



Abbeydale Geoscience

PHASE 1 DESK STUDY REPORT AND COAL MINING RISK ASSESSMENT

The Mill Academy, Worsbrough, Barnsley

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Client:

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PHASE 1 DESK STUDY REPORT AND COAL MINING RISK ASSESSMENT

THE MILL ACADEMY, WORSBROUGH, BARNSELEY

DOCUMENT VERIFICATION

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TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY	1
2.	INTRODUCTION	2
2.1.	Project Scope	
2.2.	Objectives	
2.3.	Limitations	
3.	THE SITE	3
3.1.	Existing Conditions	
3.2.	Proposed Development	
4.	HISTORY	6
5.	GEOLOGY	8
5.1.	Sources of Information	
5.2.	Artificial Soils	
5.3.	Natural Soils	
5.4.	Solid Geology	
6.	HYDROGEOLOGY & HYDROLOGY	8
6.1.	Hydrogeology	
6.2.	Hydrology	
6.3.	Flood Risk	
7.	MINING RISK ASSESSMENT & QUARRYING	9
7.1.	Sources of Information	
7.2.	Shallow Mine Workings	
7.3.	Deep Mine Workings	
7.4.	Mine Entries	
7.5.	Quarrying / Opencast	
8.	ANTICIPATED GROUND CONDITIONS	11

9.	GEOTECHNICAL CONSIDERATIONS	11
9.1.	Proposed Buildings & Structures	
9.2.	Mining Precautions	
9.3.	New Access Road & Hardstanding	
9.4.	Excavations	
9.5.	Surface Water Drainage	
9.6.	Chemical Precautions	
10.	ENVIRONMENTAL SEARCHES	13
10.1.	Current Land Uses	
10.2.	Historical Industrial Sites	
10.3.	Landfills and Waste Sites	
10.4.	Potentially Infilled Land	
10.5.	Environmental Permits, Incidents and Registers	
10.6.	Environmentally Sensitive Receptors	
11.	PRELIMINARY ENVIRONMENTAL RISK ASSESSMENT	14
11.1.	Proposed Site Use	
11.2.	Potential On Site Contamination Sources	
11.3.	Off Site Contamination Sources	
11.4.	Ground Gases	
11.5.	Invasive Plant Species	
11.6.	Potential Pathways	
11.7.	Human Health Receptors	
11.8.	Controlled Waters Receptors	
11.9.	Conceptual Site Model	
12.	SOIL MANAGEMENT	17
12.1.	Reuse of Existing Soils	
12.2.	Waste Disposal	
12.3.	Imported Soils	
13.	REGULATORY APPROVAL	18
14.	FURTHER INVESTIGATION	18

APPENDICES

APPENDIX A - PROPOSED LAYOUT DRAWINGS	A
APPENDIX B - HISTORICAL MAPS	B
APPENDIX C - CONSULTANTS COAL MINING REPORT	C
APPENDIX D - GROUNDSURE REPORT	D
APPENDIX E - HISTORICAL CONTAMINATION RISK ASSESSMENT	E
APPENDIX F - CONCEPTUAL SITE MODEL	F

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THE MILL ACADEMY, WORSBROUGH, BARNSELY

1. EXECUTIVE SUMMARY

Site Description	<ul style="list-style-type: none">• Site is currently occupied by The Mill Academy School.• There is a slope across the site, rising in elevation from south to north.
History (site)	<ul style="list-style-type: none">• The site remained as undeveloped agricultural land until 1973 when the school was constructed.
History (surrounding area)	<ul style="list-style-type: none">• In 1855 the site is situated in a rural setting with numerous quarries and collieries within 500 m of the site.• Early residential growth in 1890 with the development of Lobwood Lane.• In 1892 St Thomas's cemetery is labelled adjacent to the site.• Between 1929 - 2026 there is significant residential development in the surrounding area.• Between 1973-1977 Worsbrough Lobwood Infants School was constructed.
Geology	<ul style="list-style-type: none">• Undifferentiated Middle Coal Measures; likely mudstone and siltstone.
Hydrogeology	<ul style="list-style-type: none">• Groundwater anticipated within underlying bedrock sequence.
Hydrology	<ul style="list-style-type: none">• No notable hydrology features within 250 m of the site.
Flooding	<ul style="list-style-type: none">• Site is within Flood Zone 1.• An area of surface water flooding is present centrally on site; 1 in 1000 return period to a depth of between 0.1 m - 0.3 m.• Negligible risk from groundwater flooding.
Mining & Quarrying	<ul style="list-style-type: none">• Moderate risk of unrecorded shallow mine workings.• Deep workings recorded in Coal Measures strata; too deep to pose a risk to the surface stability of the site.• No quarrying recorded on or immediately adjacent to the site.
Surface Water Drainage	<ul style="list-style-type: none">• Soakaways unlikely to be feasible based on mudstone bedrock.• Suitability can be assessed further once ground conditions are confirmed.
Preliminary Environmental Assessment	<ul style="list-style-type: none">• No significant potential risks identified.• Future receptors will not be exposed to underlying soils due to highway use.• Intrusive investigation should include a geo-environmental assessment.
Geotechnical Appraisal	<ul style="list-style-type: none">• Top Beamshaw coal seam anticipated at shallow depth. Not likely to have been worked unrecorded in the past.• Depth to natural sub-grade should be confirmed prior to detailed design.
Recommendations	<ul style="list-style-type: none">• Intrusive investigation recommended to confirm ground conditions and suitable founding stratum for new access road.

2. INTRODUCTION

2.1. Project Scope

On the instruction of Barnsley Metropolitan Borough Council, a Phase 1 Desk Study was carried out by Abbeydale Geoscience Limited on a site of The Mill Academy, off Lobwood road, in Worsbrough, Barnsley. See Figure 1.

When writing this report the proposed development was a circular access road around the existing school of Mill Academy, at, or close to, existing ground levels. If there are changes to these proposals then some modification to the comments and recommendations given may be required. The proposed site layout provided by the client is included as Appendix A.

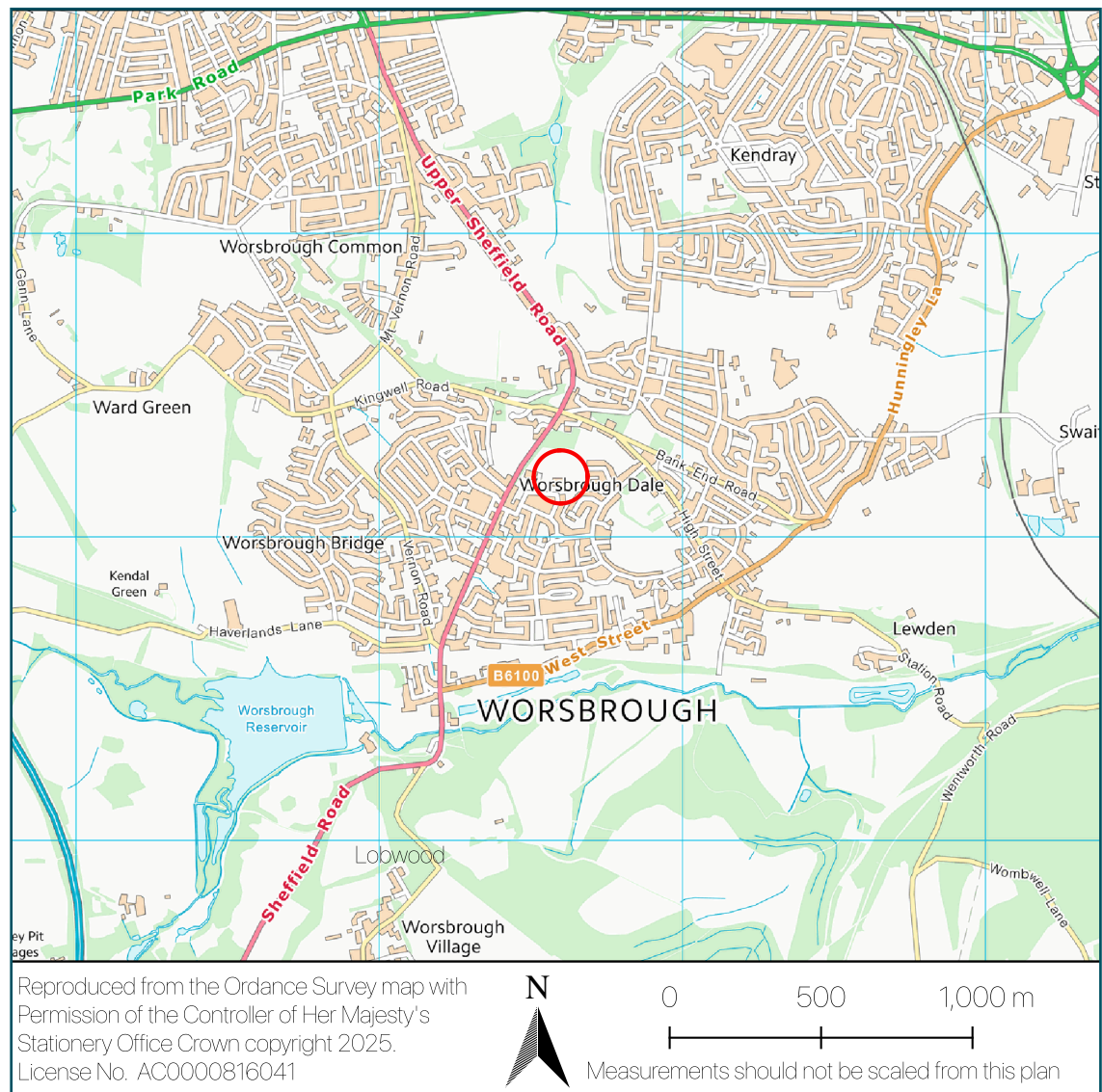


FIGURE 1 - LOCATION PLAN

2.2. Objectives

The overarching objective of this Phase 1 Desk Study is to review the baseline environmental and geotechnical context of the site to support the proposed development. This preliminary assessment focuses on the following key objectives:

