Street, Huddersfield, West Yorkshire, HD1 3BL	Not Applicable	Obsolete

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	2

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 53 >**

ID	Location	Company	Address	Operational status	Tier
O	352m NW	Northern Gas Networks Ltd	Northern Gas Networks Ltd, Huddersfield Holder Station, Gas Works Street, Huddersfield, West Yorkshire, HD1 6NA	Historical NIHHS Site	-
O	437m N	British Gas	British Gas, Gas Works Street, Huddersfield	Historical NIHHS Site	-

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	2

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 53 >**

ID	Location	Details	
O	490m N	Application reference number: 92/04972 Application status: Historical Consent Application date: 27/10/1992 Address: British Gas Plc, North Eastern, Gas Works Street/Leeds Road, Huddersfield, LS10 1LJ	Details: Deemed hazardous substances conset for fixed storage and piped distribution of natural gas Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

ID	Location	Details	
O	490m N	Application reference number: 2000/91096 Application status: Approved Application date: 03/04/2000 Address: Northern Gas Networks Ltd, Huddersfield Holder Station, Leeds Road, Huddersfield, West Yorkshire, HD1 6NA	Details: Continuation of deemed consent 1992/04972 for fixed and piped distribution of natural gas. 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	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	13

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 53 >**

ID	Location	Address	Details	
A	71m S	Huddersfield Polymeric Products Ltd, Aspley Works, Lincoln St, Huddersfield, HD1 6RX	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

ID	Location	Address	Details	
A	90m S	Francis W Birkett & Sons, Lincoln St, St Andrews Rd, Huddersfield, HD1 6RT	Process: Non-ferrous Metal Foundry Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
D	122m NW	Holset Engineering Co Ltd, St Andrews Rd, Huddersfield, HD1 6RA	Process: Rubber Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
C	144m S	G W Bodyshop Ltd, St Andrews Road, Huddersfield, HD1 3LP	Process: Respraying of Road Vehicles Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
C	151m SW	Huddersfield Accident Repair Centre, 9 St Andrew's Road, Aspley, Huddersfield, HD1 6SB	Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
5	197m SW	Johnson Cleaners UK, Sainsburys, Shorehead, Huddersfield, HD1 6QR	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
G	204m NW	Sainsburys Supermarkets, Quay St, Huddersfield, Huddersfield, HD1 6QX	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
H	218m SE	J T Ellis & Co Ltd, Silver Street, Aspley, Huddersfield, HD5 9AG	Process: Timber Manufacture Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
L	289m W	Sainsbury's Supermarkets Ltd, Shorehead, Southgate, Huddersfield, HD1 6QR	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
N	318m NW	A Roberts Ltd(t/a Cockins) Waterloo Mills, Old Leeds Rd, Huddersfield, HD1 1SE	Process: Asbestos Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

ID	Location	Address	Details	
N	318m NW	A Roberts Packaging Ltd, Waterloo Mills, Old Leeds Rd, Huddersfield, HD1 1SE	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
10	401m W	Esteem Dry Cleaners, 36 St Peters Street, Huddersfield, HD1 1RA	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
11	468m NW	Trust Motors / Brown & White (Huddersfield) Ltd, Nthgate, Huddersfield, HD1 6AB	Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m **4**

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 53 >**

ID	Location	Address	Details	
S	457m SW	Huddersfield Polytechnic, Queensgate, Huddersfield, HD1 3DH	Operator: Huddersfield Polytechnic Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AC0885 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled
S	457m SW	University Of Huddersfield, Queensgate, Huddersfield, West Yorkshire, HD1 3DH	Operator: University Of Huddersfield Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AC0923 Date of approval: 04/01/2000	Effective from: 04/01/2000 Last date of update: 01/01/2015 Status: Revoked/cancelled
S	457m SW	University Of Huddersfield, Queensgate, Huddersfield, West Yorkshire, HD1 3DH	Operator: University Of Huddersfield Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BY8055 Date of approval: 20/12/2004	Effective from: 20/12/2004 Last date of update: 01/01/2015 Status: Superseded By Variation

ID	Location	Address	Details	
S	457m SW	University Of Huddersfield, Queensgate, Huddersfield, West Yorkshire, HD1 3DH	Operator: University Of Huddersfield Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BY8055 Date of approval: 13/12/2005	Effective from: 13/12/2005 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

Records within 500m **27**

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 53 >**

ID	Location	Address	Details	
A	68m S	HOLMES W.C. & CO. LTD, TURNBRIDGE WORKS, HUDDERSFIELD, WEST YORKSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: 3048 Permit Version: 1 Receiving Water: RIVER COLNE	Status: REVOKED - UNSPECIFIED Issue date: 06/06/1974 Effective Date: 06/06/1974 Revocation Date: 15/06/1992
A	116m S	DAISY STREET CSO, OFF ST ANDREWS ROAD, HUDDERSFIELD, WEST YORKSHIRE, HD1 6SB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA9171 Permit Version: 2 Receiving Water: RIVER COLNE	Status: VARIED UNDER EPR 2010 Issue date: 28/06/2019 Effective Date: 28/06/2019 Revocation Date: -
A	118m S	DAISY STREET CSO, OFF ST ANDREWS ROAD, HUDDERSFIELD, WEST YORKSHIRE, HD1 6SB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA9171 Permit Version: 1 Receiving Water: RIVER COLNE	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 22/08/2007 Effective Date: 22/08/2007 Revocation Date: 27/06/2019
C	127m S	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 2 Receiving Water: VARIES WITH OUTLET	Status: REVISED BY NOTICE, AT DIRECTION OF SEC. OF STATE - 37(2) Issue date: 02/07/1993 Effective Date: 02/07/1993 Revocation Date: 24/01/1995

ID	Location	Address	Details	
C	127m S	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 1 Receiving Water: VARIES WITH OUTLET	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 27/05/1963 Effective Date: 27/05/1963 Revocation Date: 01/07/1993
C	127m S	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 3 Receiving Water: VARIES WITH OUTLET	Status: REVISED BY NOTICE, AT DIRECTION OF SEC. OF STATE - 37(2) Issue date: 25/01/1995 Effective Date: 25/01/1995 Revocation Date: 05/03/1995
I	231m N	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 1 Receiving Water: VARIES WITH OUTLET	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 27/05/1963 Effective Date: 27/05/1963 Revocation Date: 01/07/1993
I	231m N	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 3 Receiving Water: VARIES WITH OUTLET	Status: REVISED BY NOTICE, AT DIRECTION OF SEC. OF STATE - 37(2) Issue date: 25/01/1995 Effective Date: 25/01/1995 Revocation Date: 05/03/1995
I	231m N	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 2 Receiving Water: VARIES WITH OUTLET	Status: REVISED BY NOTICE, AT DIRECTION OF SEC. OF STATE - 37(2) Issue date: 02/07/1993 Effective Date: 02/07/1993 Revocation Date: 24/01/1995
J	262m N	ANCHOR STREET CSO, ST ANDREWS ROAD (OFF), HUDDERSFIELD, WEST YORKSHIRE, HD1 6RA	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA9172 Permit Version: 1 Receiving Water: RIVER COLNE	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 22/08/2007 Effective Date: 22/08/2007 Revocation Date: 08/08/2019

ID	Location	Address	Details	
J	273m N	ANCHOR STREET CSO, ST ANDREWS ROAD (OFF), HUDDERSFIELD, WEST YORKSHIRE, HD1 6RA	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA9172 Permit Version: 2 Receiving Water: RIVER COLNE	Status: VARIED UNDER EPR 2010 Issue date: 09/08/2019 Effective Date: 09/08/2019 Revocation Date: -
K	278m S	CARR PIT ROAD CSO, CARR PIT ROAD, HUDDERSFIELD, WEST YORKSHIRE, HD5 9AE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA8455 Permit Version: 2 Receiving Water: RIVER COLNE	Status: VARIED UNDER EPR 2010 Issue date: 10/09/2018 Effective Date: 10/09/2018 Revocation Date: -
K	278m S	IVY STREET CSO, OPPOSITE NO.7, IVY STREET, MOLDGREEN, HUDDERSFIELD, WEST YORKSHIRE, HD5 9AE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA8489 Permit Version: 2 Receiving Water: RIVER COLNE	Status: VARIED UNDER EPR 2010 Issue date: 15/11/2017 Effective Date: 15/11/2017 Revocation Date: -
K	282m S	CARR PIT ROAD CSO, CARR PIT ROAD, HUDDERSFIELD, WEST YORKSHIRE, HD5 9AE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA8455 Permit Version: 1 Receiving Water: RIVER COLNE	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 31/03/2005 Effective Date: 31/03/2005 Revocation Date: 09/09/2018
K	282m S	IVY STREET CSO, OPPOSITE NO.7, IVY STREET, MOLDGREEN, HUDDERSFIELD, WEST YORKSHIRE, HD5 9AE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA8489 Permit Version: 1 Receiving Water: RIVER COLNE	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 24/05/2005 Effective Date: 24/05/2005 Revocation Date: 14/11/2017
M	294m S	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 3 Receiving Water: VARIES WITH OUTLET	Status: REVISED BY NOTICE, AT DIRECTION OF SEC. OF STATE - 37(2) Issue date: 25/01/1995 Effective Date: 25/01/1995 Revocation Date: 05/03/1995
M	294m S	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 1 Receiving Water: VARIES WITH OUTLET	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 27/05/1963 Effective Date: 27/05/1963 Revocation Date: 01/07/1993

ID	Location	Address	Details	
M	294m S	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 2 Receiving Water: VARIES WITH OUTLET	Status: REVISED BY NOTICE, AT DIRECTION OF SEC. OF STATE - 37(2) Issue date: 02/07/1993 Effective Date: 02/07/1993 Revocation Date: 24/01/1995
8	340m N	FORMER FIRESTONE LAND, BETWEEN GASWORKS ST & ANCHOR ST, HUDDERSFIELD, WEST YORKSHIRE	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: WRA7139 Permit Version: 1 Receiving Water: RIVER COLNE	Status: REVOKED - UNSPECIFIED Issue date: 28/03/1995 Effective Date: 28/03/1995 Revocation Date: 07/10/1999
9	387m SW	TOWN HALL, RAMSDEN STREET, HUDDERSFIELD, WEST YORKSHIRE	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 3653 Permit Version: 1 Receiving Water: HUDDERSFIELD NARROW CANAL	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 02/11/1982 Effective Date: 02/11/1982 Revocation Date: -
Q	435m N	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 3 Receiving Water: VARIES WITH OUTLET	Status: REVISED BY NOTICE, AT DIRECTION OF SEC. OF STATE - 37(2) Issue date: 25/01/1995 Effective Date: 25/01/1995 Revocation Date: 05/03/1995
Q	435m N	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 1 Receiving Water: VARIES WITH OUTLET	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 27/05/1963 Effective Date: 27/05/1963 Revocation Date: 01/07/1993
Q	435m N	BAPTIST LANE SSO, BAPTIST LANE, OSSETT, WAKEFIELD, WF5 0HD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/CB/51 Permit Version: 2 Receiving Water: VARIES WITH OUTLET	Status: REVISED BY NOTICE, AT DIRECTION OF SEC. OF STATE - 37(2) Issue date: 02/07/1993 Effective Date: 02/07/1993 Revocation Date: 24/01/1995
R	449m N	GOLF DRIVING RANGE, ALFRED MCALPINE STADIUM, LEEDS ROAD, HUDDERSFIELD, WEST YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WRA6947 Permit Version: 2 Receiving Water: RIVER COLNE	Status: REVOKED - UNSPECIFIED Issue date: 20/08/1993 Effective Date: 20/08/1993 Revocation Date: 08/11/1994

ID	Location	Address	Details	
R	449m N	GOLF DRIVING RANGE, ALFRED MCALPINE STADIUM, LEEDS ROAD, HUDDERSFIELD, WEST YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WRA6947 Permit Version: 1 Receiving Water: RIVER COLNE	Status: REVOKED - UNSPECIFIED Issue date: 09/11/1994 Effective Date: 09/11/1994 Revocation Date: 28/03/2002
T	474m N	GASWORKS STREET CSO, GASWORKS ST/JCT. ST ANDREWS ROAD, HUDDERSFIELD, WEST YORKSHIRE, HD1 6NA	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA9178 Permit Version: 1 Receiving Water: RIVER COLNE	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/08/2007 Effective Date: 23/08/2007 Revocation Date: 27/06/2019
T	474m N	GASWORKS STREET CSO, GASWORKS ST/JCT. ST ANDREWS ROAD, HUDDERSFIELD, WEST YORKSHIRE, HD1 6NA	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA9178 Permit Version: 2 Receiving Water: RIVER COLNE	Status: VARIED UNDER EPR 2010 Issue date: 28/06/2019 Effective Date: 28/06/2019 Revocation Date: -

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	3

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 53 >**

ID	Location	Details	
K	301m S	Incident Date: 17/02/2003 Incident Identification: 137402 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
7	319m S	Incident Date: 20/03/2009 Incident Identification: 663022 Pollutant: Organic Chemicals/Products Pollutant Description: Pesticides and Biocides	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
P	465m S	Incident Date: 08/08/2003 Incident Identification: 180250 Pollutant: Oils and Fuel Pollutant Description: Insulating and Cable Oils	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	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

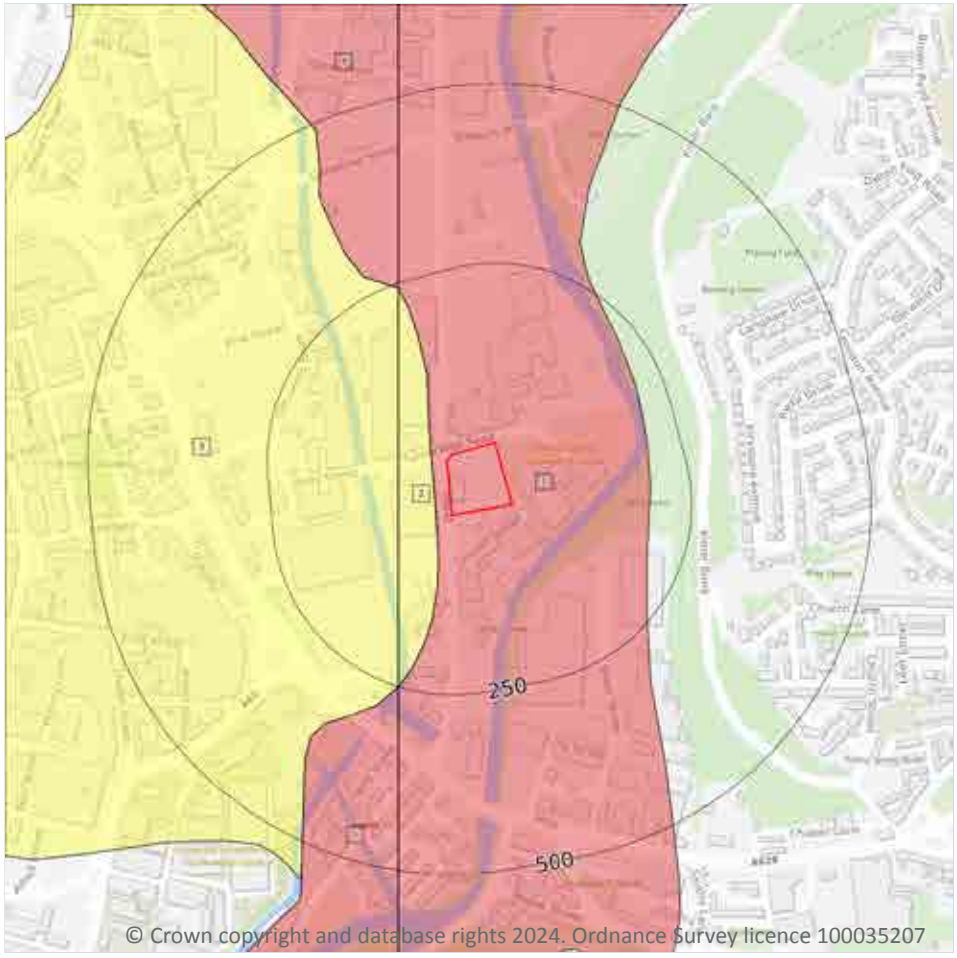
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	5

Aquifer status of groundwater held within superficial geology.