- **Desk-Based Review:** Collate and evaluate historical maps, geological records, and environmental datasets to understand past and present site activities.
- **Initial Conceptual Site Model (CSM):** Develop an initial CSM that identifies potential sources of contamination, potential pathways, and vulnerable receptors (pollutant linkages).
- **Preliminary Risk Assessment:** Evaluate potential geo-environmental risks to human health, controlled waters, and ecology, alongside preliminary geotechnical hazards that may impact project design and construction.
- **Recommendations:** Determine the necessity, scope, and specific target areas for a Phase 2 intrusive ground investigation to further quantify any identified geotechnical or geo-environmental risks.

The findings will provide clear recommendations regarding the site's preliminary suitability for its intended use and establish whether a Phase 2 intrusive ground investigation is required prior to construction.

2.3. Limitations

This report was prepared for Barnsley Metropolitan Borough Council, their advisors, and financiers. It should not be shared with others without Abbeydale Geoscience's and our client's written permission. Unauthorised parties who obtain this report do so at their own risk, and the authors owe them no duty of care or skill.

The comments and recommendations in this Phase 1 Desk Study report are based on the findings of a review of available information. However, it's important to note that other conditions on the site may not have been recorded and therefore cannot be considered in this report. The report cannot be held responsible for unrecorded information.

3. THE SITE

3.1. Existing Conditions

The site is situated on the south side of Barnsley, in Worsbrough centred on National Grid Reference 435586, 404164, with a site area of around 0.70 hectares (ha).

A site walkover was carried out on 20th April 2026 as part of the Phase 1 Desk Study assessment, to highlight any features that could pose a potential risk to

future site users, or require further investigation to better understand the potential risk(s).

The site is a regular parcel of land with a sloping topography across the site, sloping downwards from north to south with a topography change from 93.0 m AOD to 87.0 m AOD.

The site is currently occupied by The Mill Academy with a generally square-shaped building located centrally with a flat roof. The surrounding area comprises both soft and hard landscaping.

To the front (southern) side of the site, there is an area of lawned soft landscaping with two mature trees and areas of more mature managed shrubs. Centrally located within this lawned area is a tarmac path connecting Lobwood road to the school entrance. The western edge of this path is defined by a 1.0 m high metal fence. To the east of the path, on the lawned area, general waste was observed where a bin had fallen over. The entrance to the school building is also located on the southern side, with a concrete sloping ramp providing access. A 2.60 m wide tarmac path runs parallel and adjacent to the southern side of the building.

In the south-western corner of the site, a large tree stump was noted.

Moving to the western side of the site, the majority of the area is occupied by a tarmac playground. The playground is divided in half from west to east by a 1.0 m high metal fence. A further 1.0 m high metal fence defines the eastern boundary of the playground. Two wooden shelters are located within the playground area, the most southerly of which has a metal-clad roof and is labelled as the school fire assembly location. Adjacent to the western side of the school building is a covered outdoor area containing craft activity supplies and general waste. Numerous vehicle tyres are scattered across the playground, likely associated with outdoor activities. Along the western site boundary (between the playground's western edge and the boundary), a strip of sparsely vegetated land was observed.

Beyond the playground, moving to the rear (northern) side of the site, the 2.60 m wide tarmac path continues around the building. Beyond this is a grassed sloped area, rising by approximately 2.0 m AOD. The slope is divided centrally from north to south by a 1.0 m high fence and a set of concrete slabbed steps. A large playing field and tarmac sports court, with metal football nets and basketball hoops, are located at the top (northern side) of the site. At the north-eastern corner of the school building, a significant amount of general waste and indoor school furniture was noted. A strong gas smell was detected in this area.

To the eastern side of the site, a tarmac car parking area is present, along with a metal bike rack. This car park is accessed via the school access road, a wide tarmac road entered through a 3.80 m wide metal gate connecting to Lobwood road on the site's southern boundary.

Numerous service covers were noted across the site, predominantly within the southern lawned area.

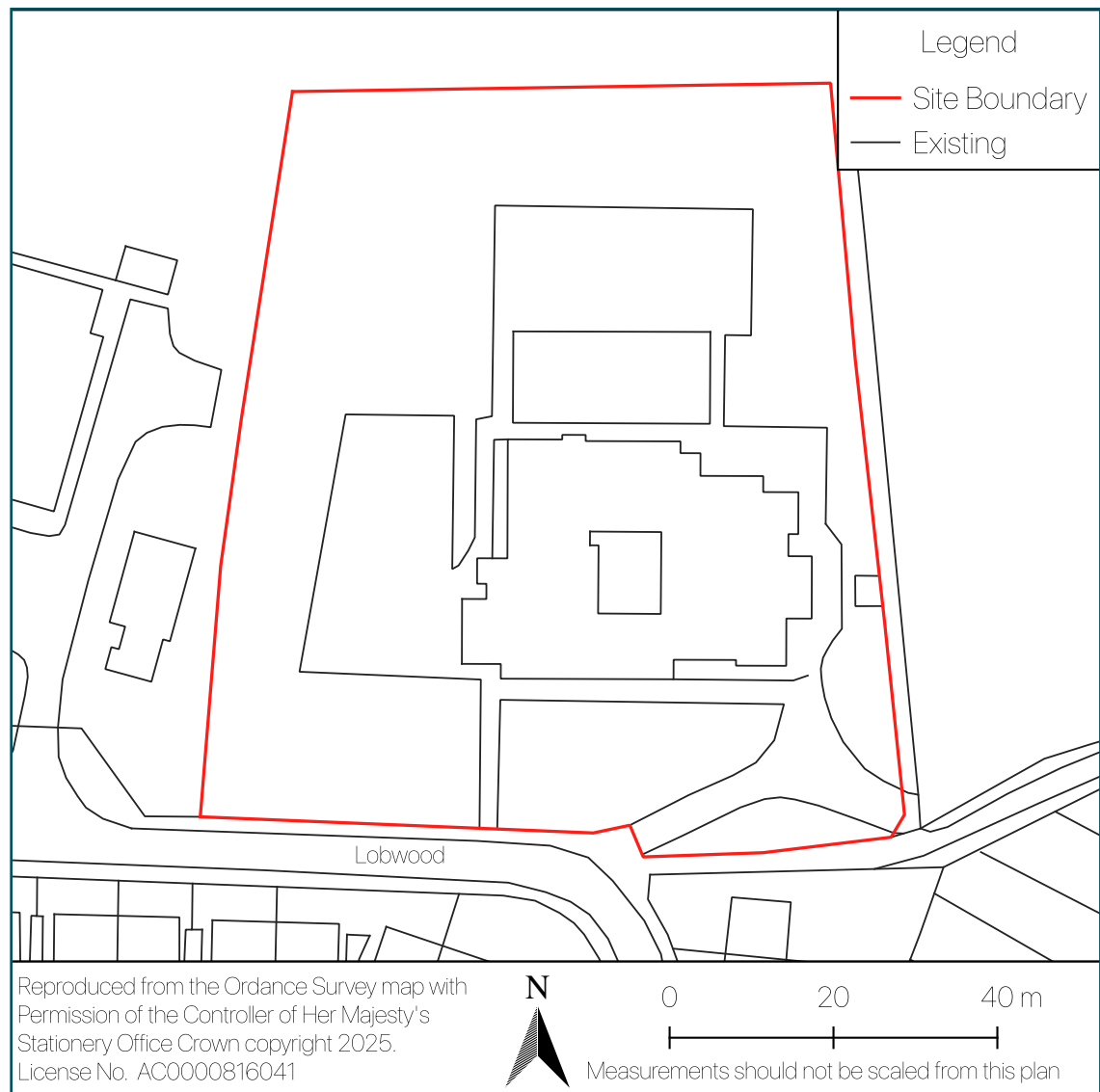


FIGURE 2 - SITE PLAN

The site boundaries are defined by metal fencing: a 2.0 m high fence along the northern, eastern, and southern boundaries, and a 1.0 m high metal fence along the western boundary.

Beyond the site, a pavement runs adjacent and parallel to the southern boundary, beyond which lies Lobwood Road. The western boundary adjoins a primary school, with playing fields directly adjacent. The northern boundary also adjoins playing fields associated with the neighbouring primary school. The eastern boundary is adjacent to a stone wall marking the edge of St Thomas's Cemetery.

There were no notable signs of potential contamination identified during the surface inspection of the site, including no evidence of stressed or unhealthy vegetation that may indicate contamination.

The current site layout is shown on Figure 2.

3.2. Proposed Development

The proposed development comprises the construction of a circular access road around the existing school building at The Mill Academy. The road will be constructed at, or close to, existing ground levels and is anticipated to be approximately 500 mm thick.

Parking spaces, including motorcycle parking, will be provided to the northern side of the access road, where a retaining wall approximately 60.0 m in length and 2.0 m in height will be constructed.

The existing road at the south-eastern corner of the site will be landscaped to provide an area for potential tree planting.

4. HISTORY

The historic Ordnance Survey (OS) maps of the site and surrounding area have been obtained from Groundsure, dated 14th April 2026; included as Appendix B. All measurements stated are approximate distances from the site boundaries to the recorded features.

Where relevant Google Street View and Google Earth aerial photograph archives have been reviewed to provide further background on more recent uses of the site. A summary of the findings of the historical sources is tabulated below.

Date(s)	On-Site Features	Surrounding Area
1855	Undeveloped agricultural fields.	<p>Park Road runs north-south approximately 100 m to the west of the site.</p> <p>Underbank Cliff is located around 150 m to the north, while Lob Wood lies 150 m to the east and Snape Sike Wood is situated 400 m to the south.</p> <p>Cupola (later labelled as an air shaft) is present 300 m to the south, Underbank Well lies to the north-west, a further well is located to the east, and Yews Land Quarry (sandstone) is situated to the north-east.</p> <p>Bell Ing Colliery (coal pit) lies approximately 350 m to the south-west, with an associated railway line running north-south at a similar distance. A colliery is also present 400 m to the south-east.</p> <p>King Well Quarry (sandstone), with an associated well, is located 450 m to the north-west.</p> <p>The wider surrounding area is predominantly characterised by undeveloped agricultural land, with several additional areas of woodland in the vicinity.</p>

Date(s)	On-Site Features	Surrounding Area
1890-1891	No significant changes.	Lobwood Lane is noted to be running from west-east adjacent to the sites southern boundary. Residential properties have been constructed adjacent to Lobwood Lane at approximately 150 m east. At 150 m south-west, numerous terraced residential properties have been constructed. St Thomas's church is noted at 200 m north. At 300 m north, properties have been constructed associated with Darley Cliff. Darley cliff plantation is additionally noted at 300 m north-west. Three wells are now noted, with association to Kingwell Quarry. Three small waterbodies are noted; 400 m west, 400 m north-west, and 450 m south-east. The railway previously noted at 350 m south-west is no longer noted. Darley Main Colliery, Bell Ing Colliery and King Well Quarry are no longer noted.
1892	No significant changes.	St Thomas's Cemetery is noted directly adjacent to the sites eastern boundary. Under bank farm is noted at 100 m north. A grave yard is noted at 200 m north associated with St Thomas's Church. Blackburn road has been constructed at approximately 150 m west, running from north to south and joining Park Road at 110 m west.
1903-1904	No significant changes.	A well is noted at 400 m south-west and an air shaft is noted at 450 m west.
1906	No significant changes.	Allotment gardens are now labelled at 150 m south-west. Park Road and the eastern side of Bank End Road is noted as a Tramway.
1929-1971	No significant changes.	The Tramway is no longer noted (1929). General increase in residential development within a 500 m radius of the site. Properties constructed directly adjacent to the site's southern boundary along newly constructed road of Lobwoods and Berrydale.
1973-1977	A school named Worsbrough Bridge RC School has been constructed centrally on site.	General increase in urbanisation surrounding the site. Worsbrough Lobwood Infants School constructed adjacent to the sites western boundary.
1977-2026	No significant changes other than a school name change to The Mill Academy between 2003 and 2026.	No significant changes other than a general increase in urbanisation surrounding the site.

HISTORICAL MAP SUMMARY

5. GEOLOGY

5.1. Sources of Information

The geological survey maps of the area, 1:10,000 scale sheet SE30SE, 1:50,000 scale BGS Sheet 87 Barnsley and Yorkshire County Series Sheet 274SE have been examined, along with the memoir of the area.

5.2. Artificial Soils

The site is not recorded to be underlain by made ground, however made ground would be anticipated across the site associated with past buildings recorded to have occupied the site from historical OS maps, to shallow depths, and existing buildings too.

5.3. Natural Soils

No superficial deposits are noted on site. Natural soils at the site are expected to be residual soils, weathered down from the parent bedrock.

5.4. Solid Geology

Geological maps indicate the solid geology beneath any made ground and natural soils to be undifferentiated Pennine Middle Coal Measures; formations of mudstone, siltstone and sandstone. The solid geology is noted to be dipping to the north-east at an angle of 5° from an assessment of outcrop patterns and dip indicators on the geological maps.

The nearest conjectured geological fault is approximately 250 m north west; the West Level Fault, trending from south-west to north-east and down throwing strata to the north-west.

The Top Beamshaw Coal seam is noted to outcrop 18 m south-west of the site, trending north-west to south-east and dipping north-east towards the site. Below this coal seam lies the Low Beamshaw coal seam, with a layer of sandstone between.

6. HYDROGEOLOGY & HYDROLOGY

Information on the hydrogeology and hydrology of the site and surrounding area has been assessed from information included in a Groundsure Enviro Insight report dated 14th April 2026, included in Appendix D.

6.1. Hydrogeology

The Environment Agency (EA) classifies the bedrock geology as a Principal / Secondary A; permeable layers capable of supporting water supplies at a local rather than strategic scale.

No potable drinking water abstractions or groundwater abstraction licenses have been highlighted within 250 m of the site, and the site is not recorded to be within a groundwater Source Protection Zone (SPZ).

6.2. Hydrology

The closest surface watercourse is the River Dove around 645 m south of the site at its closest point. The watercourse is recorded to flow in an easterly direction towards the River Dearne which lies around 6.5 km east of the site.

No surface water abstractions have been highlighted within 250 m of the site by the Groundsure Insight report.

6.3. Flood Risk

The site is not situated in an area at risk from flooding and the sea, nor is the surrounding 50 m.

Centrally on site, there is an area of potential surface water flooding risk, with the highest risk being 1 in 1000 year, 0.1 m - 0.3 m. There is a **negligible** risk in return periods 1 in 30 years, 1 in 100 years and 1 in 250 years.

The Groundsure report notes the potential risk of groundwater flooding at the site or across the surrounding area to be **negligible** and therefore not of potential concern.

7. MINING RISK ASSESSMENT & QUARRYING

7.1. Sources of Information

The presence of rock and mineral seams, including coal, which may have been mined or quarried in the area has been determined by the published geological maps and memoirs of the area, and the appended Mining Remediation Authority (MRA) Consultants coal mining report included in Appendix C.

7.2. Shallow Mine Workings

The MRA Consultants coal mining report states that there are no probable shallow workings beneath the site, no spine roadways recorded at a shallow depth.

According to the MRA interactive map viewer, the most south-westerly corner of the site is situated within a development high risk area.

Published geological maps, and the MRA Consultants coal mining report indicate the 0.30 m thick Top Beamshaw Coal to outcrop 18 m south-west of the site, trending from north-west to south-east and dipping at an angle of 5° north-east, towards the site. The seam outcrops at approximately 84.0 mAOD (~3.00 m lower than the site elevation at the sites lowest point).

The geological memoir notes that “Around Barnsley the Beamshaw Coals are usually two but sometimes three in number and are thin seams much mixed with shale and of little value.”

Assuming a dip angle of 5°, as indicated in the fault block, and the change in elevation from 84.0 mAOD to 88.0 mAOD, the Top Beamshaw coal seam is anticipated to lie at a depth of ~4.60 m bgl.

Moving from south-west to north-east across the site, the depth to the coal seam would increase due the topography rising and the seam dipping north-east, into the hillside. Accordingly the Top Beamshaw coal seam would be anticipated at around 8.6 m bgl in the north-eastern corner of the site.

Based on all of the above information the risk from potential unrecorded shallow mine workings is deemed to be **low** based on the nature of the proposed development.

7.3. Deep Mine Workings

The MRA Consultants coal mining report records several deep coal seams that have been worked historically in the area, summarised in the table below for ease of reference.

Seam Name	Depth (m)	Extraction Thickness (cm)	Year last mined
Barnsley	100	252	1872
Lidgett	204	117	1971
Top Fenton	331	102	1946
Low Fenton	341	123	1949
Parkgate	352	175	1933
Middleton Main	378	132	1942
Silkstone	430	200	1970

The Barnsley coal seam, the shallowest of the deep coal seams recorded, lies 120 m below the Top Beamshaw coal seam, indicating that the seam would be anticipated to lie approximately 124.60 m bgl beneath the site.