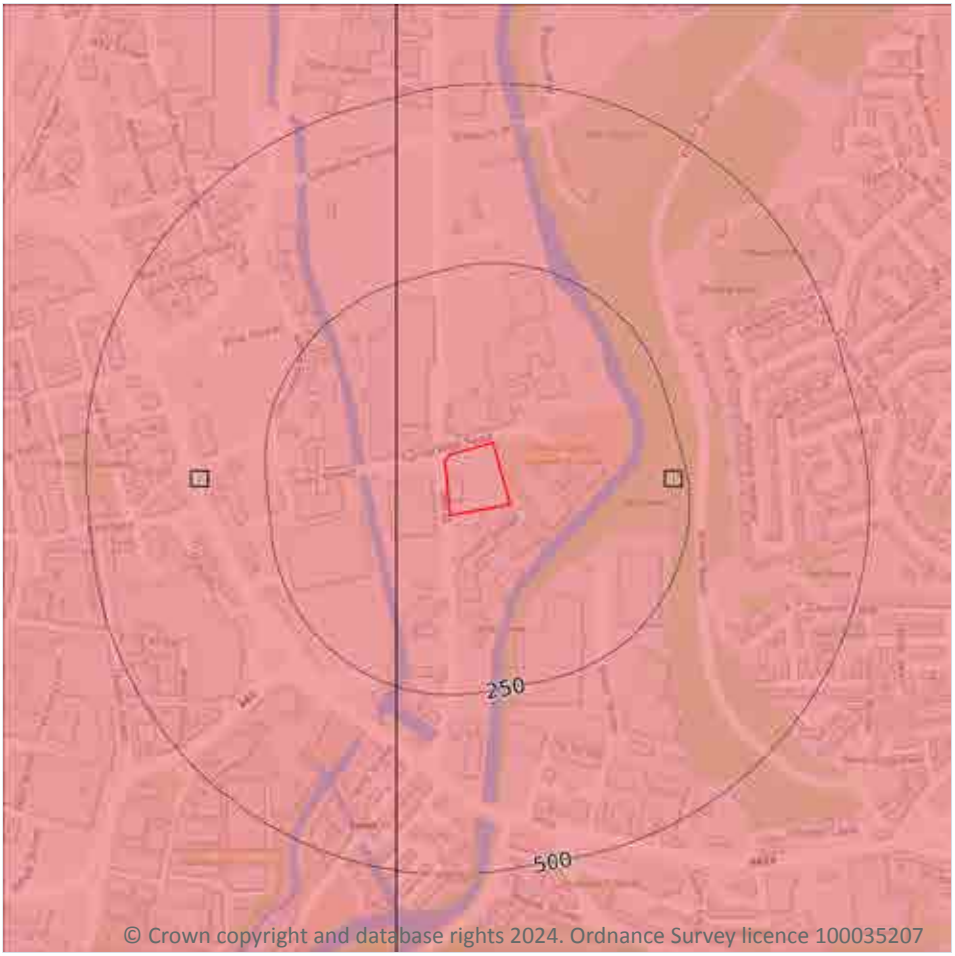
Features are displayed on the Hydrogeology map on **page 68 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	21m NW	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

ID	Location	Designation	Description
3	68m W	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	244m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	251m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	2

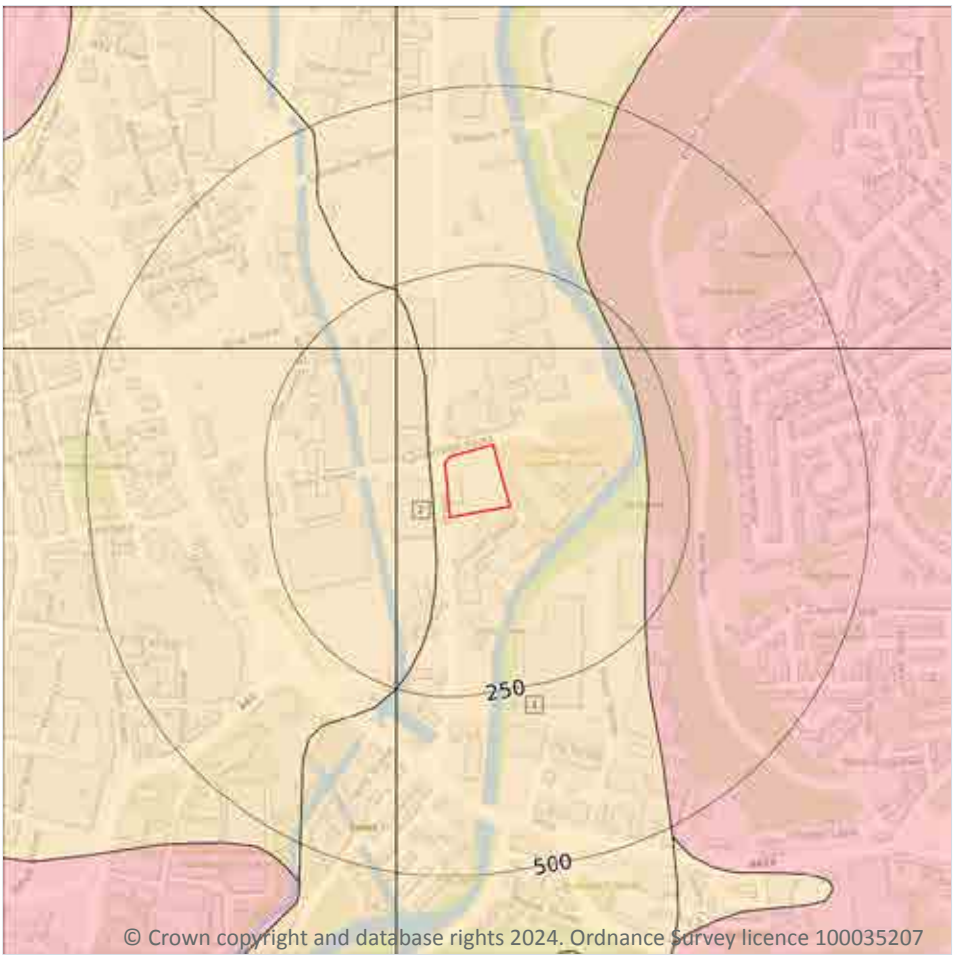
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 70 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	68m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

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

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

Other information
- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	2

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

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

Features are displayed on the Groundwater vulnerability map on **page 72 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year**	**Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
2	21m NW	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: 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	**0**

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

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

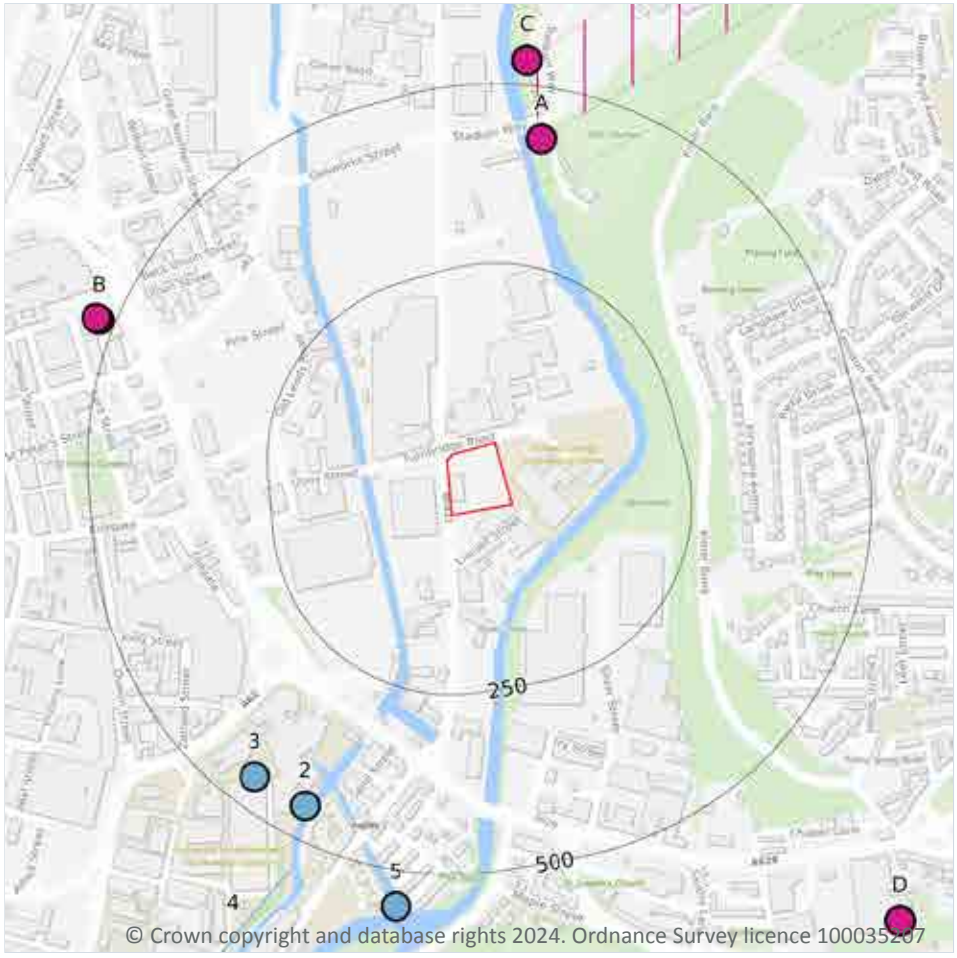
5.5 Groundwater vulnerability- local information

Records on site	**0**

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 ↗.

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	29

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 74 >**

ID	Location	Details	
1	429m N	Status: Historical Licence No: 2/27/11/060 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: GROUNDWATERS Point: BOREHOLE X4 - CARBONIFEROUS MILLSTONE GRIT Data Type: Poly4 Name: ZENECA FINE CHEMICAL MANUFACTURING ORGANISATION Easting: 416690 Northing: 418150	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/01/1966 Version End Date: -
A	429m N	Status: Historical Licence No: 2/27/11/060 Details: Process Water Direct Source: GROUNDWATERS Point: BOREHOLE 3 - MILLSTONE GRIT Data Type: Point Name: SYNGENTA LTD Easting: 415200 Northing: 417290	Annual Volume (m^3): 881941 Max Daily Volume (m^3): 6000.84 Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 12/10/2006 Version End Date: -
A	429m N	Status: Historical Licence No: 2/27/11/060 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: GROUNDWATERS Point: BOREHOLE 3 - MILLSTONE GRIT Data Type: Point Name: SYNGENTA LTD Easting: 415200 Northing: 417290	Annual Volume (m^3): 881941 Max Daily Volume (m^3): 6000.84 Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 12/10/2006 Version End Date: -
B	522m NW	Status: Active Licence No: 2/27/11/193/R01 Details: Heat Pump Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - HUDDERSFIELD Data Type: Point Name: Kirklees Council Easting: 414584 Northing: 417037	Annual Volume (m^3): 32000 Max Daily Volume (m^3): 357 Original Application No: NPS/WR/025885 Original Start Date: 17/04/2015 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 02/10/2017 Version End Date: -

ID	Location	Details	
B	527m NW	Status: Historical Licence No: 2/27/11/193 Details: Non-Evaporative Cooling Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - HUDDERSFIELD Data Type: Point Name: KIRKLEES METROPOLITAN COUNCIL Easting: 414580 Northing: 417040	Annual Volume (m^3): 2400 Max Daily Volume (m^3): 85 Original Application No: - Original Start Date: 18/05/2007 Expiry Date: 31/03/2015 Issue No: 2 Version Start Date: 01/04/2008 Version End Date: -
C	536m N	Status: Historical Licence No: 2/27/11/060 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: GROUNDWATERS Point: BOREHOLE 4 - MILLSTONE GRIT - HUDDERSFIELD Data Type: Point Name: SYNGENTA LTD Easting: 415180 Northing: 417400	Annual Volume (m^3): 881941 Max Daily Volume (m^3): 6000.84 Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 12/10/2006 Version End Date: -
C	536m N	Status: Historical Licence No: 2/27/11/060 Details: Process Water Direct Source: GROUNDWATERS Point: BOREHOLE 4 - MILLSTONE GRIT - HUDDERSFIELD Data Type: Point Name: SYNGENTA LTD Easting: 415180 Northing: 417400	Annual Volume (m^3): 881941 Max Daily Volume (m^3): 6000.84 Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 12/10/2006 Version End Date: -
D	793m SE	Status: Active Licence No: 2/27/11/018 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - MOLDGREEN Data Type: Point Name: W T JOHNSON & SONS (HUDDERSFIELD) LTD Easting: 415700 Northing: 416200	Annual Volume (m^3): 105854 Max Daily Volume (m^3): 390.96 Original Application No: 1567(1) Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1965 Version End Date: -

ID	Location	Details	
D	793m SE	Status: Active Licence No: 2/27/11/031 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - MOLDGREEN Data Type: Point Name: W T JOHNSON & SONS (HUDDERSFIELD) LTD Easting: 415700 Northing: 416200	Annual Volume (m^3): 36754 Max Daily Volume (m^3): 136.38 Original Application No: 1567(2) Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1965 Version End Date: -
D	793m SE	Status: Historical Licence No: 2/27/11/031 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: W T JOHNSON & SONS (HUDDERSFIELD) LTD Easting: 415700 Northing: 416200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1965 Version End Date: -
D	793m SE	Status: Historical Licence No: 2/27/11/018 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: W T JOHNSON & SONS (HUDDERSFIELD) LTD Easting: 415700 Northing: 416200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1965 Version End Date: -
D	793m SE	Status: Historical Licence No: 2/27/11/031 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT - MOLDGREEN Data Type: Point Name: W T JOHNSON & SONS (HUDDERSFIELD) LTD Easting: 415700 Northing: 416200	Annual Volume (m^3): 36754 Max Daily Volume (m^3): 136.38 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1965 Version End Date: -

ID	Location	Details	
D	793m SE	Status: Historical Licence No: 2/27/11/018 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT - MOLDGREEN Data Type: Point Name: W T JOHNSON & SONS (HUDDERSFIELD) LTD Easting: 415700 Northing: 416200	Annual Volume (m^3): 105854 Max Daily Volume (m^3): 390.956 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1965 Version End Date: -
-	900m SW	Status: Historical Licence No: 2/27/11/176 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: SKA TEXTILES LTD Easting: 414600 Northing: 416000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/08/1995 Expiry Date: - Issue No: 101 Version Start Date: 08/02/2001 Version End Date: -
-	900m SW	Status: Historical Licence No: 2/27/11/176 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - HUDDERSFIELD Data Type: Point Name: SKA TEXTILES LTD Easting: 414600 Northing: 416000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/08/1995 Expiry Date: - Issue No: 101 Version Start Date: 08/02/2001 Version End Date: -
-	1020m SW	Status: Historical Licence No: 2/27/11/176 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - HUDDERSFIELD Data Type: Point Name: SKA TEXTILES LTD Easting: 414400 Northing: 416000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/08/1995 Expiry Date: - Issue No: 101 Version Start Date: 08/02/2001 Version End Date: -

ID	Location	Details	
-	1142m N	Status: Active Licence No: 2/27/11/171 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT - HUDDERSFIELD Data Type: Point Name: HUDDERSFIELD DYEING CO LTD Easting: 415000 Northing: 418000	Annual Volume (m^3): 136410 Max Daily Volume (m^3): 637.07 Original Application No: 6256 Original Start Date: 24/05/1990 Expiry Date: - Issue No: 100 Version Start Date: 24/05/1990 Version End Date: -
-	1142m N	Status: Historical Licence No: 2/27/11/171 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: HUDDERSFIELD DYEING CO LTD Easting: 415000 Northing: 418000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/05/1990 Expiry Date: - Issue No: 100 Version Start Date: 24/05/1990 Version End Date: -
-	1198m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: BENJAMIN SHAW & SONS LTD Easting: 414500 Northing: 417900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 26/03/1999 Version End Date: -
-	1198m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT Data Type: Point Name: BENJAMIN SHAW & SONS LTD Easting: 414500 Northing: 417900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 26/03/1999 Version End Date: -
-	1312m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT-HUDDERSFIELD Data Type: Point Name: BRITVIC SOFT DRINKS PLC Easting: 414140 Northing: 417770	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 636.4 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2009 Version End Date: -

ID	Location	Details	
-	1336m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT-HUDDERSFIELD Data Type: Point Name: BRITVIC SOFT DRINKS PLC Easting: 414250 Northing: 417900	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 636.4 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2009 Version End Date: -
-	1338m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: BENJAMIN SHAW & SONS LTD Easting: 414210 Northing: 417870	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 26/03/1999 Version End Date: -
-	1338m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT Data Type: Point Name: BRITVIC SOFT DRINKS LTD Easting: 414210 Northing: 417870	Annual Volume (m^3): 360000 Max Daily Volume (m^3): 1200 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 101 Version Start Date: 01/11/2004 Version End Date: -
-	1338m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT- HUDDERSFIELD Data Type: Point Name: BRITVIC SOFT DRINKS PLC Easting: 414210 Northing: 417870	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 636.4 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2009 Version End Date: -
-	1407m SW	Status: Historical Licence No: 2/27/11/190 Details: Process Water Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT-HUDDERSFIELD Data Type: Point Name: SKA TEXTILES LTD Easting: 413830 Northing: 416110	Annual Volume (m^3): 465000 Max Daily Volume (m^3): 1272 Original Application No: - Original Start Date: 04/02/2005 Expiry Date: 31/12/2010 Issue No: 2 Version Start Date: 18/04/2006 Version End Date: -

ID	Location	Details	
-	1474m SW	Status: Historical Licence No: NE/027/0011/006 Details: Process Water Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT-HUDDERSFIELD Data Type: Point Name: SKA TEXTILES LTD Easting: 413794 Northing: 416036	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 1272 Original Application No: - Original Start Date: 06/01/2011 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 06/01/2011 Version End Date: -
-	1817m NE	Status: Historical Licence No: 2/27/11/060 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: GROUNDWATERS Point: BOREHOLE 2 - MILLSTONE GRIT - HUDDERSFIELD Data Type: Point Name: SYNGENTA LTD Easting: 416370 Northing: 418200	Annual Volume (m^3): 881941 Max Daily Volume (m^3): 1091.06 Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 103 Version Start Date: 23/06/2017 Version End Date: -
-	1817m NE	Status: Historical Licence No: 2/27/11/060 Details: Process Water Direct Source: GROUNDWATERS Point: BOREHOLE 2 - MILLSTONE GRIT - HUDDERSFIELD Data Type: Point Name: SYNGENTA LTD Easting: 416370 Northing: 418200	Annual Volume (m^3): 881941 Max Daily Volume (m^3): 1091.06 Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 103 Version Start Date: 23/06/2017 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**19**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 74 >**

ID	Location	Details	
2	454m SW	Status: Historical Licence No: 2/27/11/160 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD CANAL Data Type: Point Name: Canal and River Trust Easting: 414870 Northing: 416360	Annual Volume (m^3): 700000 Max Daily Volume (m^3): 3600 Original Application No: - Original Start Date: 01/03/1974 Expiry Date: - Issue No: 102 Version Start Date: 21/01/2008 Version End Date: -
3	457m SW	Status: Historical Licence No: 2/27/11/160 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD CANAL Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 414800 Northing: 416400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1974 Expiry Date: - Issue No: 100 Version Start Date: 17/11/1993 Version End Date: -
4	544m SW	Status: Historical Licence No: 2/27/11/175 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD NARROW CANAL Data Type: Line Name: Canal and River Trust Easting: 414690 Northing: 416080	Annual Volume (m^3): 1250000 Max Daily Volume (m^3): 3960 Original Application No: - Original Start Date: 22/09/1994 Expiry Date: - Issue No: 103 Version Start Date: 21/01/2008 Version End Date: -
5	551m S	Status: Active Licence No: NE/027/0011/023 Details: Supply To A Canal For Throughflow Direct Source: SURFACE WATER Point: RIVER COLNE AT ASPLEY, HUDDERSFIELD Data Type: Point Name: Canal and River Trust Easting: 414997 Northing: 416219	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/NA/000948 Original Start Date: 31/03/2021 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 31/03/2021 Version End Date: -

ID	Location	Details	
-	700m SW	Status: Historical Licence No: 2/27/11/175 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD NARROW CANAL Data Type: Line Name: BRITISH WATERWAYS BOARD Easting: 414650 Northing: 416010	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 22/09/1994 Expiry Date: - Issue No: 101 Version Start Date: 10/03/2003 Version End Date: -
-	799m N	Status: Historical Licence No: 2/27/11/182 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD BROAD CANAL Data Type: Point Name: BRITISH WATERWAYS Easting: 414800 Northing: 417600	Annual Volume (m^3): 170000 Max Daily Volume (m^3): 750 Original Application No: - Original Start Date: 10/07/1998 Expiry Date: 31/12/2006 Issue No: 100 Version Start Date: 10/07/1998 Version End Date: -
-	866m SW	Status: Historical Licence No: 2/27/11/175 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD NARROW CANAL Data Type: Line Name: BRITISH WATERWAYS BOARD Easting: 414650 Northing: 416010	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 22/09/1994 Expiry Date: - Issue No: 100 Version Start Date: 22/09/1994 Version End Date: -
-	943m N	Status: Active Licence No: 2/27/11/158 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD BROAD CANAL - HUDERSFIELD INCINERATOR Data Type: Point Name: Canal and River Trust Easting: 414830 Northing: 417760	Annual Volume (m^3): 273000 Max Daily Volume (m^3): 1090 Original Application No: 5182 Original Start Date: 27/10/1972 Expiry Date: - Issue No: 103 Version Start Date: 21/01/2008 Version End Date: -