Based on the depth and thickness of deep coal seams, the resultant risk is deemed to be **low** to the surface stability of the site.

7.4. Mine Entries

No mine entries are recorded on or within 20 m of the site boundary.

7.5. Quarrying / Opencast

Opencast quarrying at Yews Lane Quarry (sandstone) is noted at 236 m north-east. However due to the distance from the site, the resultant risk of unrecorded quarrying having affected the site is considered to be **very low**.

8. ANTICIPATED GROUND CONDITIONS

Based on our interpretation of the published geological maps and any available archive BGS borehole information we have summarised below what we expect the ground conditions to broadly be across the site. Any archive information has been obtained using public sector information licensed under the Open Government License (OGL) v3.0. We've used it assuming that it is correct and any assumptions based on this information are for guidance purposes only at this stage. Confirmation of the actual ground conditions should be considered if deemed critical.

Boreholes (SE20SE80–87) within 100 m of the site, show consistent stratigraphy. Ground conditions are expected to comprise topsoil to a depth of approximately 0.25-0.50 m bgl, underlain by firm brown mottled sandy gravelly clay to around 1.20-2.10 m bgl. Beneath this, a firm grey-brown clay containing coal fragments is anticipated to depths of 1.70-2.60 m bgl. All boreholes terminate on mudstone at 3.05m bgl.

Groundwater is likely to be confined in the underlying bedrock sequence.

9. GEOTECHNICAL CONSIDERATIONS

9.1. Proposed Buildings & Structures

When writing this report we had been provided with a proposed development plan. We understand that a circular access road, with an anticipated thickness of 500 mm is to be constructed around the existing school building of The Mill Academy, at, or around existing ground levels.

Although not confirmed we'd assume that the loadings will be up to 80 kN/m. Some modification to the comments and recommendations provided may be necessary if different loadings or a different type of development is proposed.

9.2. Mining Precautions

From an assessment of available data, the risk of unrecorded shallow coal mining affecting the site is assessed as **low** at this stage. The appended Consultants coal mining report does not highlight the potential for any probable unrecorded mine workings and the Top Beamshaw seam coal is noted in the geological memoir to have been of little value.

However, based on the development proposals and with the Top Beamshaw Coal unlikely to have been worked, it is likely that the potential risks from mining could be overcome by the use of geo-grids, if deemed to be required.

No mine shafts have been recorded on or within 20 m of the site boundary. The risk of encountering any unrecorded mine entry is considered to be **low** at this stage based on the findings of the Phase 1 Desk Study report.

9.3. New Access Road & Hardstanding

Without any information on the ground conditions it should be assumed that any highways and hardstanding areas will need to be constructed on re-engineered material at this stage to help mitigate the potential for excessive differential movement. For design purposes a CBR of 2.5% may be assumed provided that the formation is proof rolled and any soft spots are removed.

Intrusive ground investigation is recommended to confirm the ground conditions and identify the depth of suitable natural sub-grade. The relative stiffness of the natural soils, and depth, will help to determine the thickness of unbound foundation layers needed for the new access road.

9.4. Excavations

It should be expected that there may be some difficulties when excavating through made ground and any bedrock without the use of a hydraulic breaker. Support of temporary excavations may also be required where within made ground or where greater than 1.20 m deep.

Consideration should also be given to the requirement for dewatering of excavations and the potential for encountering running sand conditions.

9.5. Surface Water Drainage

All surface water drainage systems should follow the Local Authority's guidance on Sustainable Drainage Systems (SuDS) and the best practice guidance in the SuDS Manual, CIRIA C753:2015.

Considering the anticipated ground conditions being cohesive soils and mudstone bedrock, this would not be considered suitable for soakaways.

If soakaways are being considered then in situ soakaway tests will need to be carried out at the location(s) of proposed soakaways, to determine the feasibility of soakaways and calculate a soil infiltration rate for soakaway design purposes. Any soakaways would need to be placed at least 5 m from any existing or proposed structures.

It may be possible to attenuate surface waters and discharge directly into the surface water drainage network. It is likely that this would need to be no more than an applicable greenfield rate and the inclusion of fuel interceptors would also need to be considered when draining from highway areas.

Sustainable Drainage Systems (SuDS) principles could be incorporated into the design of the road by source collection methods such as water butts, and utilising permeable paving, particularly across the parking bays, to provide storage in the sub-base to help to slow down the flow of surface water through the drainage system.

9.6. Chemical Precautions

Without any chemical data for any made ground and natural soils, it should be assumed that sulphate resistant concrete is required at this stage as a precautionary measure.

If any coal was encountered this would need to be sealed using clay or a layer of sacrificial concrete to negate the potential for sulphate attack.

10. ENVIRONMENTAL SEARCHES

As part of the Phase 1 Desk Study assessment, a Groundsure Enviro Insight report was obtained on 14th April 2026. This report provided environmental search information on potentially contaminative sources and sensitive receptors across the site and surrounding area. The relevant findings of the report are summarised below. The full report is included in the Appendix D.

10.1. Current Land Uses

There are four current records of industrial land use within 250 m of the site, all of which are electricity substations. These do not present a high potential off site contamination risk.

10.2. Historical Industrial Sites

Numerous historical industrial sites are noted within 250 m of the site. A cemetery is noted directly adjacent to the sites eastern boundary, recorded to be present between the dates of 1890-1977 according to the Groundsure report. There are seven records of unspecified works/ heaps/ quarries/ ground workings within 250 m of the site, recorded to be present between dates of 1890-1987. A sandstone quarry is noted to lie at 210 m north-east, present in 1850. Within 250 m of the site, ten historic electricity substations are noted to be present in dates between 1971-1993.

10.3. Landfills and Waste Sites

There are no landfill sites or waste sites within 250 m of the site.

10.4. Potentially Infilled Land

There are no records of potentially infilled land within 250 m of the site. There is an area of artificial made ground 81 m to the west.

10.5. Environmental Permits, Incidents and Registers

There are no records of discharge consents, pollution incidents or permitted activities within 250 m of the site.

10.6. Environmentally Sensitive Receptors

There are no records of SSSI's, Areas of Outstanding Natural Beauty, wetland habitats or nature reserves within 250 m of the site.

11. PRELIMINARY ENVIRONMENTAL RISK ASSESSMENT

The official definition of Contaminated Land is outlined in Part 2A of the Environmental Protection Act 1990, and administered through Section 57 of the Environment Act 1995. The United Kingdom's Land Contamination Risk Management (LCRM) guidance outlines a risk assessment approach based on three components:

Source: Something potentially harmful in, on, or under the land.

Pathway: A plausible route for the contaminant to travel through.

Receptor: Something or someone that could be harmed by the contaminant.

For there to be an actual risk all three of these elements must be present. If any one of them is missing, then there isn't a complete "linkage" for pollution to cause harm.

However, if all three parts are or could be present, the resulting risk is based on an assessment of how bad the consequences would be if the harmful substance actually reached the receptor (the person, animal, plant, or water), and how likely it is that this will actually happen. This is outlined in CIRIA C552, tabulated below for reference.

		Consequence (C)			
		Severe	Medium	Mild	Minor
Probability (P)	High Likelihood	Very high risk	High risk	Moderate risk	Moderate / low risk
	Likely	High risk	Moderate risk	Moderate / low risk	Low risk
	Low likelihood	Moderate risk	Moderate / low risk	Low risk	Very low risk
	Unlikely	Moderate / low risk	Low risk	Very low risk	Very low risk

RISK MATRIX FOR ENVIRONMENTAL RISK ASSESSMENT (BASED ON CIRIA C552)

For a Local Authority to designate something as Contaminated Land it needs to be either knowingly causing harm, or have a significant possibility of causing harm. This includes to either land or controlled waters.

The potential risks associated with historical land uses on the site have been assessed in relation to the tables provided in Appendix E.

11.1. Proposed Site Use

We understand that the current development proposal is the construction of a circular access road, with an anticipated thickness of 500 mm around the existing school building of The Mill Academy. A proposed layout plan is included as Appendix A.

To the south-eastern corner of the site, there is a proposed area of soft landscaping, providing an area for tree planting, in place of where the existing road was.

There is also a lesser potential for any construction workers to come into contact with existing soils, and standard precautionary measures should be employed to reduce the potential for dermal contact and/or inhalation of dust or vapours. Good hygiene practices and facilities should also be provided as a standard precautionary measure.

11.2. Potential On Site Contamination Sources

The historic OS maps show the site to have been previously occupied by undeveloped fields followed by a school since 1973, with a subsequent **low** risk of potential contamination resulting from this usage.

No obvious visual or olfactory signs of potential contamination were identified during the walkover survey undertaken as part of the desk study assessment.

As is common with brownfield sites there is potential for contaminants such as heavy metals and Polycyclic Aromatic Hydrocarbons (PAH) to be present in any made ground present across the site, and future receptors may come into contact with any such contaminants in proposed play areas or soft landscaping areas.

11.3. Off Site Contamination Sources

The cemetery located adjacent to the eastern boundary of the site represents a potentially significant source of contamination, particularly with respect to ground gases. However, as no buildings are proposed the risk is considered to be **negligible** as future site users will not be exposed to potential ground gases, or any other potential off-site contaminants.

11.4. Ground Gases

According to the Groundsure Enviro Insight report the site is within a radon affected area of between 1% to 3% as defined by the Health Protection Agency (HPA) and no radon protection measures are required to be installed in any new buildings in accordance with Building Research Establishment (BRE) document BRE report BR211:2023.

No recorded landfill sites have been identified within 250 m of the site. However, the cemetery adjacent to the site's eastern boundary represents a potential source of ground gas generation. In addition, if unrecorded mine workings are present beneath the site, these could constitute a considerable potential source of gas generation.

However, given that the proposed development comprises only an access road for private use, with no enclosed indoor spaces, the risk posed by ground gases to potential receptors is considered to be **negligible**.

Based on the above information the overall risk from ground gases is considered to be **negligible** at this stage. Further assessment or monitoring would only be considered necessary if any enclosed spaces or new buildings were being proposed.

11.5. Invasive Plant Species

The vegetation in and around the site has been examined. No obvious signs of potential invasive plant species were noted during the site walkover undertaken. However, because weedkiller could have been applied prior to carrying out our walkover survey, not seeing any signs of invasive plants during our brief time on site cannot be a guarantee that they are not present on or around the site.

11.6. Potential Pathways

- Dermal contact (indoor and outdoor).
- Ingestion of soil and indoor dust.
- Indirect ingestion (indoor and outdoor).
- Inhalation of dust (indoor and outdoor).
- Inhalation of vapours (indoor and outdoor).
- Leaching to groundwater
- Surface water run-off.
- Direct contact with concrete substructures.
- Migration through the ground (vertical and horizontal).

11.7. Human Health Receptors

The historic OS maps show the site to have been previously occupied by undeveloped fields followed by a school since 1973, with a subsequent **low** risk of potential contamination resulting from this usage.

No obvious visual or olfactory signs of potential contamination were identified during the walkover survey undertaken, and with the site being previously used for as a school, no specific sources of potential contamination have been identified.

11.8. Controlled Waters Receptors

If any groundwater is encountered below the site, there could be the potential for leachable contaminants to adversely affect the groundwater quality of this controlled waters resource.

11.9. Conceptual Site Model

Based on the information gathered during the Phase 1 Desk Study we've created a preliminary Conceptual Site Model (CSM) to highlight possible sources of contamination and if there's a plausible linkage to a future receptor. The preliminary CSM is tabulated and provided diagrammatically in Appendix F.

It's important to keep the CSM up-to-date following later phases of ground investigation, and throughout the development process, to update any potential risks to future receptors as more data becomes available. This is especially important if previously unexpected ground conditions are encountered.

To further quantify the potential risks from the preliminary CSM we recommend carrying out intrusive ground investigation, along with laboratory testing and ground gas monitoring. Our recommended scope of Phase 2 Ground Investigation is detailed in Section 14 (Further Investigation) of this report. Following this the CSM should then be updated so that the potential risks identified can be reassessed to reflect the additional information.

12. SOIL MANAGEMENT

12.1. Reuse of Existing Soils

Wherever possible it is desirable to keep existing soils on site and avoid the need for unnecessary removal or importation of soils onto site. This will depend partly on the chemical composition of the soils if there are to remain in proposed garden or soft landscaping areas, or the geotechnical suitability if the soils need to meet a particular engineering classification.

Depending on the chemical composition of the existing soils it may be possible to retain or reuse the existing soils in proposed gardens or soft landscaping areas.

Provided that natural soils are not mixed with any made ground or other sources of potential contamination then any excavated natural soils can be considered for reuse as subsoil in any gardens or soft landscaping areas.

12.2. Waste Disposal

Any waste arising from development of the site, such as excess soil or material deemed unsuitable for retention on site, should be disposed of in accordance with the Duty of Care Regulations. If any soils are being disposed directly to a landfill site then Waste Acceptance Criteria (WAC) analysis may be required in addition to basic environmental screen testing to determine the most appropriate disposal facility for the waste, in accordance with the requirements of the current Landfill Directive.

12.3. Imported Soils

If imported soils are needed for the development, they must be validated to ensure they're suitable and safe for the future use of the site. The validation should follow YALPAG guidance '*Verification Requirements for Cover Systems*' version 4.1, dated June 2021. The scope of analysis needed depends on the source and the volume of imported soils required.

13. REGULATORY APPROVAL

The conclusions and recommendations in this report are based on a review of available information and observations made during the site walkover survey undertaken. The conclusions and recommendations cannot be guaranteed to gain regulatory approval if this report is required as part of a planning application. If it is required as such it should be passed to the relevant regulatory bodies for their comment and approval.

14. FURTHER INVESTIGATION

Based on the findings of the Phase 1 Desk Study undertaken it would be recommended to carry out an intrusive Ground Investigation prior to constructing the proposed new access road, primarily to confirm the ground conditions and geotechnical properties of the soils and weathered bedrock for engineering purposes, and also to assess whether the existing soils could be retained close to the surface across the wider school site, and for a contractor's health and safety assessment to look at potential risks to construction workers.

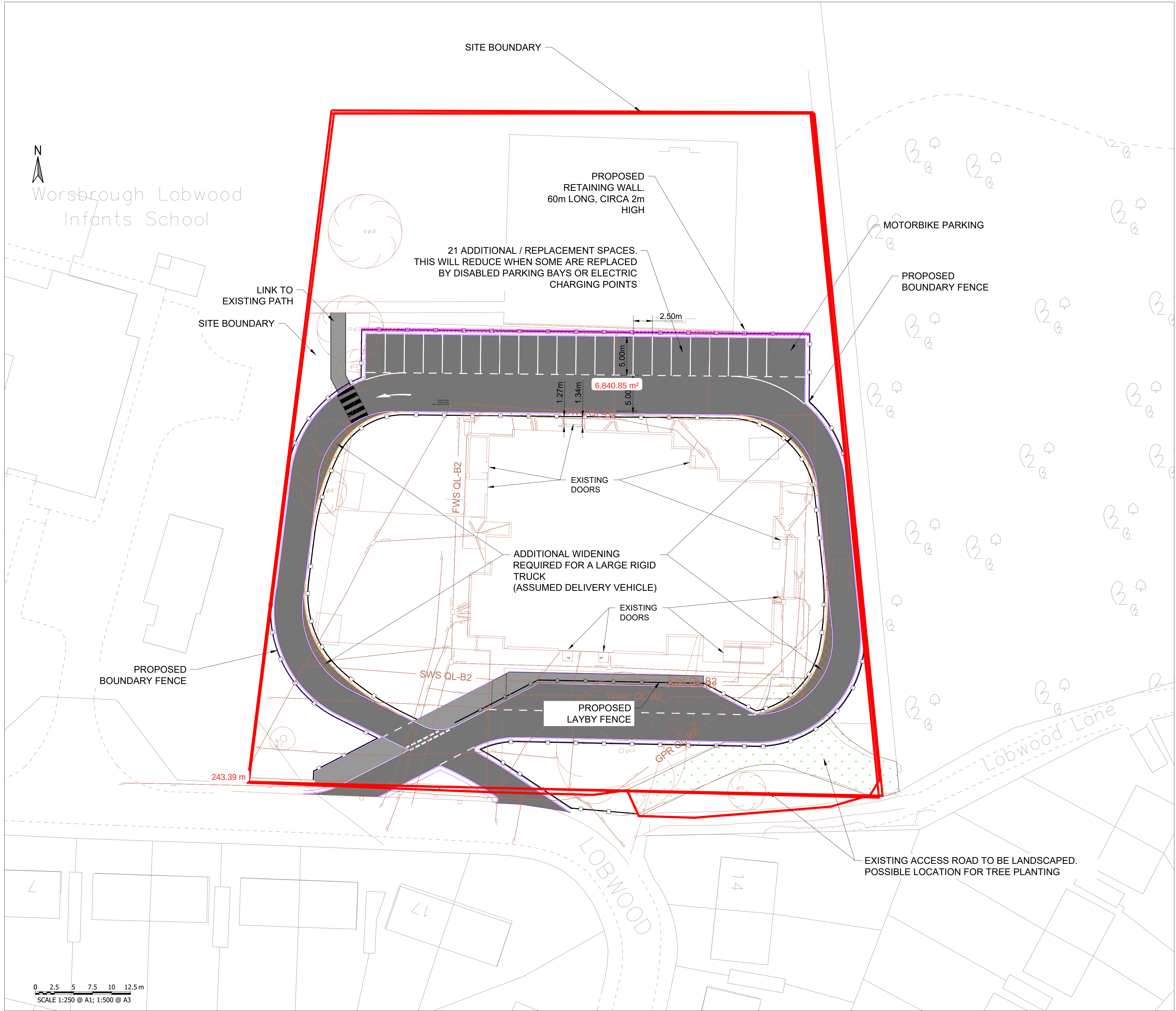
The most suitable method of investigation is deemed to be a series of window sampling holes to confirm the underlying site geology.