ID	Location	Details	
-	943m N	Status: Historical Licence No: 2/27/11/158 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD BROAD CANAL Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 414830 Northing: 417760	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 27/10/1972 Expiry Date: - Issue No: 102 Version Start Date: 26/10/1999 Version End Date: -
-	1124m SW	Status: Active Licence No: NE/027/0011/011 Details: Non-Evaporative Cooling Direct Source: SURFACE WATER Point: HUDDERSFIELD NARROW CANAL Data Type: Point Name: Canal and River Trust Easting: 414179 Northing: 416087	Annual Volume (m^3): 1684800 Max Daily Volume (m^3): 7560 Original Application No: NPS/WR/008366 Original Start Date: 24/04/2012 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 24/04/2012 Version End Date: -
-	1142m N	Status: Active Licence No: 2/27/11/131 Details: Process Water Direct Source: SURFACE WATER Point: HUDDERSFIELD CANAL Data Type: Point Name: Canal and River Trust Easting: 415000 Northing: 418000	Annual Volume (m^3): 400000 Max Daily Volume (m^3): 1800 Original Application No: 2266 Original Start Date: 26/05/1966 Expiry Date: - Issue No: 101 Version Start Date: 21/01/2008 Version End Date: -
-	1142m N	Status: Active Licence No: 2/27/11/131 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD CANAL Data Type: Point Name: Canal and River Trust Easting: 415000 Northing: 418000	Annual Volume (m^3): 400000 Max Daily Volume (m^3): 1800 Original Application No: 2266 Original Start Date: 26/05/1966 Expiry Date: - Issue No: 101 Version Start Date: 21/01/2008 Version End Date: -
-	1142m N	Status: Historical Licence No: 2/27/11/131 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD CANAL Data Type: Point Name: BRITISH WATERWAYS Easting: 415000 Northing: 418000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 26/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/02/1993 Version End Date: -

ID	Location	Details	
-	1142m N	Status: Historical Licence No: 2/27/11/131 Details: General use relating to Secondary Category (Very Low Loss) Direct Source: SURFACE WATER Point: HUDDERSFIELD CANAL Data Type: Point Name: BRITISH WATERWAYS Easting: 415000 Northing: 418000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 26/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/02/1993 Version End Date: -
-	1303m SW	Status: Historical Licence No: 2/27/10/009 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: RIVER HOLME Data Type: Point Name: TAYLOR & LODGE LTD Easting: 414200 Northing: 415800	Annual Volume (m^3): 54552 Max Daily Volume (m^3): 327.312 Original Application No: - Original Start Date: 01/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1965 Version End Date: -
-	1303m SW	Status: Historical Licence No: 2/27/10/009 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: RIVER HOLME - HUDDERSFIELD Data Type: Point Name: TAYLOR & LODGE LTD Easting: 414200 Northing: 415800	Annual Volume (m^3): 54552 Max Daily Volume (m^3): 327.312 Original Application No: - Original Start Date: 01/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1965 Version End Date: -
-	1881m NE	Status: Active Licence No: 2/27/11/059 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: RIVER COLNE AND TRIBUTARIES - POINT 5 - DALTON WORKS Data Type: Point Name: SYNGENTA LTD Easting: 416330 Northing: 418320	Annual Volume (m^3): 24600000 Max Daily Volume (m^3): 67200 Original Application No: 665 Original Start Date: 27/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 25/07/2002 Version End Date: -

ID	Location	Details	
-	1881m NE	Status: Active Licence No: 2/27/11/059 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: RIVER COLNE AND TRIBUTARIES - POINT 5 - DALTON WORKS Data Type: Point Name: SYNGENTA LTD Easting: 416330 Northing: 418320	Annual Volume (m^3): 24600000 Max Daily Volume (m^3): 67200 Original Application No: 665 Original Start Date: 27/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 25/07/2002 Version End Date: -
-	1881m NE	Status: Historical Licence No: 2/27/11/059 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: RIVER COLNE Data Type: Poly3 Name: ZENECA FINE CHEMICAL MANUFACTURING ORGANISATION Easting: 416660 Northing: 418270	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 12/04/1985 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	**7**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 74 >**

ID	Location	Details	
-	1198m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: BENJAMIN SHAW & SONS LTD Easting: 414500 Northing: 417900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 26/03/1999 Version End Date: -

ID	Location	Details	
-	1198m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT Data Type: Point Name: BENJAMIN SHAW & SONS LTD Easting: 414500 Northing: 417900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 26/03/1999 Version End Date: -
-	1312m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT-HUDDERSFIELD Data Type: Point Name: BRITVIC SOFT DRINKS PLC Easting: 414140 Northing: 417770	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 636.4 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2009 Version End Date: -
-	1336m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT-HUDDERSFIELD Data Type: Point Name: BRITVIC SOFT DRINKS PLC Easting: 414250 Northing: 417900	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 636.4 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2009 Version End Date: -
-	1338m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: BENJAMIN SHAW & SONS LTD Easting: 414210 Northing: 417870	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 26/03/1999 Version End Date: -
-	1338m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT Data Type: Point Name: BRITVIC SOFT DRINKS LTD Easting: 414210 Northing: 417870	Annual Volume (m^3): 360000 Max Daily Volume (m^3): 1200 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 101 Version Start Date: 01/11/2004 Version End Date: -

ID	Location	Details	
-	1338m NW	Status: Historical Licence No: 2/27/11/023 Details: Water Bottling Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT- HUDDERSFIELD Data Type: Point Name: BRITVIC SOFT DRINKS PLC Easting: 414210 Northing: 417870	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 636.4 Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2009 Version End Date: -

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.

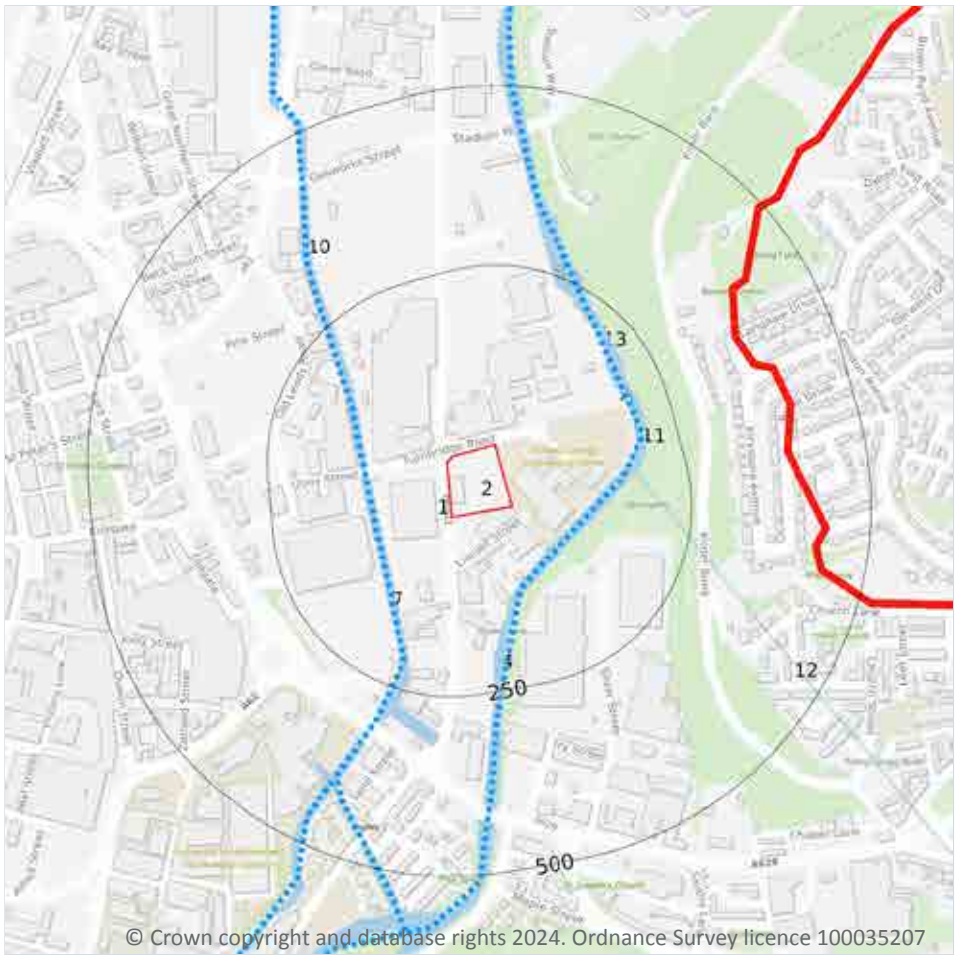
5.10 Source Protection Zones (confined aquifer)

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



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	10

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 89 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
4	85m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Colne

ID	Location	Type of water feature	Ground level	Permanence	Name
7	107m SW	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Huddersfield Broad Canal
10	116m W	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Huddersfield Broad Canal
11	175m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Colne
12	175m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Penny Spring Beck
A	190m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Colne
13	192m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Colne
A	192m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Colne
B	240m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Colne
B	247m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Colne

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**3**

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 89 >**

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 89 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Colne from River Holme to River Calder**	**GB104027062550**	**Colne and Holme**	**Aire and Calder**

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

6.4 WFD Surface water bodies

Records identified	2

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 89 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	86m SE	River	Colne from River Holme to River Calder	GB104027062550 ↗	Moderate	Fail	Moderate	2019
8	107m SW	Canal	Huddersfield Broad Canal	GB70410176 ↗	Moderate	Fail	Good	2019

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

6.5 WFD Groundwater bodies

Records on site	1

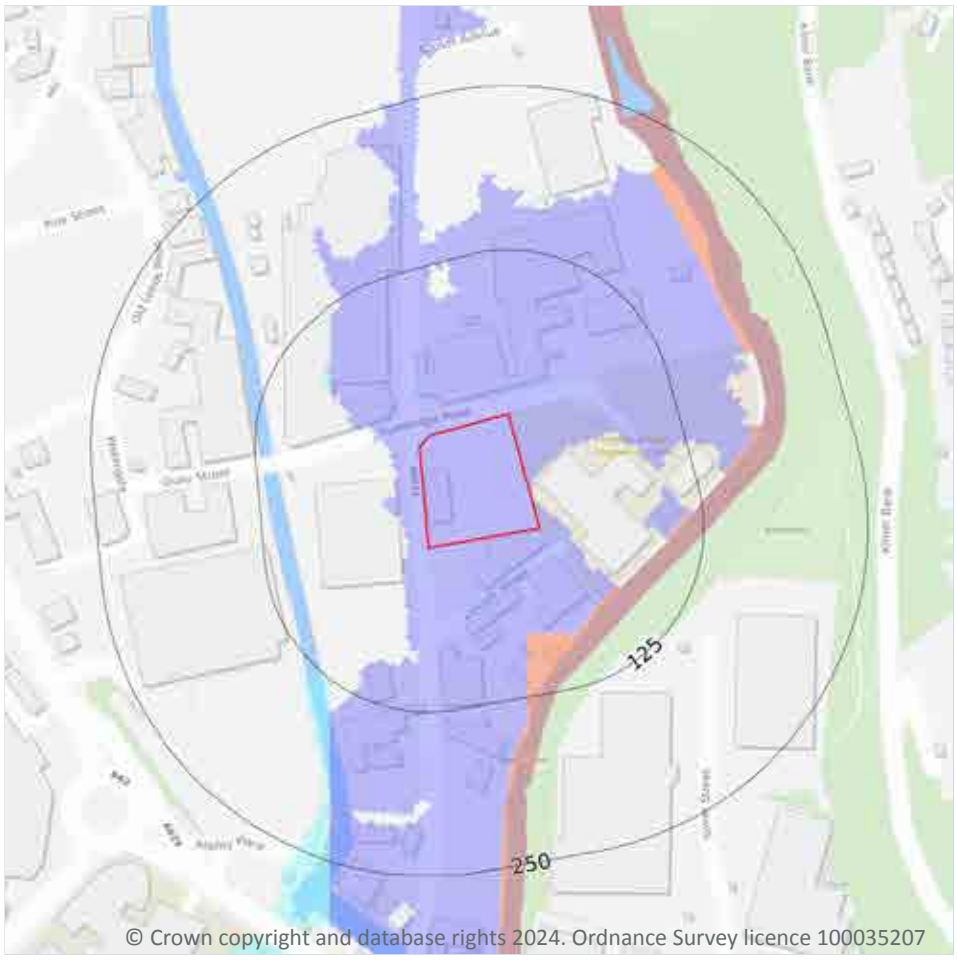
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 89 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	**On site**	**Aire & Calder Carb Limestone / Millstone Grit / Coal Measures.**	**GB40402G700400** ↗	**Poor**	**Poor**	**Good**	**2019**

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

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	5

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 93 >**

Distance	Flood risk category
On site	**Medium**
0 - 50m	Medium

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

7.2 Historical Flood Events

Records within 250m	**0**

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

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

7.3 Flood Defences

Records within 250m	**0**

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	**0**

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

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

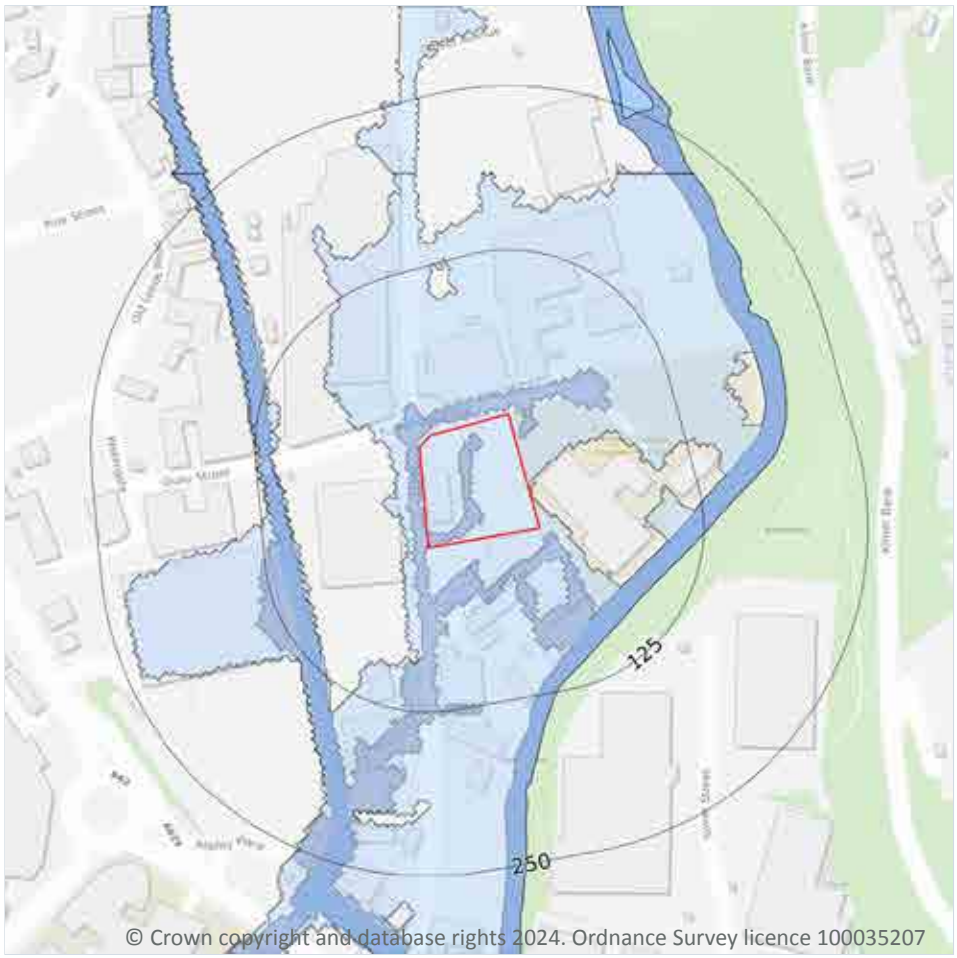
7.5 Flood Storage Areas

Records within 250m	**0**

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

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

River and coastal flooding - Flood Zones



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 93 >**

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

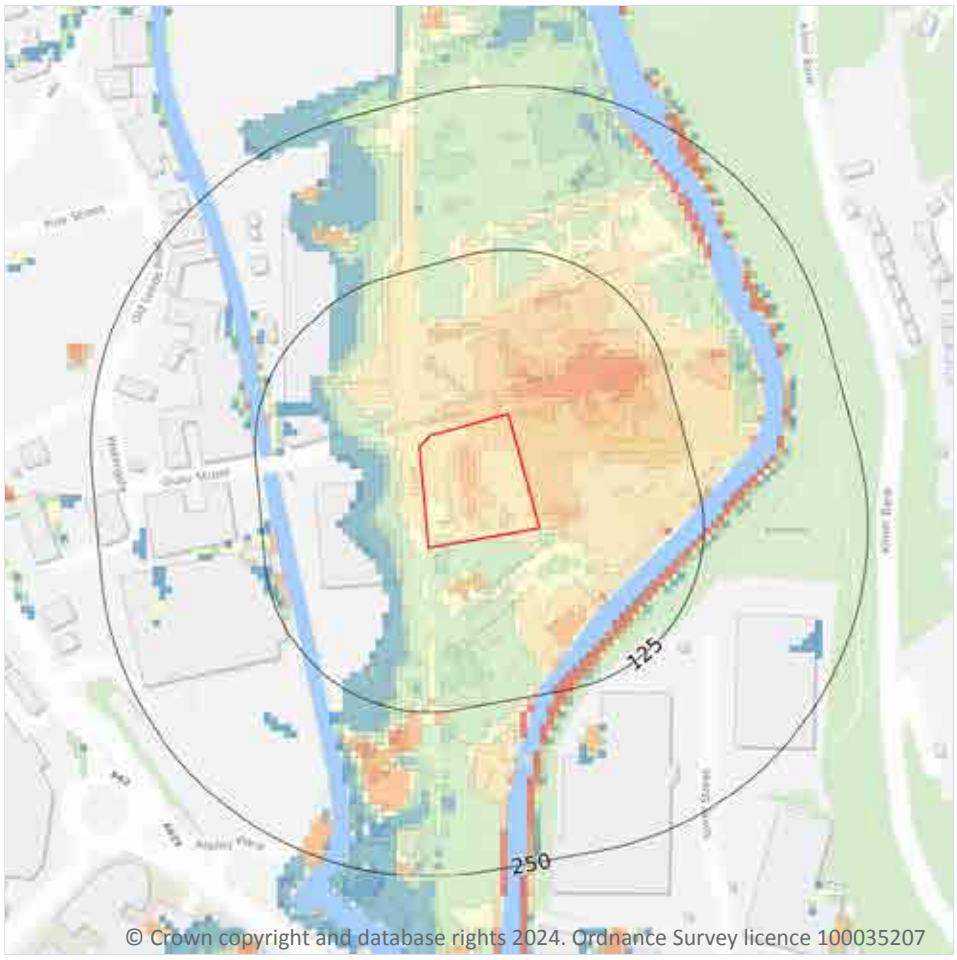
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 93 >**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

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

8 Surface water flooding



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.1m - 0.3m**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

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 97 >**

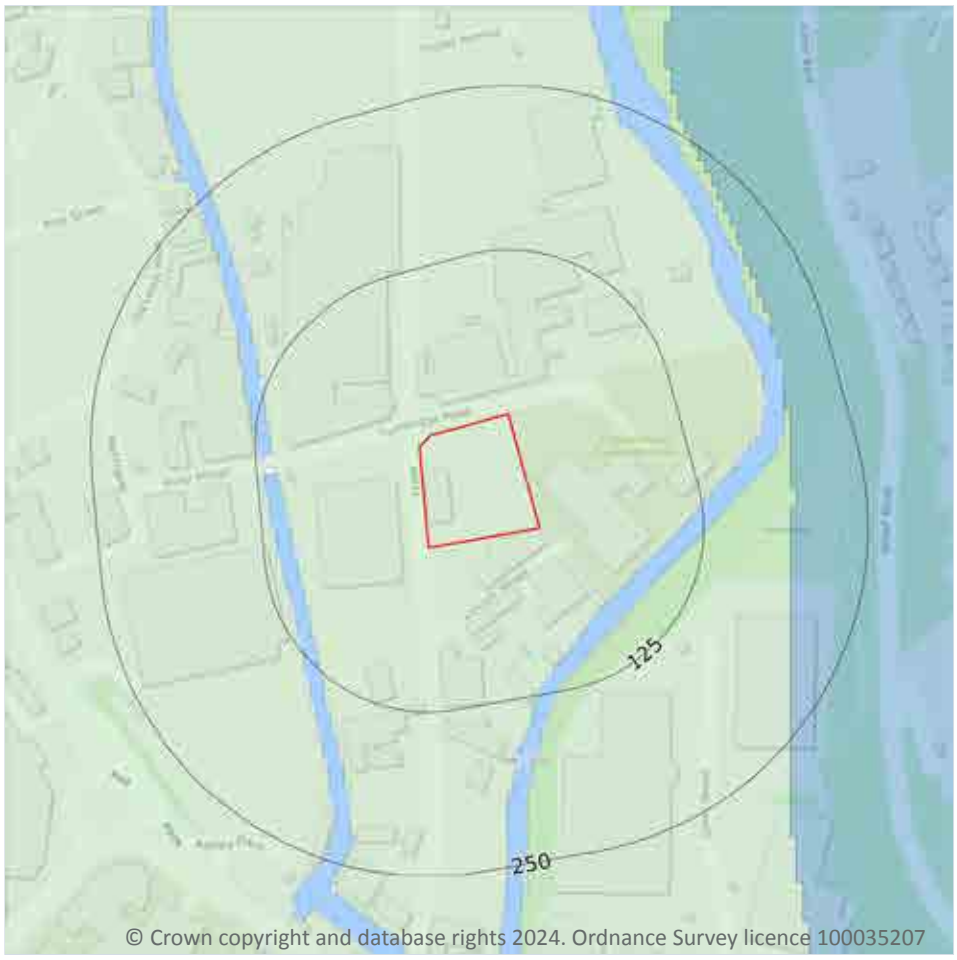
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

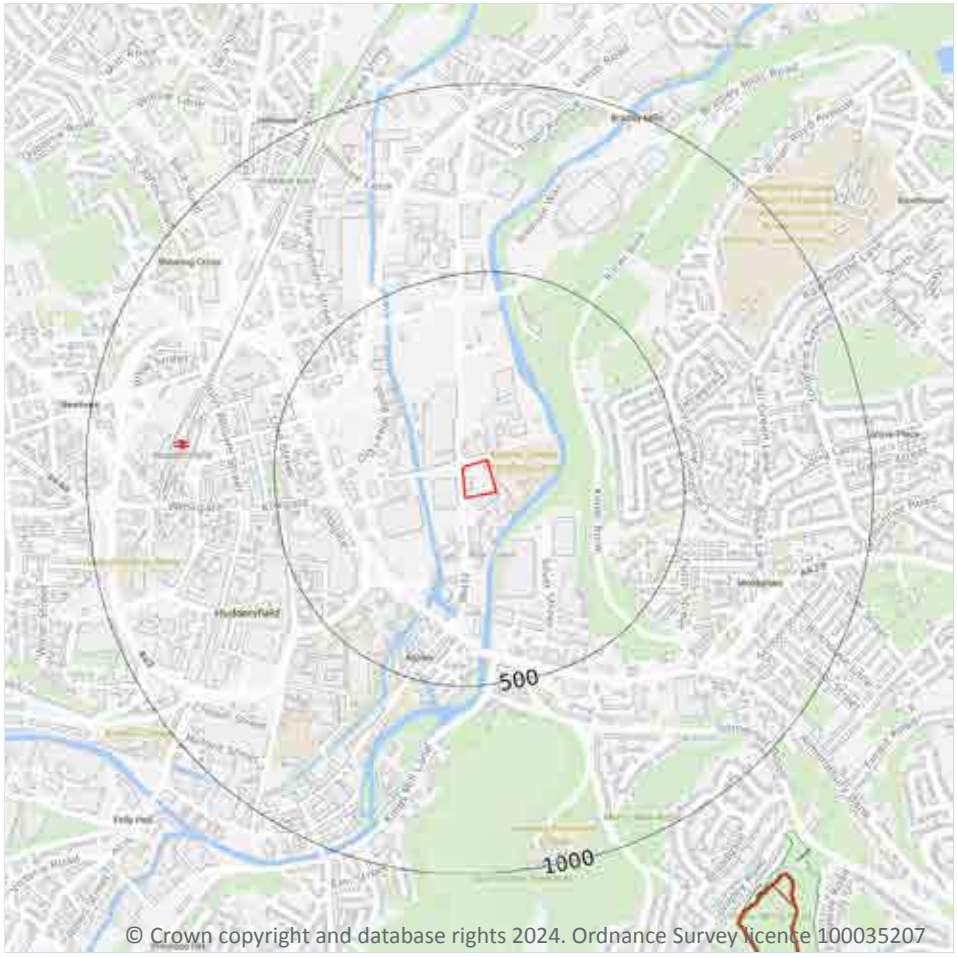
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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

Features are displayed on the Groundwater flooding map on **page 99 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Designated Ancient Woodland

Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 100 >**

ID	Location	Name	Data source
-	1716m W	Gledholt Woods	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	2

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

Features are displayed on the Environmental designations map on **page 100 >**

ID	Location	Name	Woodland Type
2	1269m SE	Benholmley Wood	Ancient Replanted Woodland
-	1843m SE	Benholmley Wood	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 100 >**

ID	Location	Name	Local Authority name
1	1189m SE	South and West Yorkshire	Kirklees

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

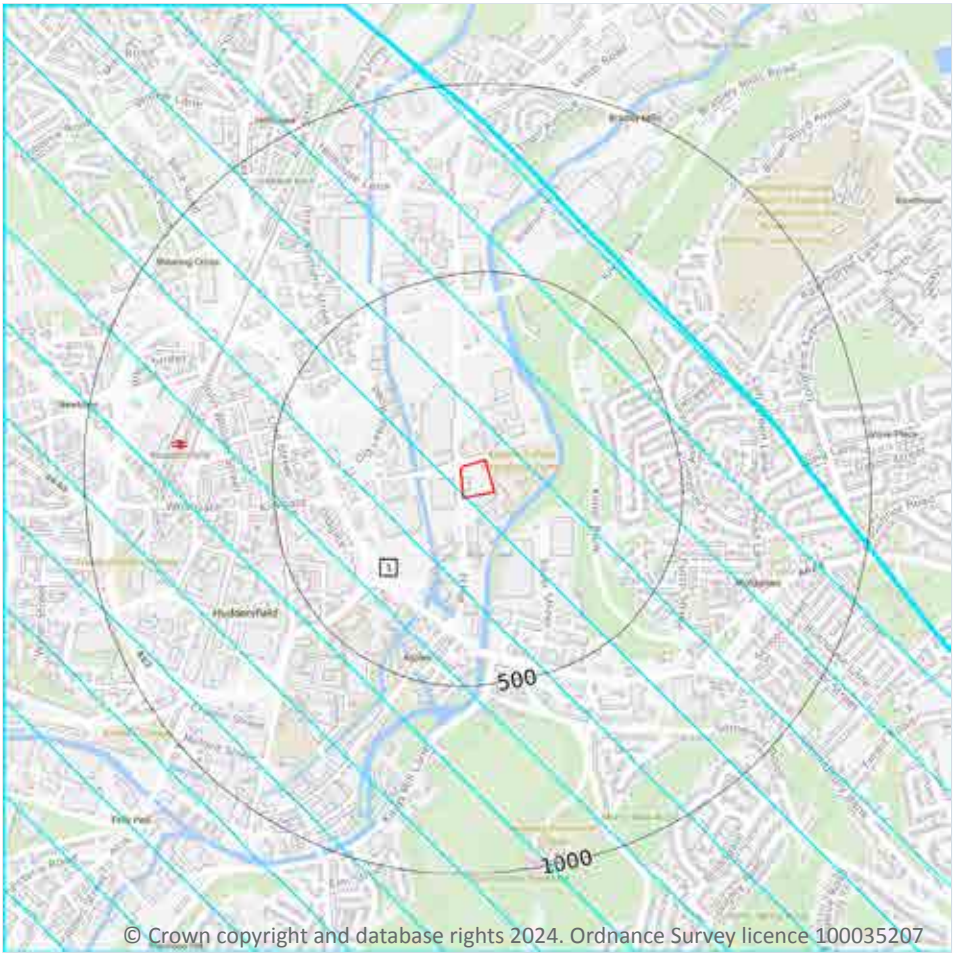
10.16 Nitrate Vulnerable Zones

Records within 2000m	0

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

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

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site	1

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

Features are displayed on the SSSI Impact Zones and Units map on **page 105 >**

ID	Location	Type of developments requiring consultation
1	**On site**	**Infrastructure - Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Oil & gas exploration/extraction. Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 4000m². Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.**

This data is sourced from Natural England.

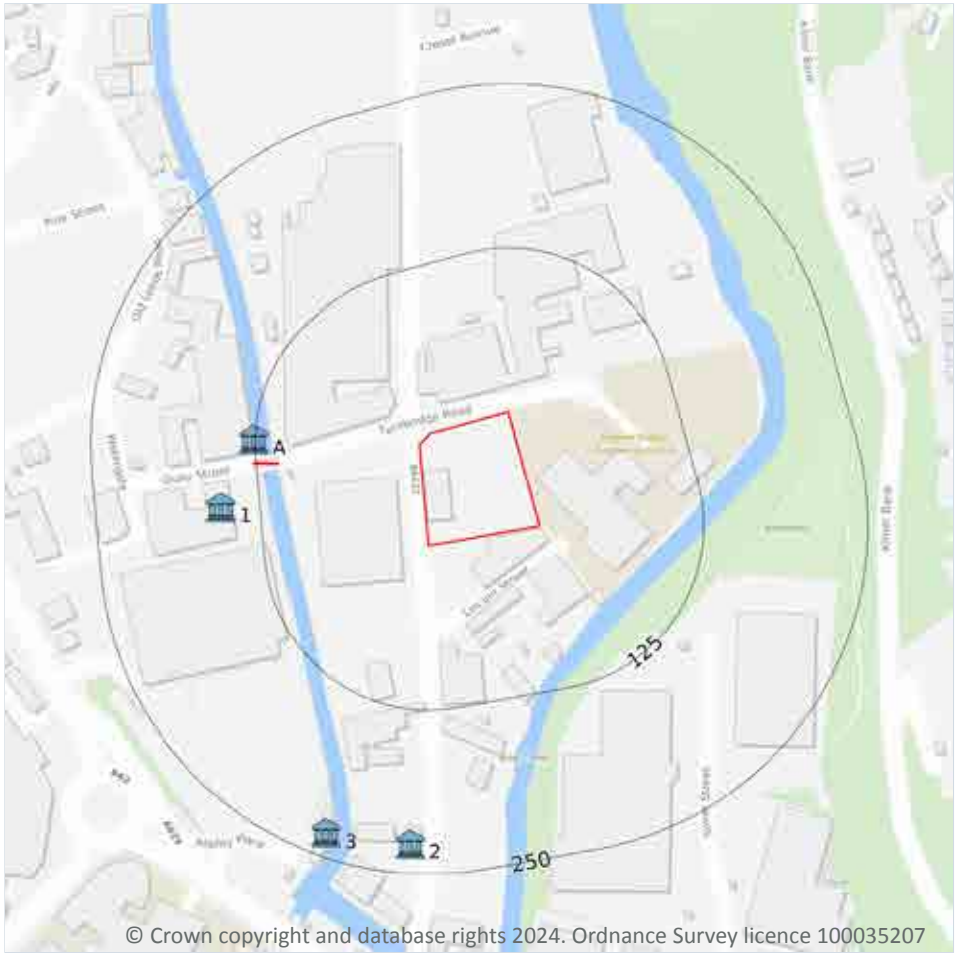
10.18 SSSI Units

Records within 2000m	**0**

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

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

11 Visual and cultural designations



Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	4

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

Features are displayed on the Visual and cultural designations map on **page 107 >**

ID	Location	Name	Grade	Reference Number	Listed date
A	126m W	Chimney At Se 14942 16846	II	1409815	23/05/2012
1	155m W	John L Brierleys Mill	II	1231214	29/09/1978
2	227m S	Numbers 1 And 3 And The Premises Of The Benson Tool Hire Company	II	1231779	29/09/1978
3	232m SW	Canal Warehouse At North End	II	1220248	29/09/1978

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	1

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.

Features are displayed on the Visual and cultural designations map on **page 107 >**

ID	Location	Ancient monument name	Reference number
A	108m W	Turn Bridge, Quay Street	1005793

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

11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations

Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	1

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

Features are displayed on the Agricultural designations map on **page 110 >**

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.

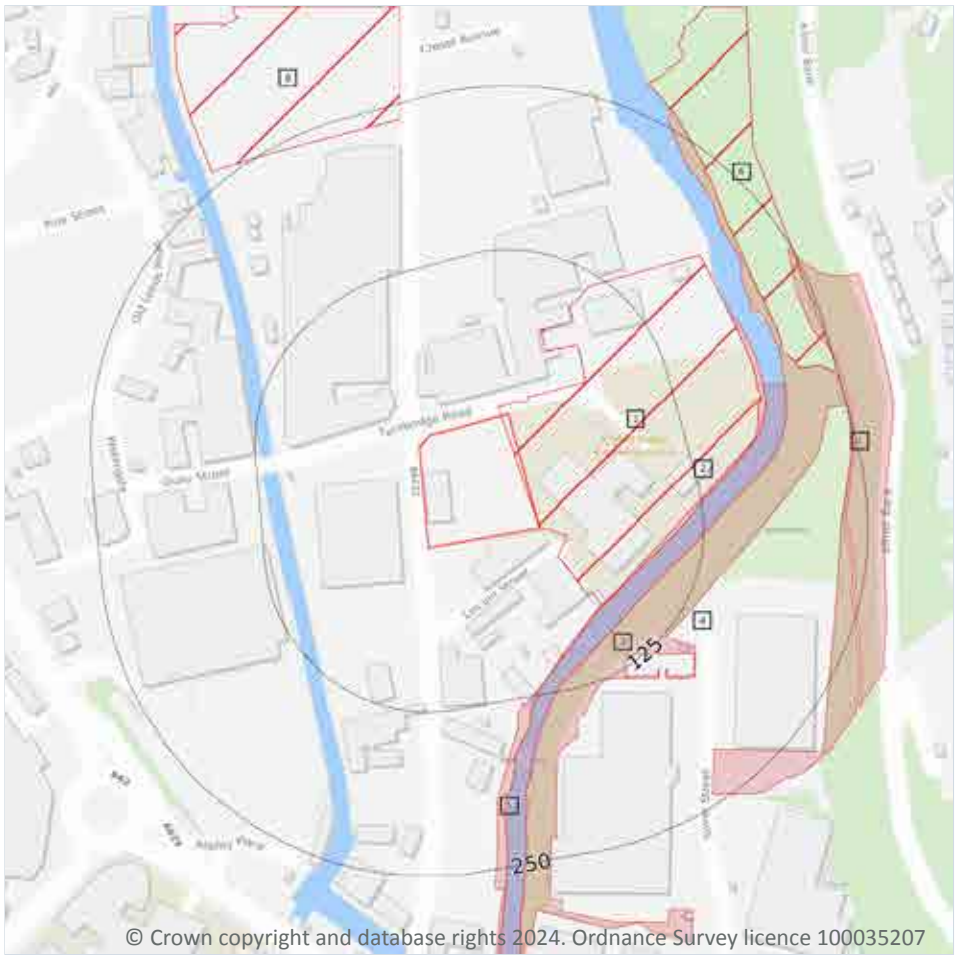
12.5 Countryside Stewardship Schemes

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



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks
Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	**5**

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 112 >**

ID	Location	Main Habitat	Other habitats
2	75m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	77m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	93m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	117m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
7	233m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	**0**

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.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	**3**

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.