Disturbed samples of the existing soils and weathered bedrock should be obtained to allow subsequent chemical and geotechnical testing to be undertaken.

In situ Standard Penetration Tests (SPTs) would be undertaken as part of the windowless sampling to provide relative strength information for geotechnical design purposes.

Report 26063-DS | May 2026

APPENDIX A - PROPOSED LAYOUT DRAWINGS



DRAFT ISSUE

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Rev.	By	Amendments	Date
A	ICG	FIRST ISSUE	03.03.26



Project			
MILL SITE ENTRANCE			
Drawing title			
LOOP ROAD OPTION			
Scale	Drawn	Checked	Date
AS SHOWN	ICG		FEB 2026
Drawing No.			File
BMBC1004-GA-05			FILE
Paul Castle Service Director Growth & Sustainability Directorate Environment & Transportation (Business Unit 6) P.O. Box 601, Westgate Plaza One, Westgate Barnsley S70 9FA Tel. (01226) 770770			

APPENDIX B - HISTORICAL MAPS

Site details:	The Mill Academy Barnsley
Client ref:	26063/4595
Report ref:	GS-7IC-VD7-2OV-K64
Grid ref:	435579.9, 404190.72
Production date:	14 April 2026

Map name:	County Series
Map date:	1855
Scale:	1:10,560
Printed at:	1:10,560



Date: 1855
Surveyed: 1851
Edition: 1855

Date: 1855
Surveyed: 1851
Edition: 1855

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



Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: County Series
Map date: 1890-1891
Scale: 1:10,560
Printed at: 1:10,560



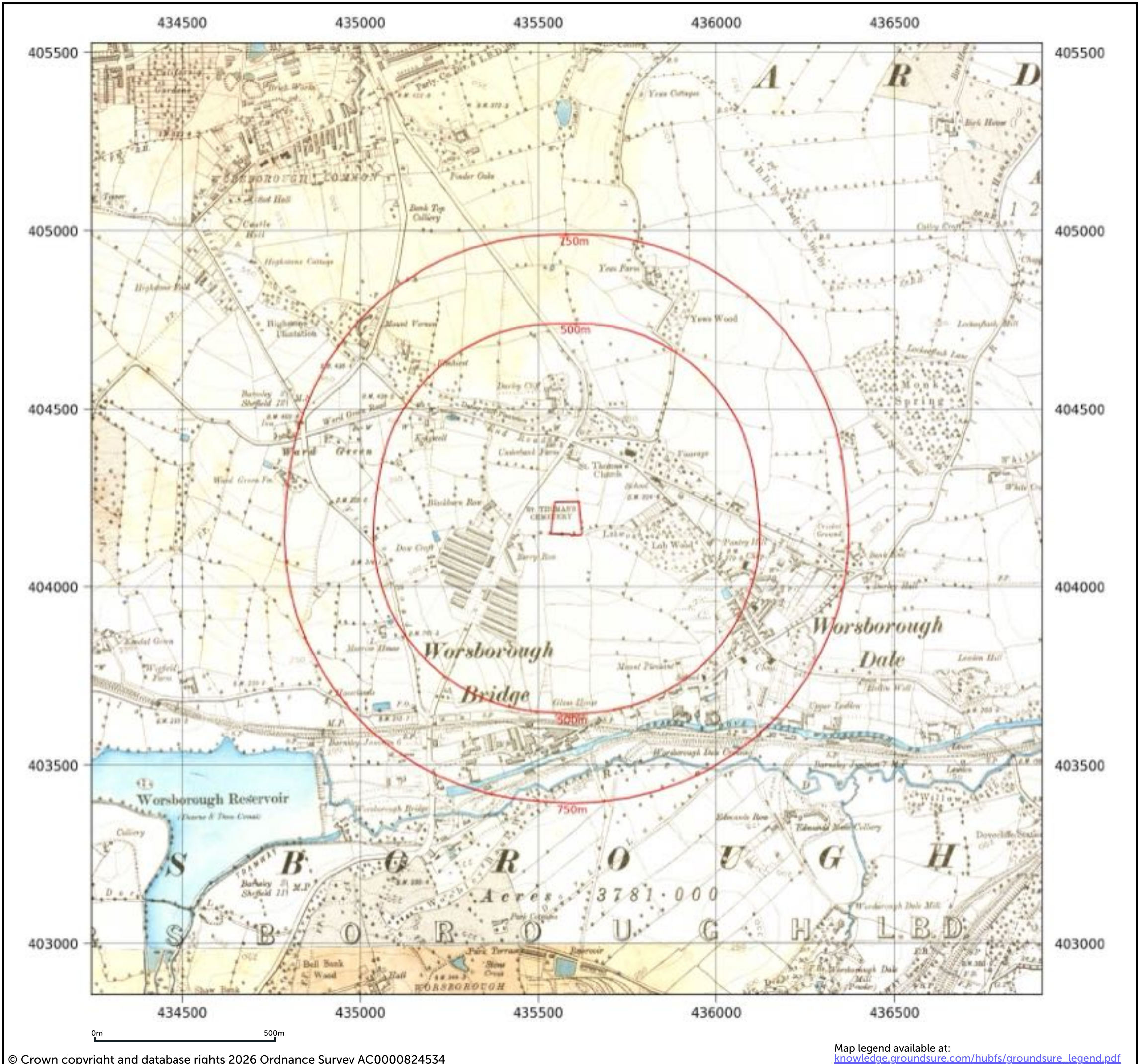
Date: 1890
Surveyed: 1890
Revised: 1890

Date: 1891
Surveyed: 1891
Revised: 1891

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info@groundsure.com

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: County Series
Map date: 1892
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Printed at: 1:2,500

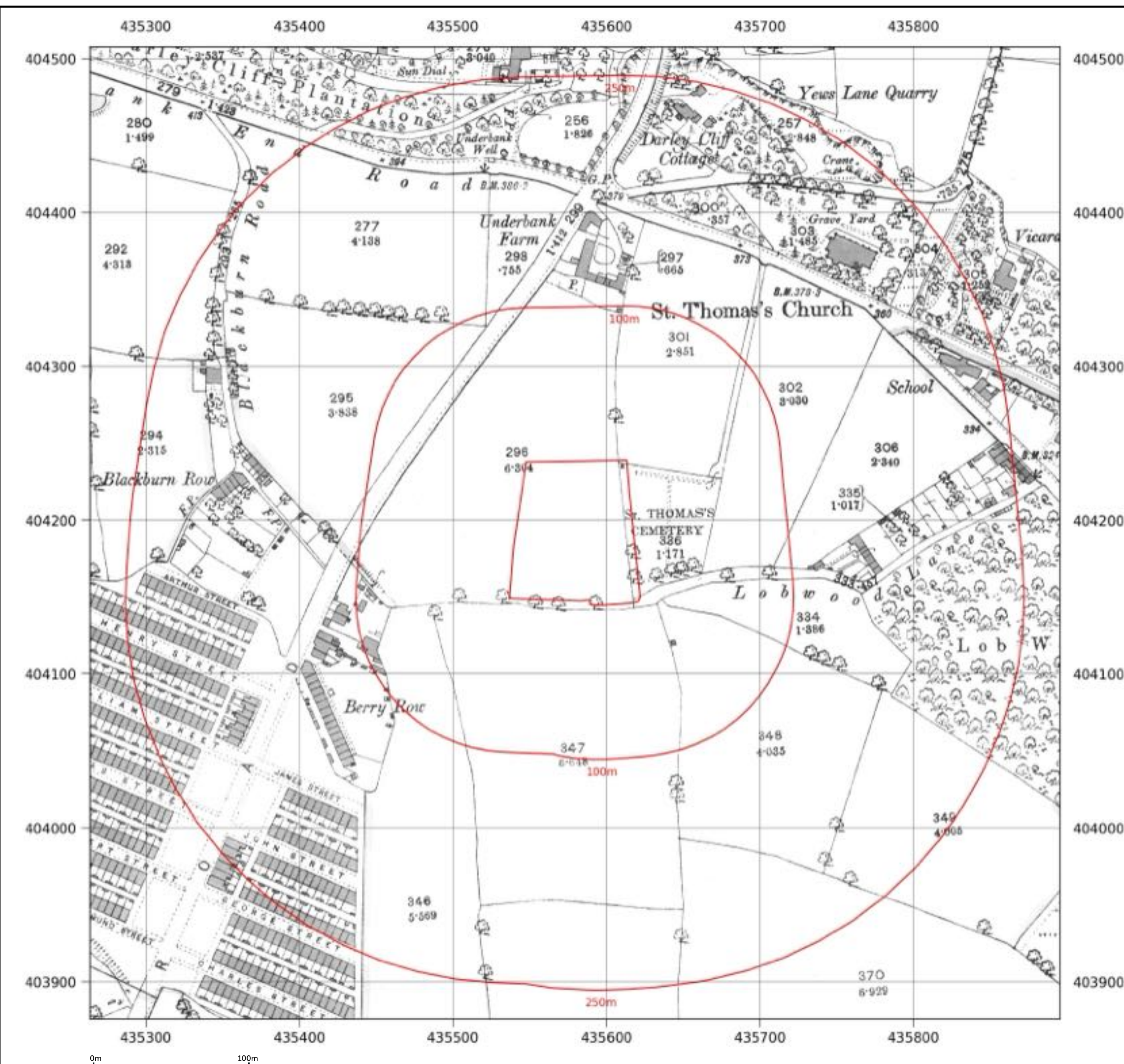


Date: 1892
 Surveyed: 1892
 Revised: 1892

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: County Series
Map date: 1903-1904
Scale: 1:10,560
Printed at: 1:10,560