Features are displayed on the Habitat designations map on **page 112 >**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	**On site**	**NLUD Ref: 471801197**	**Low**	**National Land Use Database - Previously Developed Land**	**UK Perspectives Aerial Photography**	**-**
6	212m NE	HLD_refs: EAHLD04176	Low	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography	-
8	239m N	HLD_refs: EAHLD04233	Low	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

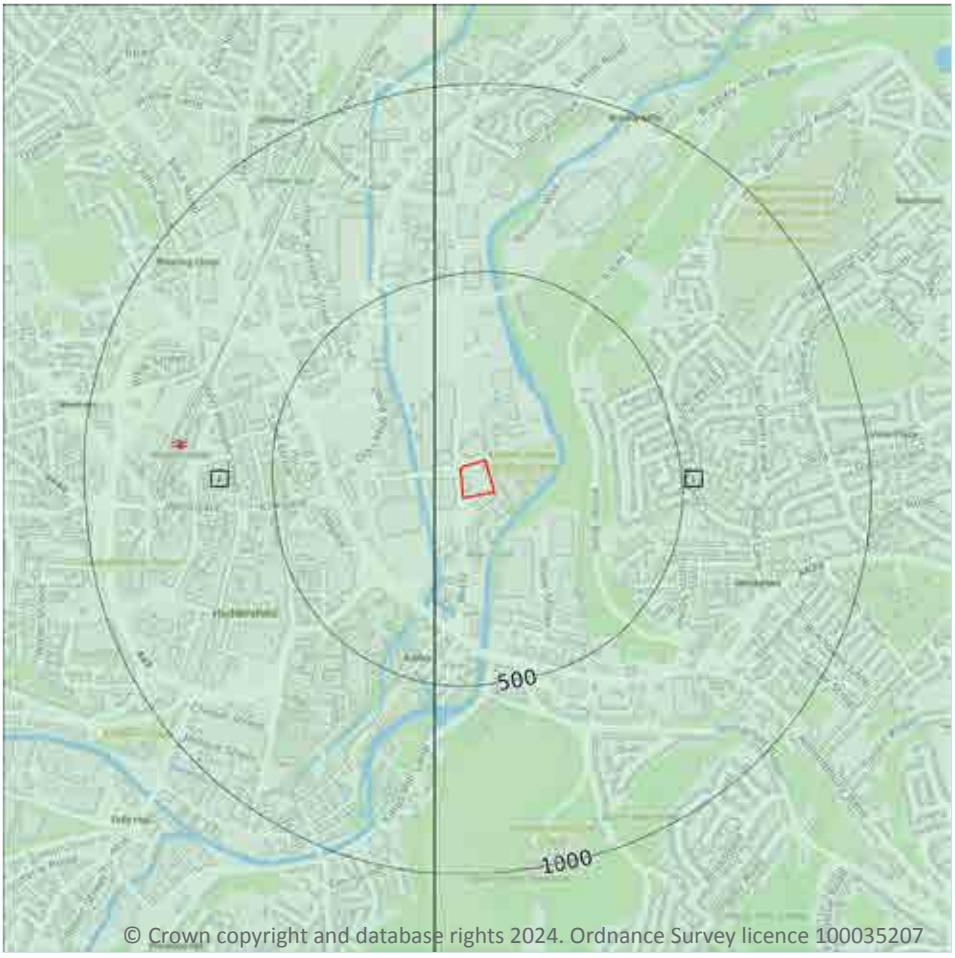
Records within 250m	**0**

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

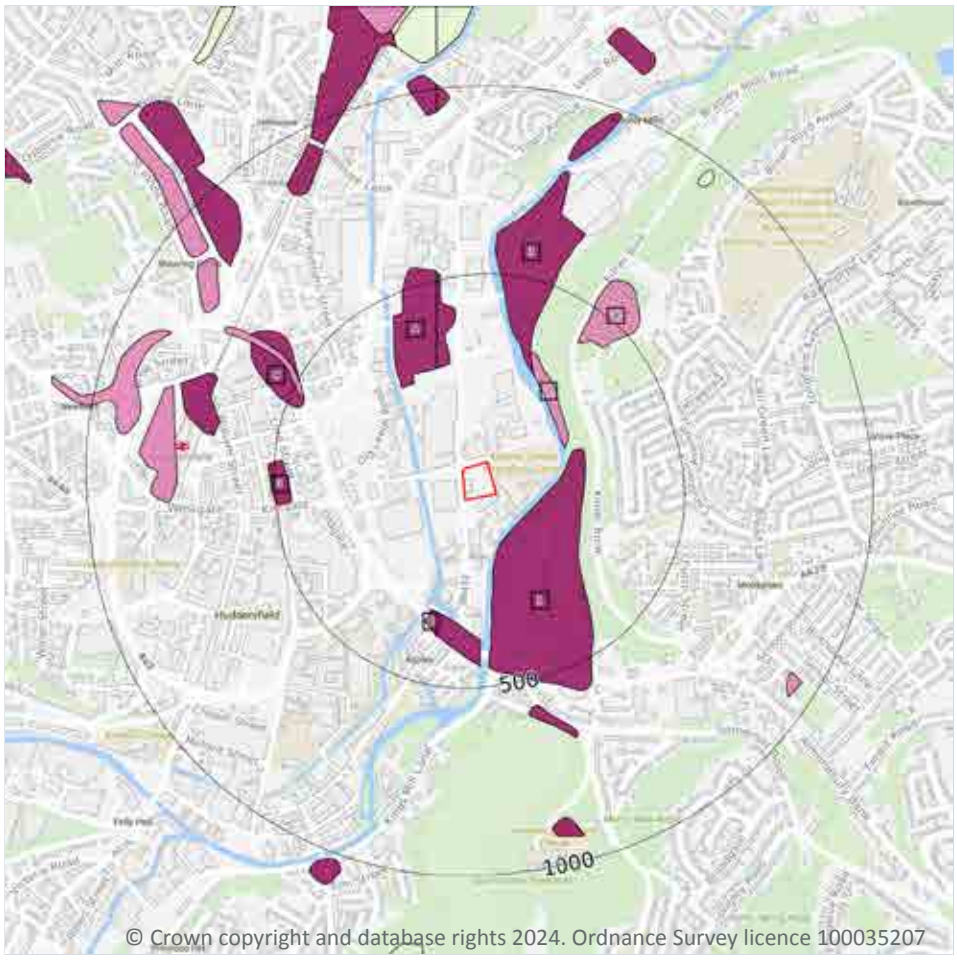
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 115 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**SE11NE**
2	68m W	Full	Full	Full	Full	SE11NW

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	12

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.

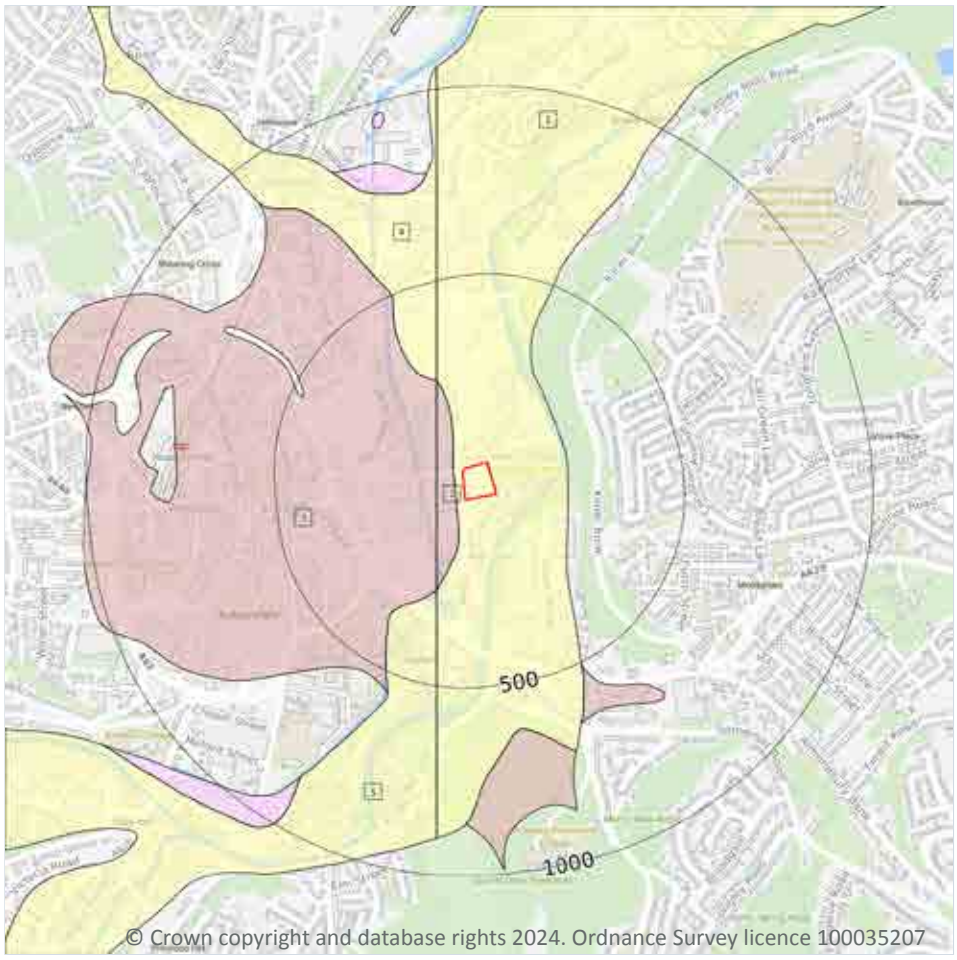
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 116 >**

ID	Location	LEX Code	Description	Rock description
1	94m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	204m NE	WGR-VOID	Worked Ground (Undivided)	Void
3	262m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	263m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

ID	Location	LEX Code	Description	Rock description
A	276m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
B	304m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
B	306m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	398m NE	WGR-VOID	Worked Ground (Undivided)	Void
5	459m W	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
C	459m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
C	469m NW	WGR-VOID	Worked Ground (Undivided)	Void
C	496m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m **5**

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 118 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCSV**	**Alluvium - Clay, Sand And Gravel**	**Clay, Sand And Gravel**
2	24m W	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
3	68m W	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

ID	Location	LEX Code	Description	Rock description
4	244m N	ALV-XCSV	Alluvium - Clay, Sand And Gravel	Clay, Sand And Gravel
5	251m S	ALV-XCSV	Alluvium - Clay, Sand And Gravel	Clay, Sand And Gravel

This data is sourced from the British Geological Survey.

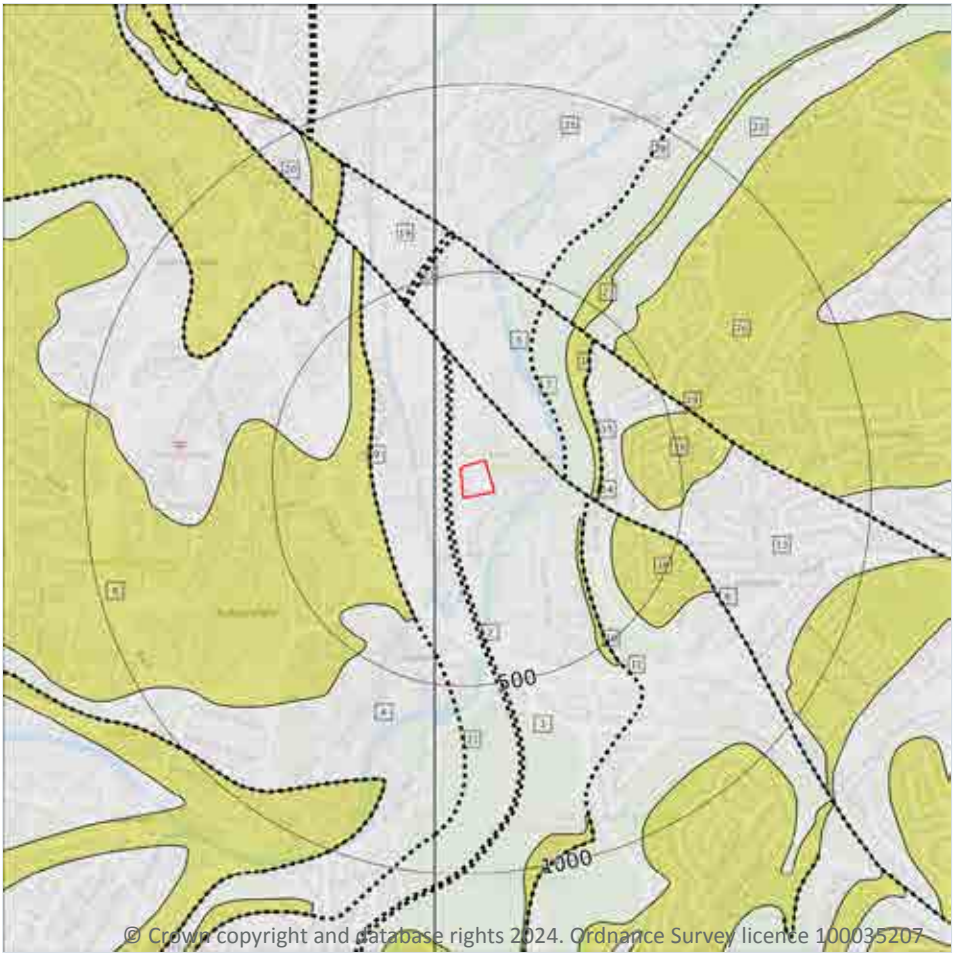
14.4 Landslip (10k)

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	14

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 120 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**PLCM-MDSS**	**Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone**	**Langsettian Sub-age**
4	68m W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age

ID	Location	LEX Code	Description	Rock age
5	115m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
8	227m W	MBR-SDST	Middle Band Rock - Sandstone	Langsettian Sub-age
10	237m E	STNR-SDST	Stanningley Rock - Sandstone	Langsettian Sub-age
12	257m E	EYR-SDST	80 Yard Rock - Sandstone	Langsettian Sub-age
13	273m E	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
16	329m E	EYR-SDST	80 Yard Rock - Sandstone	Langsettian Sub-age
18	351m E	EF-SDST	Elland Flags - Sandstone	Langsettian Sub-age
19	354m N	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
22	428m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
23	428m NE	EYR-SDST	80 Yard Rock - Sandstone	Langsettian Sub-age
25	430m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
26	442m NE	EF-SDST	Elland Flags - Sandstone	Langsettian Sub-age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	**15**

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.

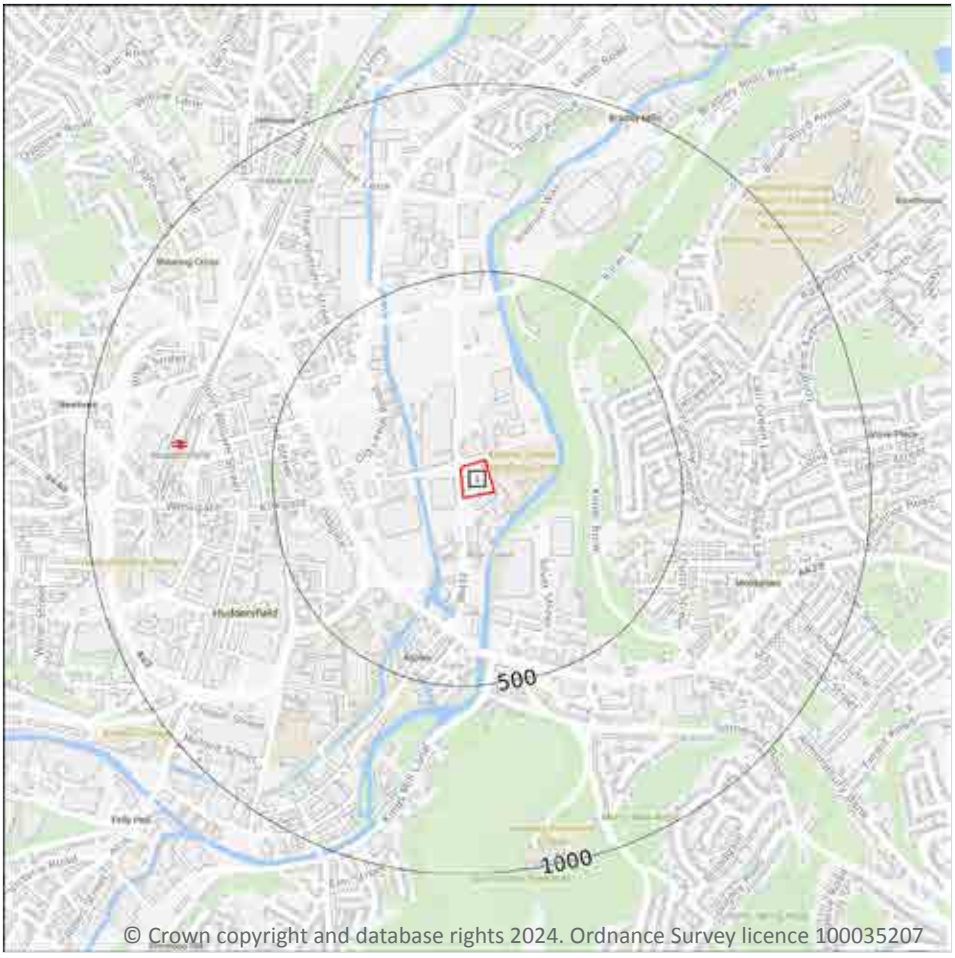
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 120 >**

ID	Location	Category	Description
2	30m NW	FOSSIL_HORIZON	Fossil horizon, marine band
3	40m W	ROCK	Coal seam, inferred
6	115m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
7	191m E	ROCK	Coal seam, inferred
9	227m W	ROCK	Coal seam, inferred

ID	Location	Category	Description
11	247m E	ROCK	Coal seam, inferred
14	273m E	ROCK	Coal seam, inferred
15	280m E	ROCK	Coal seam, observed
17	335m NE	ROCK	Coal seam, inferred
20	354m N	FAULT	Normal fault, inferred; crossmarks on downthrow side
21	418m S	ROCK	Coal seam, inferred
24	428m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
27	454m N	FOSSIL_HORIZON	Fossil horizon, marine band
28	456m N	ROCK	Coal seam, inferred
29	465m N	ROCK	Coal seam, inferred

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

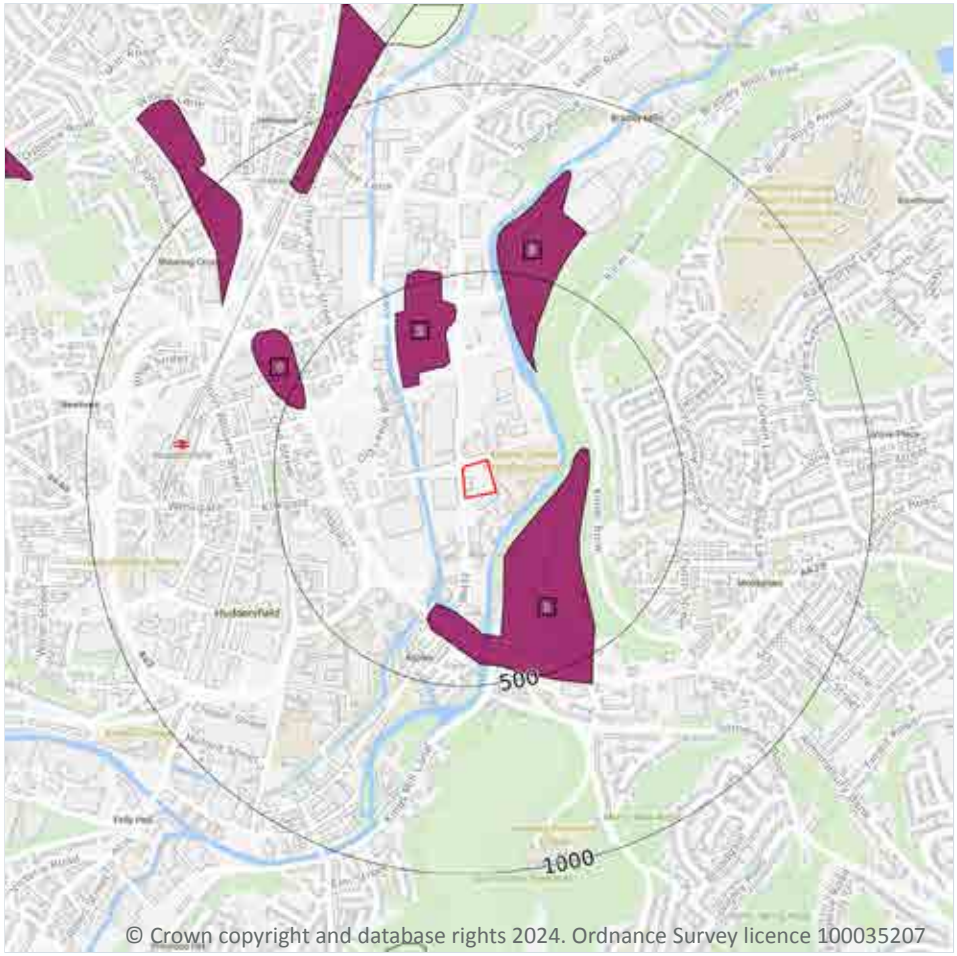
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 123 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW077_huddersfield_v4**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

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

15.2 Artificial and made ground (50k)

Records within 500m	4

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 124 >**

ID	Location	LEX Code	Description	Rock description
1	118m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	250m NW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	268m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
4	450m W	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

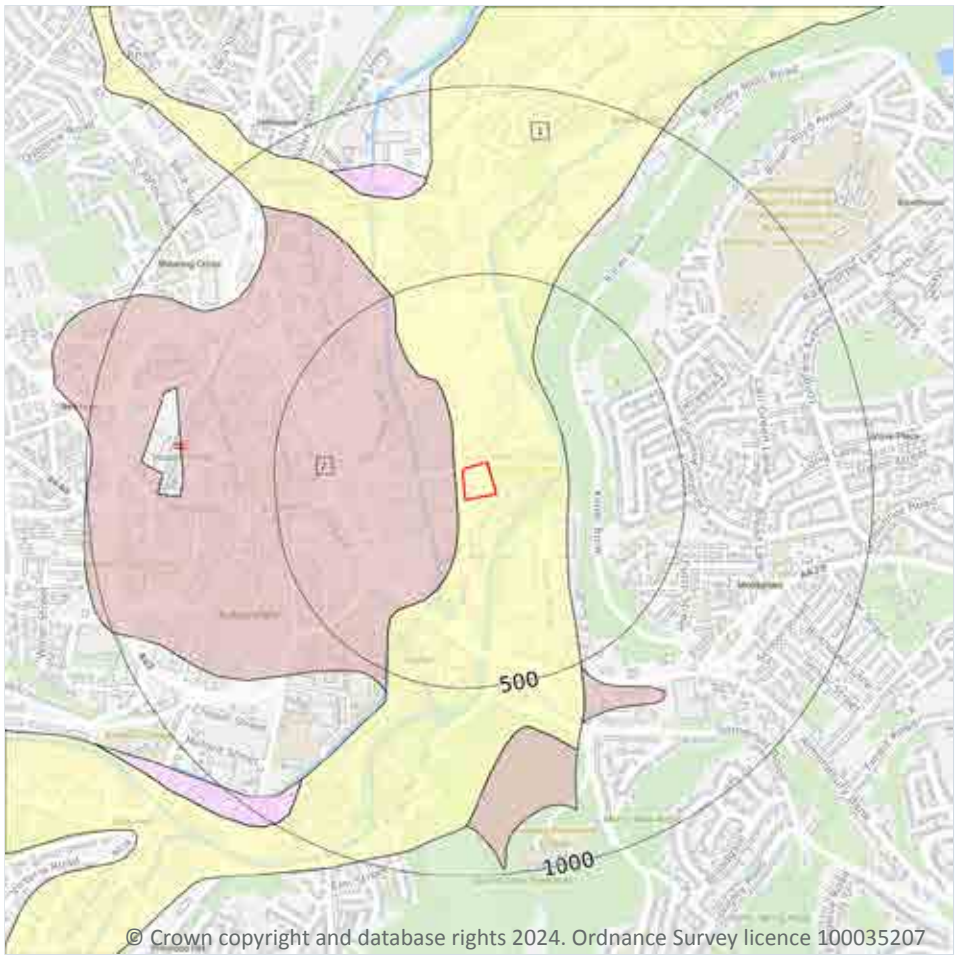
15.3 Artificial ground permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m	2

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 126 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
2	21m NW	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial 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 superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**High**	**Very Low**
21m NW	Mixed	High	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.

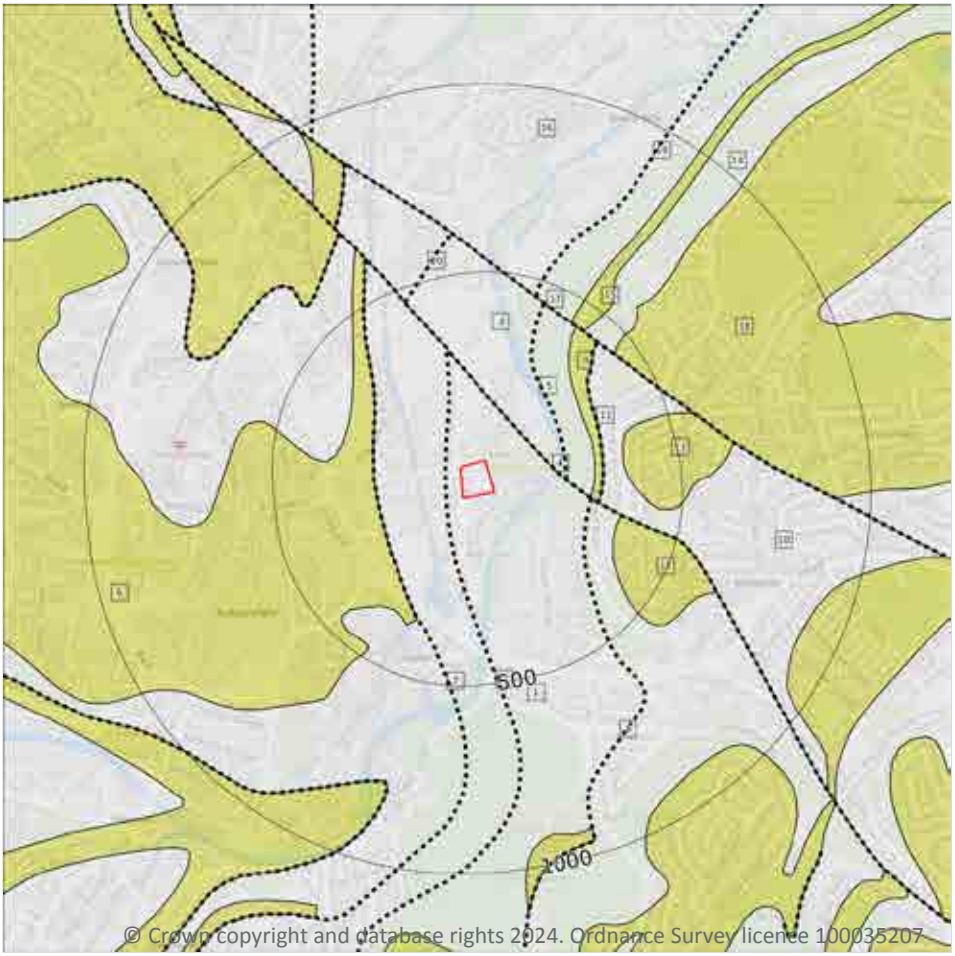
15.7 Landslip permeability (50k)

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	11

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 128 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**PLCM-MDSS**	**PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE**	**WESTPHALIAN**
3	116m NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
6	223m SW	MBR-SDST	MIDDLE BAND ROCK - SANDSTONE	WESTPHALIAN

ID	Location	LEX Code	Description	Rock age
9	256m E	EYR-SDST	80 YARD ROCK - SANDSTONE	WESTPHALIAN
10	278m E	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
12	335m E	EYR-SDST	80 YARD ROCK - SANDSTONE	WESTPHALIAN
13	351m E	EF-SDST	ELLAND FLAGS - SANDSTONE	WESTPHALIAN
14	430m NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
15	430m NE	EYR-SDST	80 YARD ROCK - SANDSTONE	WESTPHALIAN
16	430m NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
18	443m NE	EF-SDST	ELLAND FLAGS - SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**1**

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Moderate**	**Low**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**9**

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.

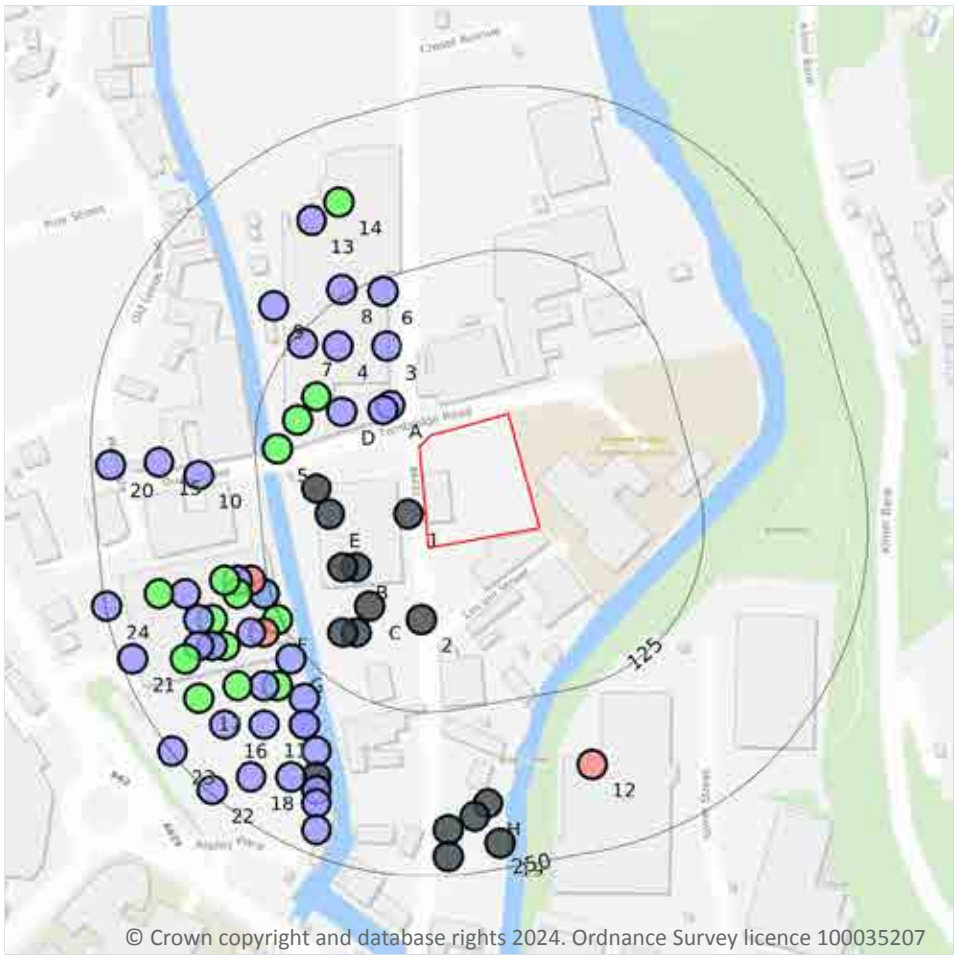
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 128 >**

ID	Location	Category	Description
2	40m W	ROCK	Coal seam, inferred
4	116m NE	FAULT	Fault, inferred

ID	Location	Category	Description
5	195m E	ROCK	Coal seam, inferred
7	223m SW	ROCK	Coal seam, inferred
8	255m E	ROCK	Coal seam, inferred
11	278m E	ROCK	Coal seam, inferred
17	430m NE	FAULT	Fault, inferred
19	454m N	ROCK	Coal seam, inferred
20	462m N	ROCK	Coal seam, inferred

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

16.1 BGS Boreholes

Records within 250m	70

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 131 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	13m SW	415060 416790	I M C DEVELOPMENT TP 7	-	Y	N/A
A	38m NW	415046 416873	HOLSET HUDDERSFIELD 1	4.32	N	40831 ↗
A	39m NW	415040 416870	HOLSET HUDDERSFIELD 1A	7.92	N	41063 ↗

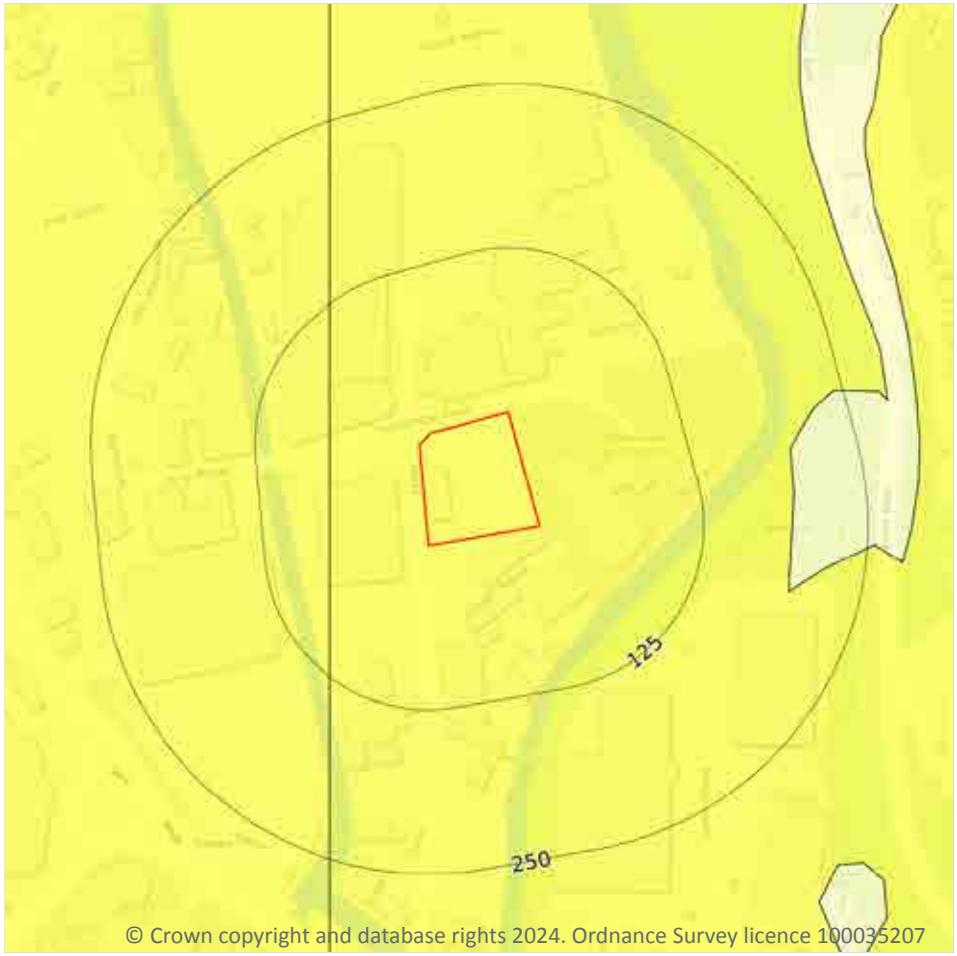
ID	Location	Grid reference	Name	Length	Confidential	Web link
2	55m S	415070 416710	I M C DEVELOPMENT TP 6	-	Y	N/A
B	57m SW	415020 416750	I M C DEVELOPMENT TP 2	-	Y	N/A
C	64m SW	415030 416720	I M C DEVELOPMENT TP 5	-	Y	N/A
D	65m NW	415009 416868	HOLSET HUDDERSFIELD 4	7.92	N	40834 ↗
B	67m SW	415010 416750	I M C DEVELOPMENT 2	-	Y	N/A
E	73m W	415000 416790	I M C DEVELOPMENT TP 3	-	Y	N/A
3	76m NW	415043 416918	HOLSET HUDDERSFIELD 2	7.32	N	40832 ↗
E	81m W	414990 416810	IMC DEVELOPMENT TP 4	-	Y	N/A
C	85m SW	415020 416700	I M C DEVELOPMENT 1	-	Y	N/A
D	87m NW	414990 416880	HOLSET HUDDERSFIELD 2	10.3	N	13332288 ↗
C	92m SW	415010 416700	I M C DEVELOPMENT TP 1	-	Y	N/A
D	95m W	414975 416862	HOLSET HUDDERSFIELD 8	10.97	N	41059 ↗
4	98m NW	415006 416918	HOLSET HUDDERSFIELD 5	9.14	N	40835 ↗
5	108m W	414960 416840	HOLSET HUDDERSFIELD 1	11.0	N	13332283 ↗
6	116m NW	415040 416960	HOLSET HUDDERSFIELD 3	7.92	N	40833 ↗
7	118m NW	414979 416920	HOLSET HUDDERSFIELD 9	9.45	N	41060 ↗
F	128m SW	414960 416710	BROCKHOLES HUDDERSFIELD P5	30.0	N	41409 ↗
8	130m NW	415009 416961	HOLSET HUDDERSFIELD 6	7.92	N	40836 ↗
F	130m SW	414950 416730	BROCKHOLES HUDDERSFIELD P4	30.0	N	41408 ↗
F	130m SW	414950 416730	BROCKHOLES HUDDERSFIELD TP 4	2.85	N	41378 ↗
G	135m SW	414970 416680	BROCKHOLES HUDDERSFIELD TP 6	2.0	N	41380 ↗
F	137m SW	414940 416740	BROCKHOLES HUDDERSFIELD RD1	30.8	N	41414 ↗
F	141m SW	414950 416700	BROCKHOLES HUDDERSFIELD RD2	31.2	N	41415 ↗
F	147m W	414930 416740	BROCKHOLES HUDDERSFIELD TP 2	3.2	N	41376 ↗
G	149m SW	414980 416650	BROCKHOLES HUDDERSFIELD TP 8	2.6	N	41382 ↗
F	149m SW	414930 416730	BROCKHOLES HUDDERSFIELD P3	30.0	N	41407 ↗
F	150m SW	414940 416700	BROCKHOLES HUDDERSFIELD TP 5	2.75	N	41379 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
9	154m NW	414957 416949	HOLSET HUDDERSFIELD 10	5.03	N	41061 ↗
G	156m SW	414960 416660	BROCKHOLES HUDDERSFIELD P6	30.0	N	41410 ↗
F	157m W	414920 416740	BROCKHOLES HUDDERSFIELD P1	30.0	N	41405 ↗
G	163m SW	414950 416660	BROCKHOLES HUDDERSFIELD TP 7	2.1	N	41381 ↗
G	165m SW	414980 416630	BROCKHOLES HUDDERSFIELD T10	10.0	N	41403 ↗
G	165m SW	414980 416630	BROCKHOLES HUDDERSFIELD TP 10	2.1	N	41384 ↗
10	170m W	414900 416820	QUAY STREET HUDDERSFIELD 1	8.5	N	13223744 ↗
F	172m SW	414920 416690	BROCKHOLES HUDDERSFIELD P8	30.0	N	41412 ↗
F	174m SW	414910 416710	BROCKHOLES HUDDERSFIELD P2	30.0	N	41406 ↗
G	177m SW	414990 416610	BROCKHOLES HUDDERSFIELD TP 12	2.1	N	41386 ↗
G	179m SW	414930 416660	BROCKHOLES HUDDERSFIELD P9	30.0	N	41413 ↗
F	181m SW	414910 416690	BROCKHOLES HUDDERSFIELD TP 27	2.25	N	41399 ↗
F	184m SW	414900 416710	BROCKHOLES HUDDERSFIELD TP 3	3.15	N	41377 ↗
11	184m SW	414950 416630	BROCKHOLES HUDDERSFIELD TP 11	2.4	N	41385 ↗
12	184m SE	415200 416600	R DEWHIRST AND CO	74.06	N	18524377 ↗
13	187m NW	414986 417014	HOLSET HUDDERSFIELD 11	8.53	N	41062 ↗
F	188m W	414890 416730	BROCKHOLES HUDDERSFIELD TP 1	2.5	N	41375 ↗
F	190m SW	414900 416690	BROCKHOLES HUDDERSFIELD TP S1	1.6	N	41400 ↗
14	191m NW	415007 417028	HOLSET HUDDERSFIELD 7	10.36	N	40837 ↗
G	194m SW	414990 416590	FOX HOLLIES ROAD, HUDDERSFIELD TP2	-	Y	N/A
15	199m W	414870 416830	QUAY STREET HUDDERSFIELD 2	8.1	N	13223749 ↗
H	200m S	415120 416570	EXAMINER BUILDING HUDDERSFIELD WS3	-	Y	N/A
G	203m SW	414990 416580	BROCKHOLES HUDDERSFIELD TP 13	3.15	N	41387 ↗
F	204m SW	414890 416680	BROCKHOLES HUDDERSFIELD P7	30.0	N	41411 ↗
G	204m SW	414970 416590	BROCKHOLES HUDDERSFIELD TP S3	2.9	N	41402 ↗
16	206m SW	414920 416630	BROCKHOLES HUDDERSFIELD TP 9	2.8	N	41383 ↗
H	208m S	415110 416560	EXAMINER BUILDING HUDDERSFIELD WS9	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
F	208m W	414870 416730	BROCKHOLES HUDDERSFIELD RD3	30.0	N	41416 ↗
17	209m SW	414900 416650	BROCKHOLES HUDDERSFIELD RD4	30.0	N	41417 ↗
G	213m SW	414990 416570	BROCKHOLES HUDDERSFIELD T13	8.9	N	41404 ↗
H	215m S	415090 416550	EXAMINER BUILDING HUDDERSFIELD WS2	-	Y	N/A
18	221m SW	414940 416590	BROCKHOLES HUDDERSFIELD TP 19	3.1	N	41393 ↗
19	231m S	415130 416540	EXAMINER BUILDING HUDDERSFIELD WS10	-	Y	N/A
G	231m SW	414990 416550	BROCKHOLES HUDDERSFIELD TP 14	3.0	N	41388 ↗
H	235m S	415090 416530	EXAMINER BUILDING HUDDERSFIELD WS8	-	Y	N/A
20	236m W	414833 416828	HUDDERSFIELD TE 6	4.88	N	41076 ↗
21	241m SW	414850 416680	BROCKHOLES HUDDERSFIELD TP 23	2.85	N	41396 ↗
22	248m SW	414910 416580	BROCKHOLES HUDDERSFIELD TP 18	2.95	N	41392 ↗
23	249m SW	414880 416610	BROCKHOLES HUDDERSFIELD TP 20	2.9	N	41394 ↗
24	249m W	414830 416720	BROCKHOLES HUDDERSFIELD TP 25	2.75	N	41398 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	1