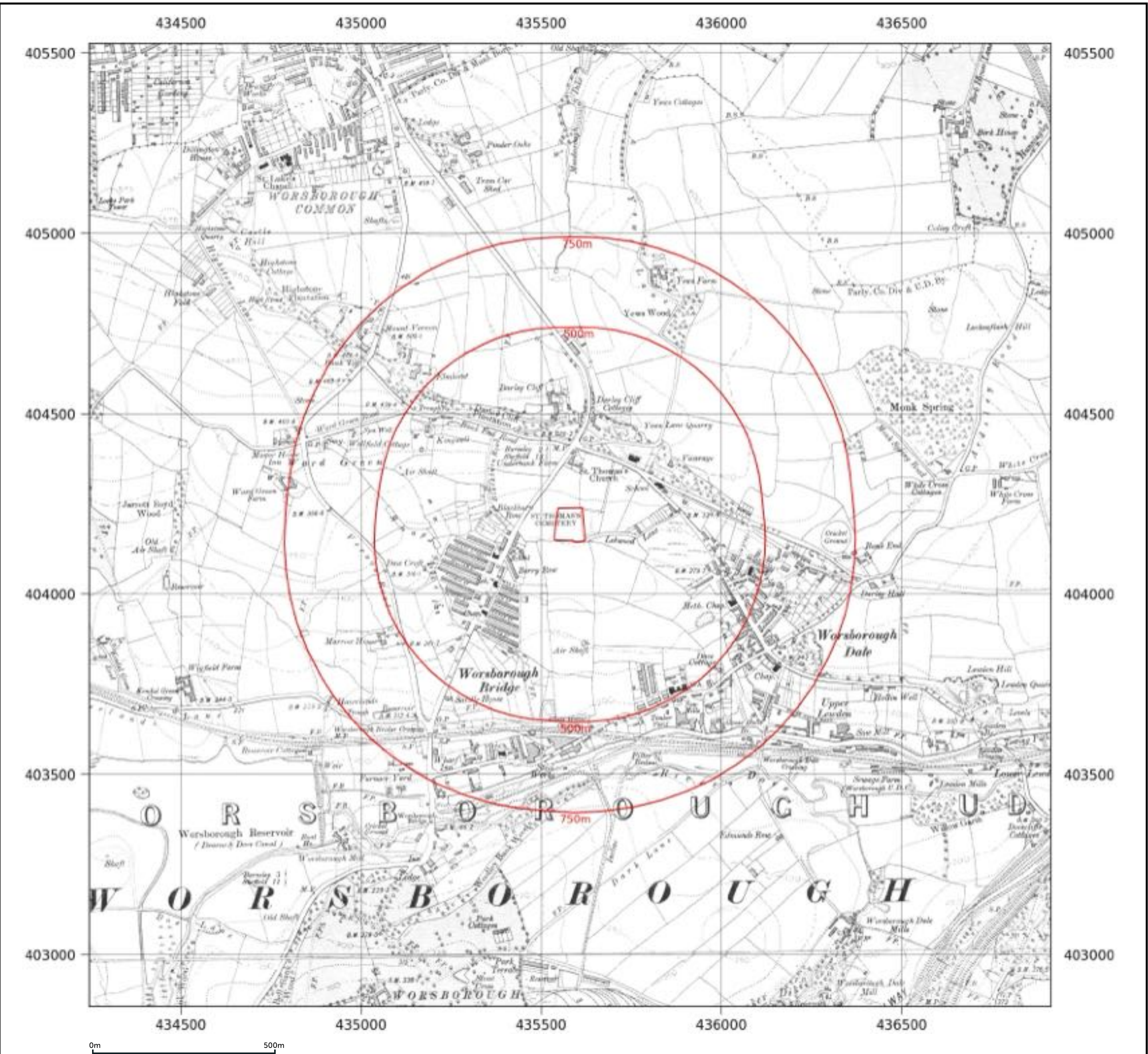
Date: 1904
Surveyed: 1890
Revised: 1904

Date: 1903
Surveyed: 1891
Revised: 1903

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: County Series
Map date: 1906
Scale: 1:2,500
Printed at: 1:2,500



Date: 1906
 Surveyed: 1906
 Revised: 1906

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knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

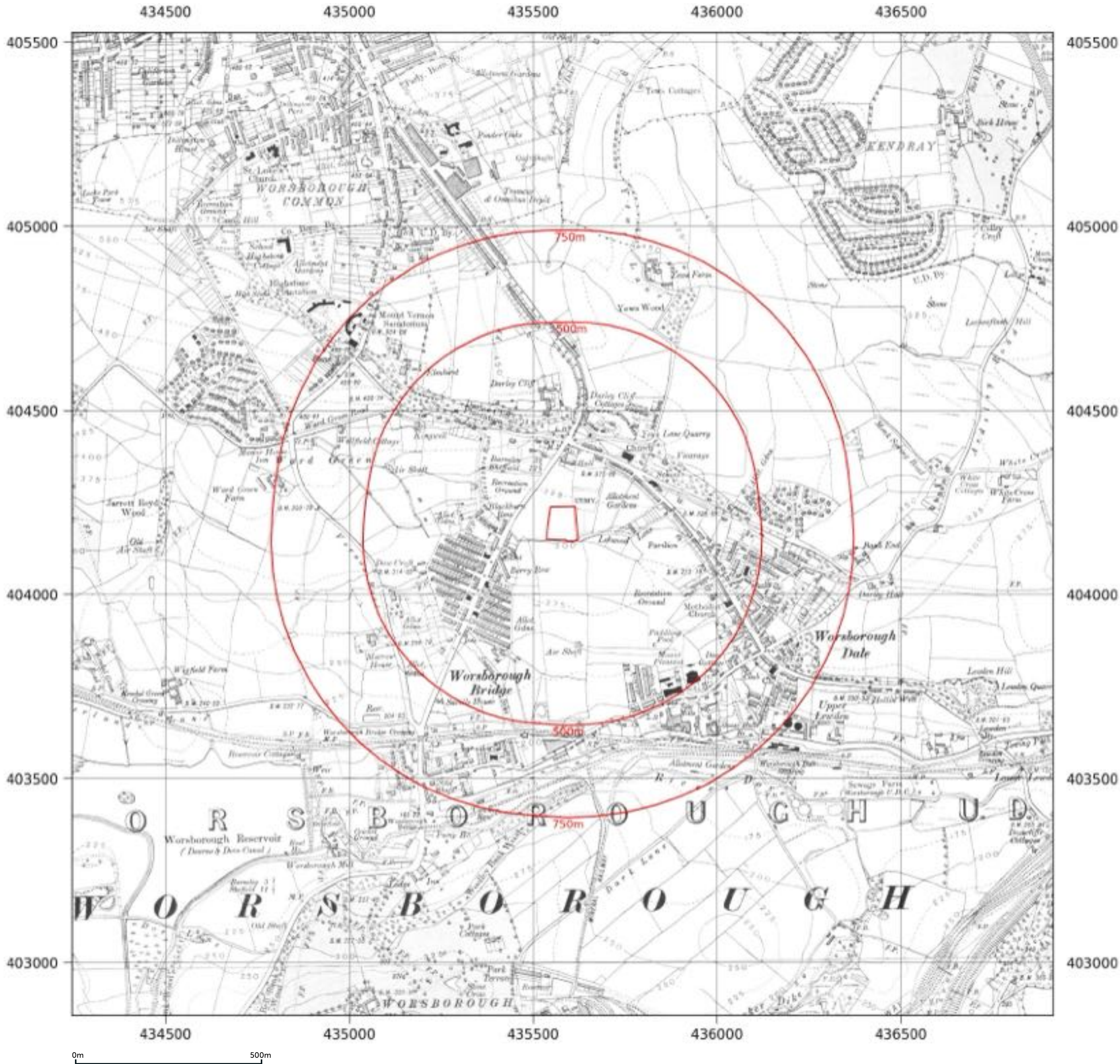
Map name: County Series
Map date: 1929
Scale: 1:10,560
Printed at: 1:10,560



Date: 1929
Surveyed: 1851
Revised: 1929

Date: 1929
Surveyed: 1851
Revised: 1929

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: County Series
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Scale: 1:10,560
Printed at: 1:10,560