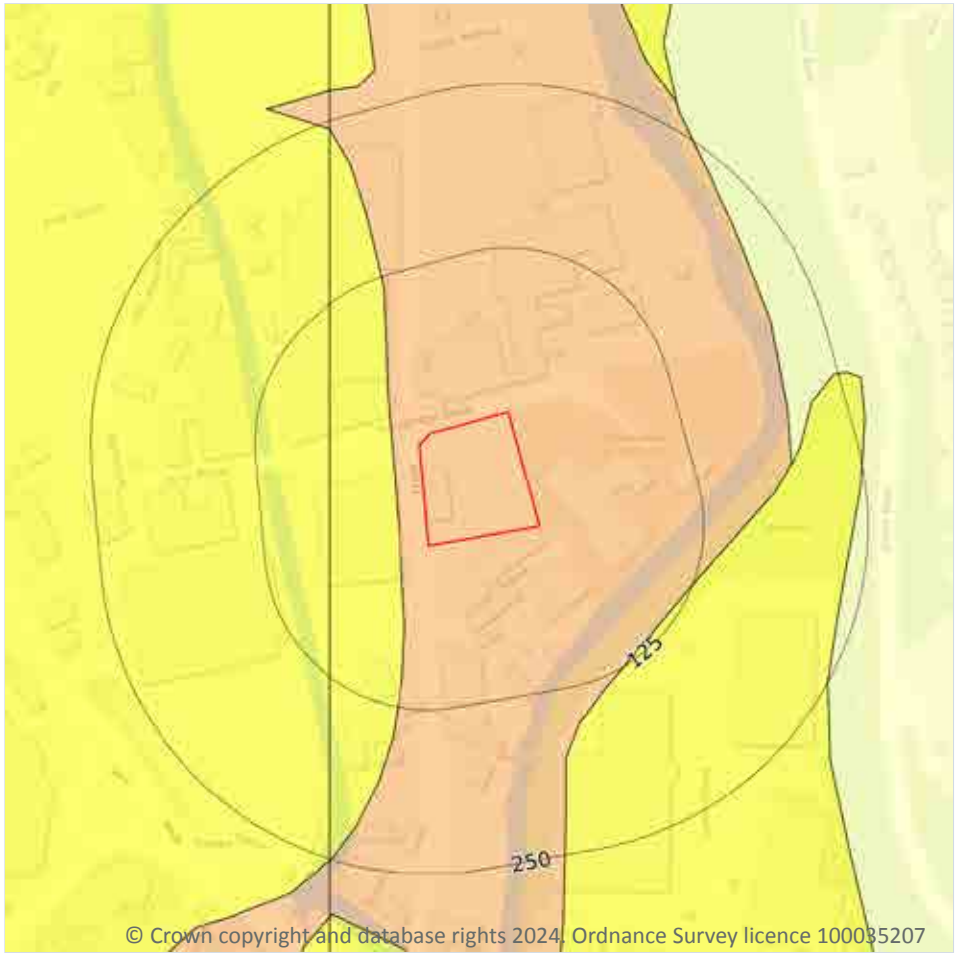
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 135 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	2

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

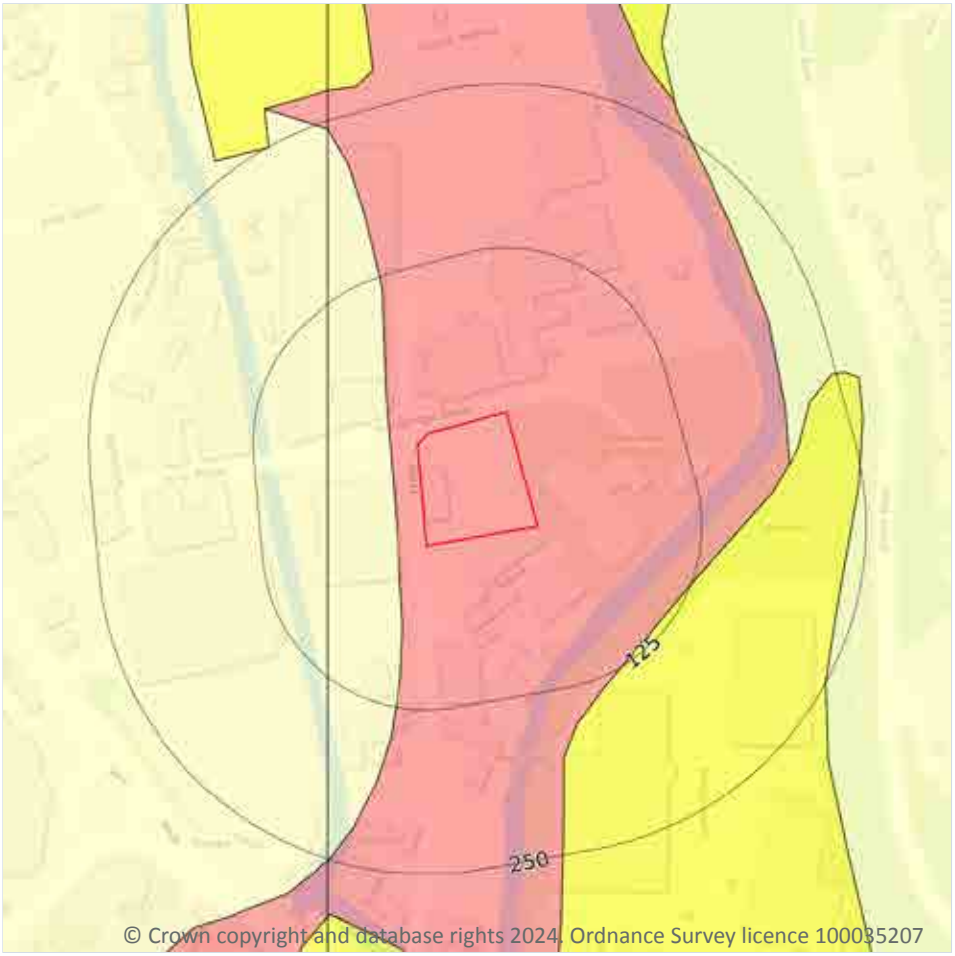
Features are displayed on the Natural ground subsidence - Running sands map on **page 136 >**

Location	Hazard rating	Details
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**

Location	Hazard rating	Details
21m NW	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	2

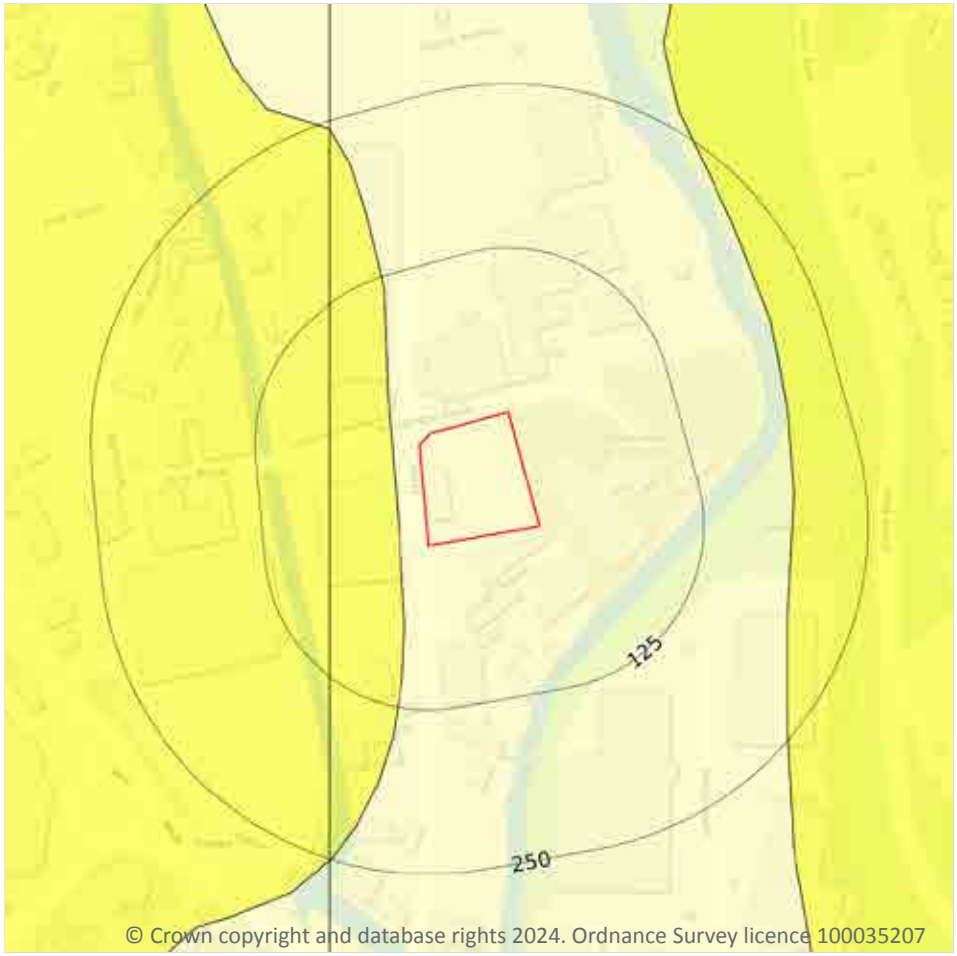
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 138 >**

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.**
21m NW	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	2

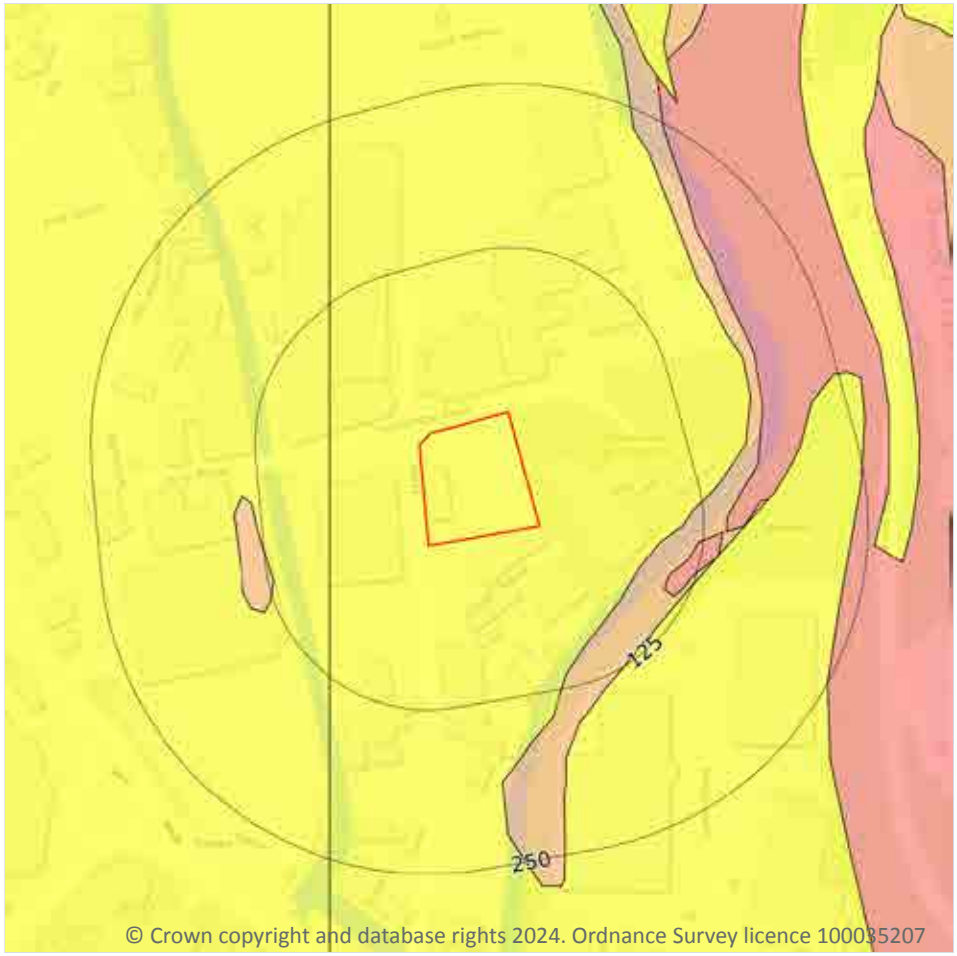
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 140 >**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
21m NW	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	1

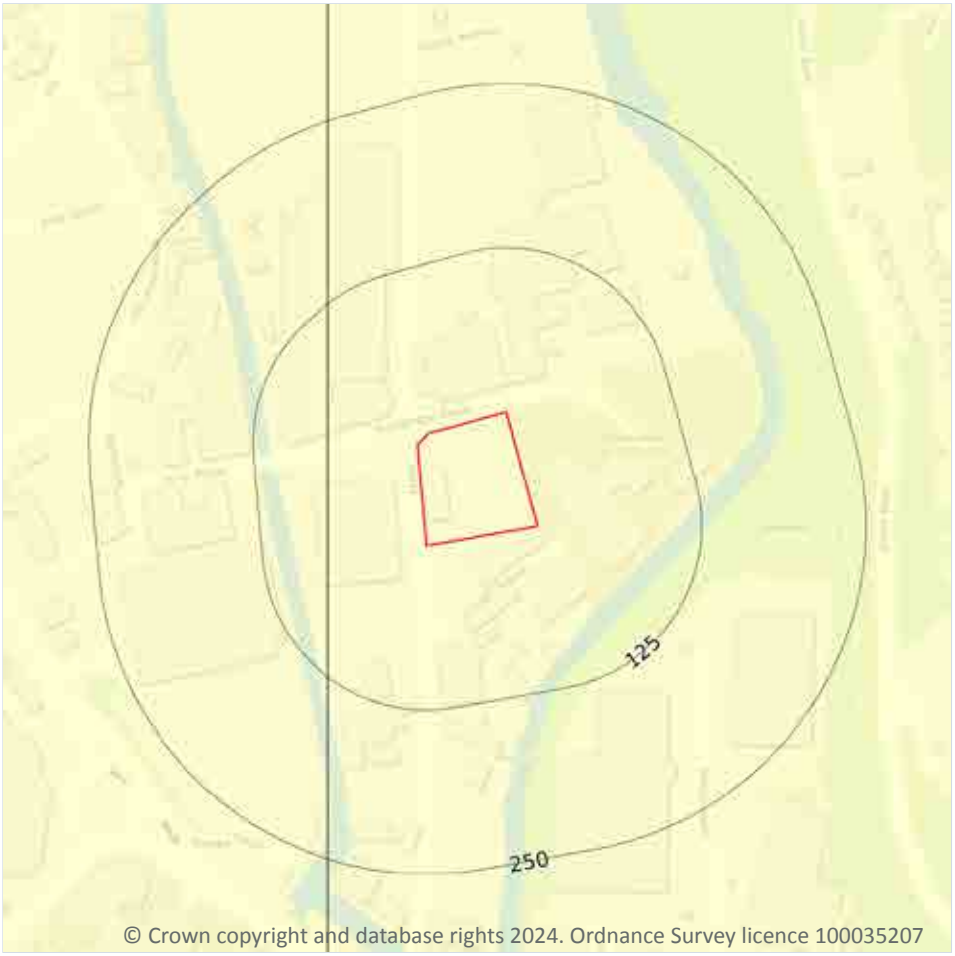
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 141 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



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	1

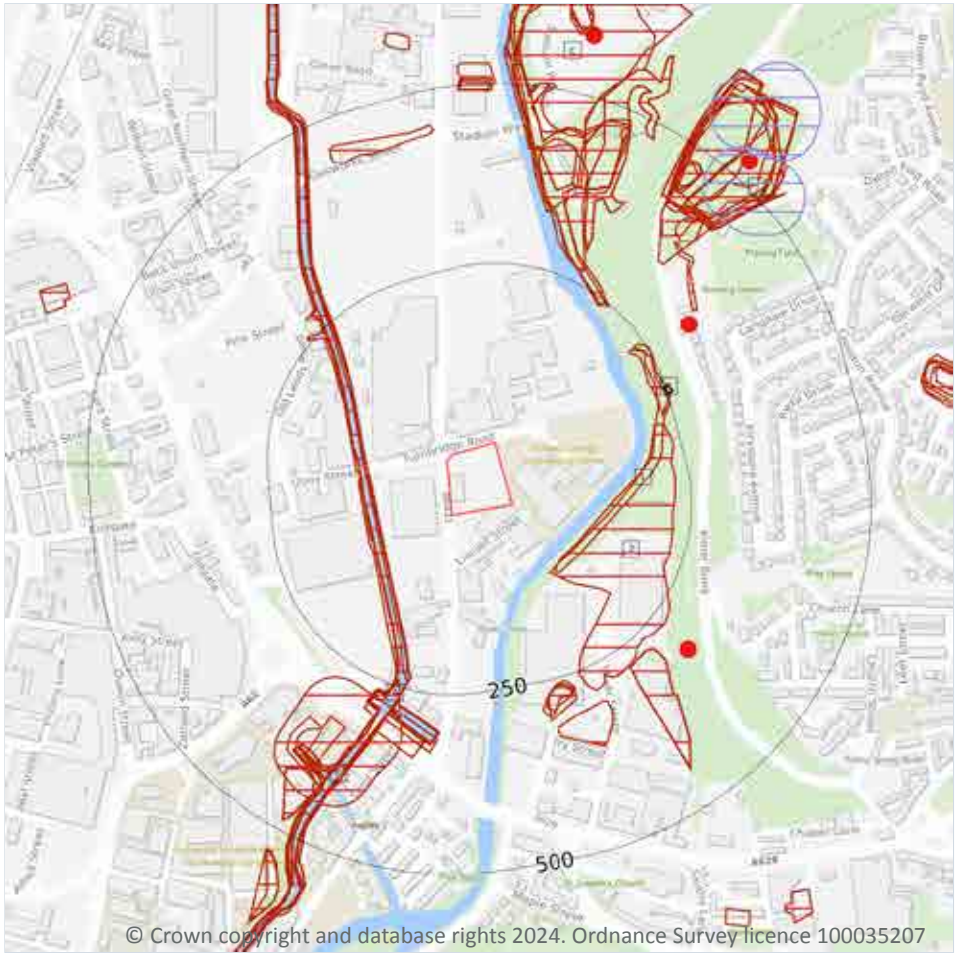
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 142 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

BritPits

Surface ground workings

Underground workings

Underground mining extents

Historical mineral planning areas

TCA non-coal mining

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	2

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.

Features are displayed on the Mining and ground workings map on **page 144 >**

ID	Location	Details	Description
5	316m NE	Name: Upper Hill Top Address: Moldgreen, HUDDERSFIELD, West Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
6	318m SE	Name: Storths Address: Moldgreen, HUDDERSFIELD, West Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	**13**

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 144 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	101m SE	Unspecified Ground Workings	1905	1:10560
A	101m SW	Canal	1938	1:10560
A	103m SW	Canal	1948	1:10560
A	103m SW	Canal	1905	1:10560
2	104m SE	Unspecified Pit	1889	1:10560
A	106m SW	Canal	1889	1:10560
B	232m E	Unspecified Ground Workings	1956	1:10560
C	239m NE	Unspecified Ground Workings	1975	1:10000
D	241m S	Disused Canal	1985	1:10000
D	241m S	Canal	1966	1:10560
D	241m S	Disused Canal	1975	1:10000
D	241m S	Canal	1956	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
C	242m NE	Unspecified Ground Workings	1965	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	**13**

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

Features are displayed on the Mining and ground workings map on **page 144 >**

ID	Location	Land Use	Year of mapping	Mapping scale
B	247m NE	Unspecified Old Shaft	1905	1:10560
-	792m W	Tunnels	1975	1:10000
-	792m W	Tunnels	1956	1:10560
-	792m W	Tunnels	1985	1:10000
-	792m W	Tunnels	1966	1:10560
-	799m W	Tunnel	1948	1:10560
-	799m W	Tunnel	1905	1:10560
-	807m W	Tunnels	1975	1:10000
-	807m W	Tunnels	1956	1:10560
-	807m W	Tunnels	1985	1:10000
-	807m W	Tunnels	1966	1:10560
-	813m W	Tunnel	1948	1:10560
-	813m W	Tunnel	1905	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	**0**

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

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

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

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	1

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.

Features are displayed on the Mining and ground workings map on **page 144 >**

ID	Location	Mineral type	Mineral
I	442m NE	Stone	Fireclay

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	2

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.

Location	Mineral
410m NE	Fireclay
410m NE	Fireclay

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	1

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

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

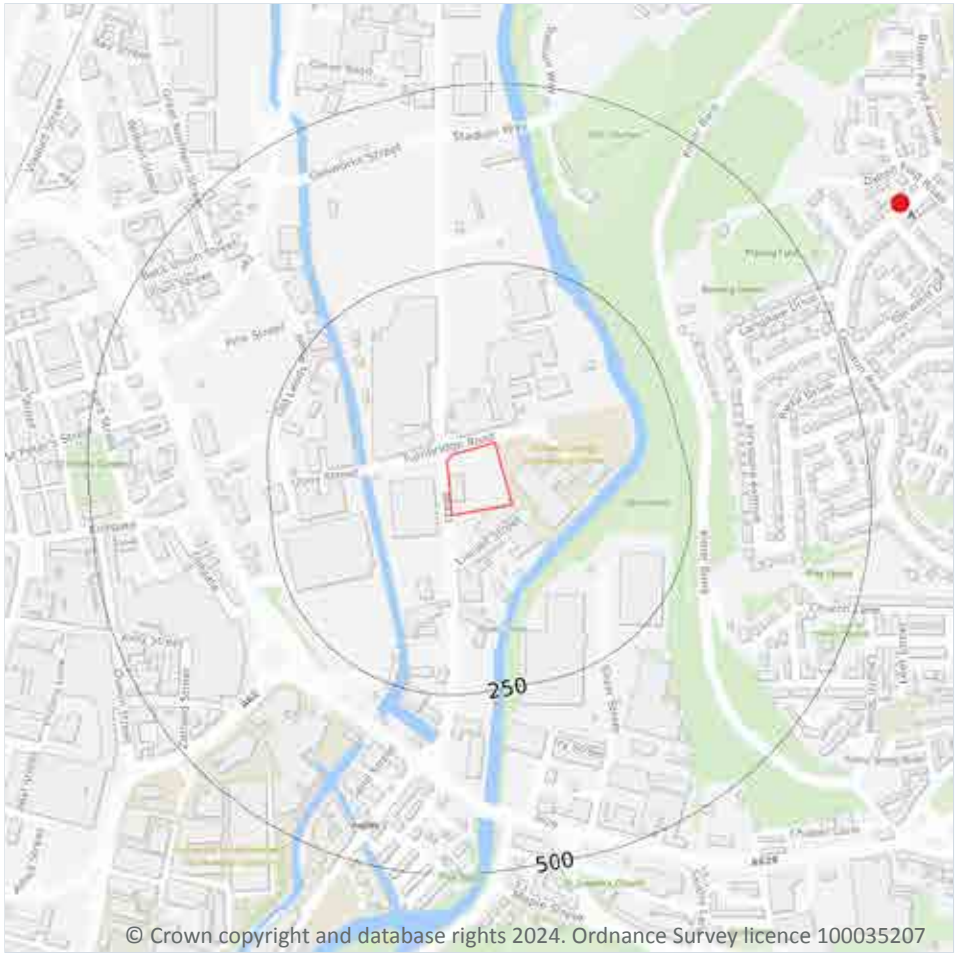
18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes



Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- Mining cavities
- Reported recent incidents
- Historical incidents
- BGS karst database (Point)
- BGS karst database (Line)
- BGS karst database (Area)

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	2

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.

Features are displayed on the Ground cavities and sinkholes map on **page 150 >**

ID	Location	Mine Address	Mineral	Data source	Publisher
A	656m NE	Brown Royd, West Yorkshire	Clay	LISTING OF NEW MINERAL RECORDS OFFICE CATALOGUE.	UNPUBLISHED/DRAFT
A	656m NE	Brown Royd, West Yorkshire	Clay	LISTING OF NEW MINERAL RECORDS OFFICE CATALOGUE.	UNPUBLISHED/DRAFT

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

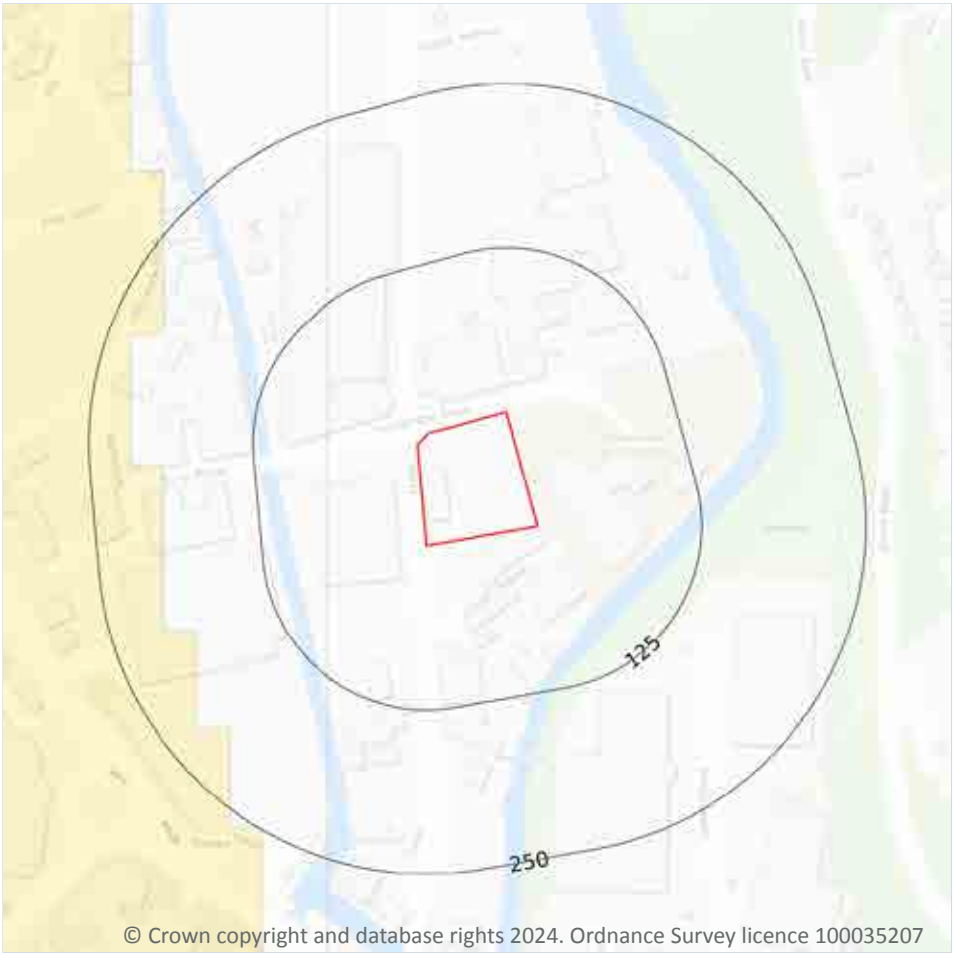
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

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



Site Outline

Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

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 153 >**

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	2

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^2. 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^2; 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	**25 - 35 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**120 - 180 mg/kg**	**30 - 45 mg/kg**
21m NW	25 - 35 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 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^2).

This data is sourced from the British Geological Survey.

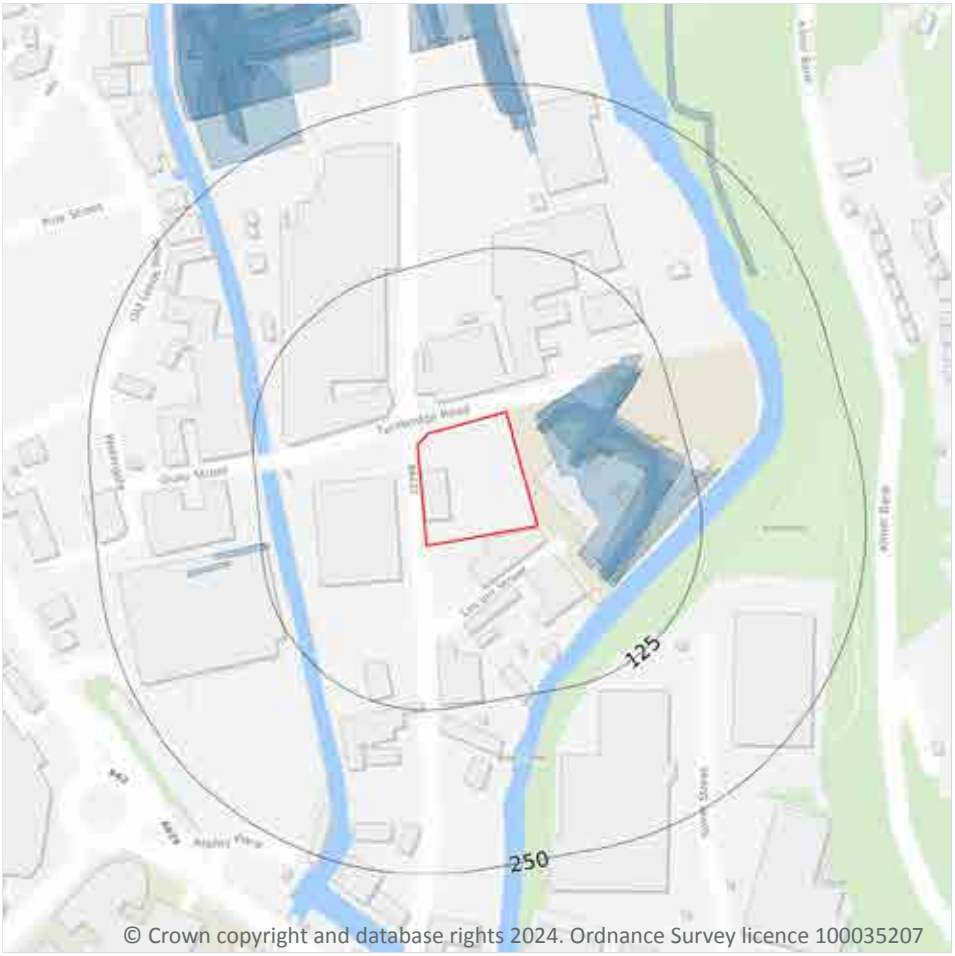
21.3 BGS Measured Urban Soil Chemistry

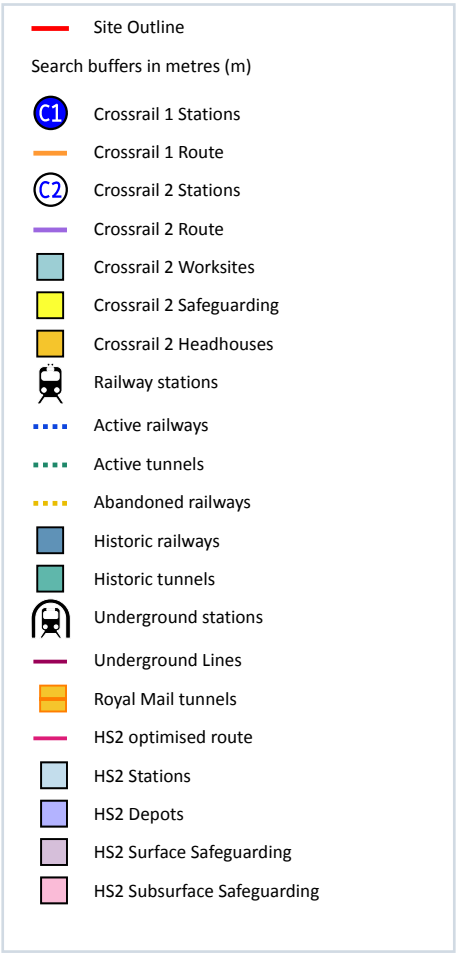
Records within 50m	0

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^2.

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	11

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 156 >**

Location	Land Use	Year of mapping	Mapping scale
19m NE	Railway Sidings	1948	10560
20m NE	Railway Sidings	1932	2500
20m NE	Railway Sidings	1938	10560
22m NE	Railway Sidings	1956	10560
119m W	Railway Sidings	1893	2500
151m W	Railway Sidings	1893	2500
198m N	Railway Sidings	1932	2500
213m NE	Tramway Sidings	1918	2500
216m N	Railway Sidings	1938	10560
226m N	Railway Sidings	1948	10560
242m NW	Railway Sidings	1966	10560

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

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

Appendix 4

Photographs

Photo 1: Image shows entry to site off St Andrew's Road.

Photo 2: Image shows shipping containers present to the southwest corner of the site.

Photo 3: Image shows the centre area of the site.

Photo 4: Image shows piles of assumed demolition material.