Date: 1938
Surveyed: 1851
Revised: 1938

Date: 1938
Surveyed: 1851
Revised: 1938

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: County Series
Map date: 1948
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Printed at: 1:10,560



Date: 1948
Surveyed: 1851
Revised: 1948
Edition: 1948

Date: 1948
Surveyed: 1851
Revised: 1948
Edition: 1948

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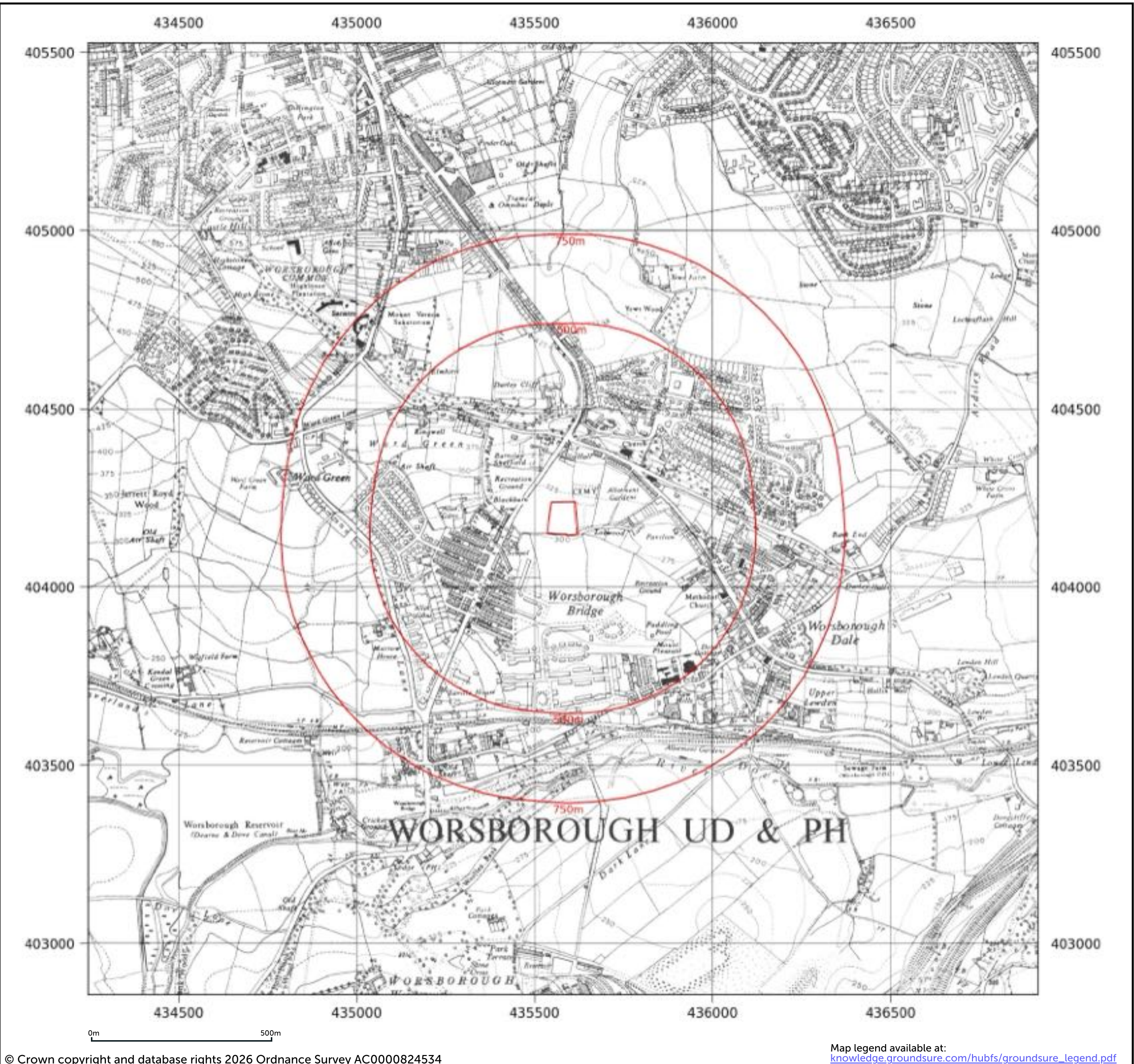
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Report ref: GS-7IC-VD7-2OV-K64
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Production date: 14 April 2026

Map name: Provisional
Map date: 1951-1956
Scale: 1:10,560
Printed at: 1:10,560



Date: 1956 Revised: 1955 Copyright: 1956	Date: 1955 Revised: 1955 Copyright: 1955
Date: 1956 Revised: 1955 Copyright: 1956	Date: 1951 Surveyed: 1951 Revised: 1951

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: National Grid
Map date: 1960
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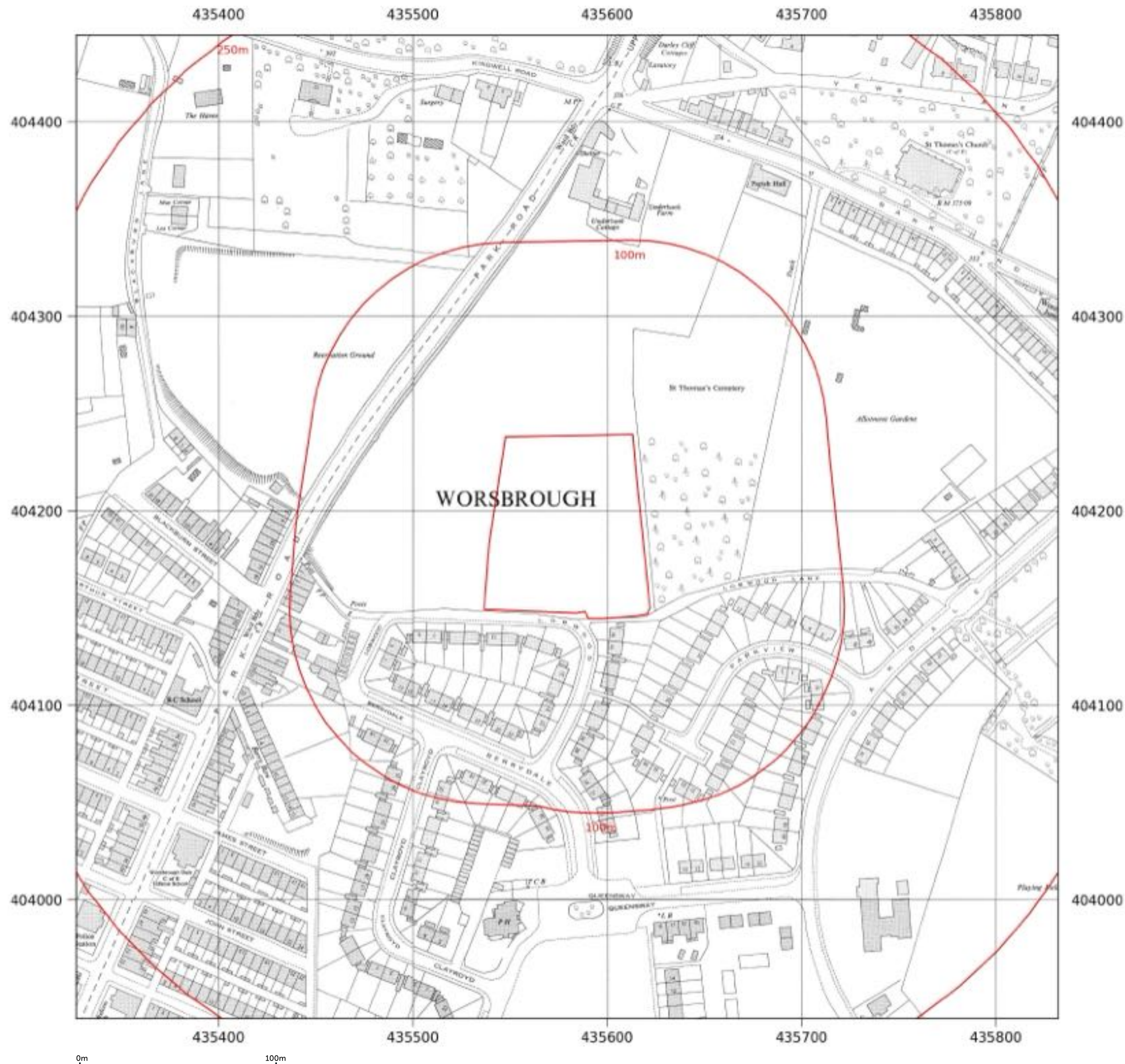


Date: 1960 Surveyed: 1959 Revised: 1959 Copyright: 1960 Levelled: 1930	Date: 1960 Surveyed: 1959 Revised: 1959 Copyright: 1960 Levelled: 1930
Date: 1960 Surveyed: 1959 Revised: 1959 Copyright: 1960 Levelled: 1930	Date: 1960 Surveyed: 1959 Revised: 1959 Copyright: 1960 Levelled: 1930

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: National Grid
Map date: 1961
Scale: 1:2,500
Printed at: 1:2,500



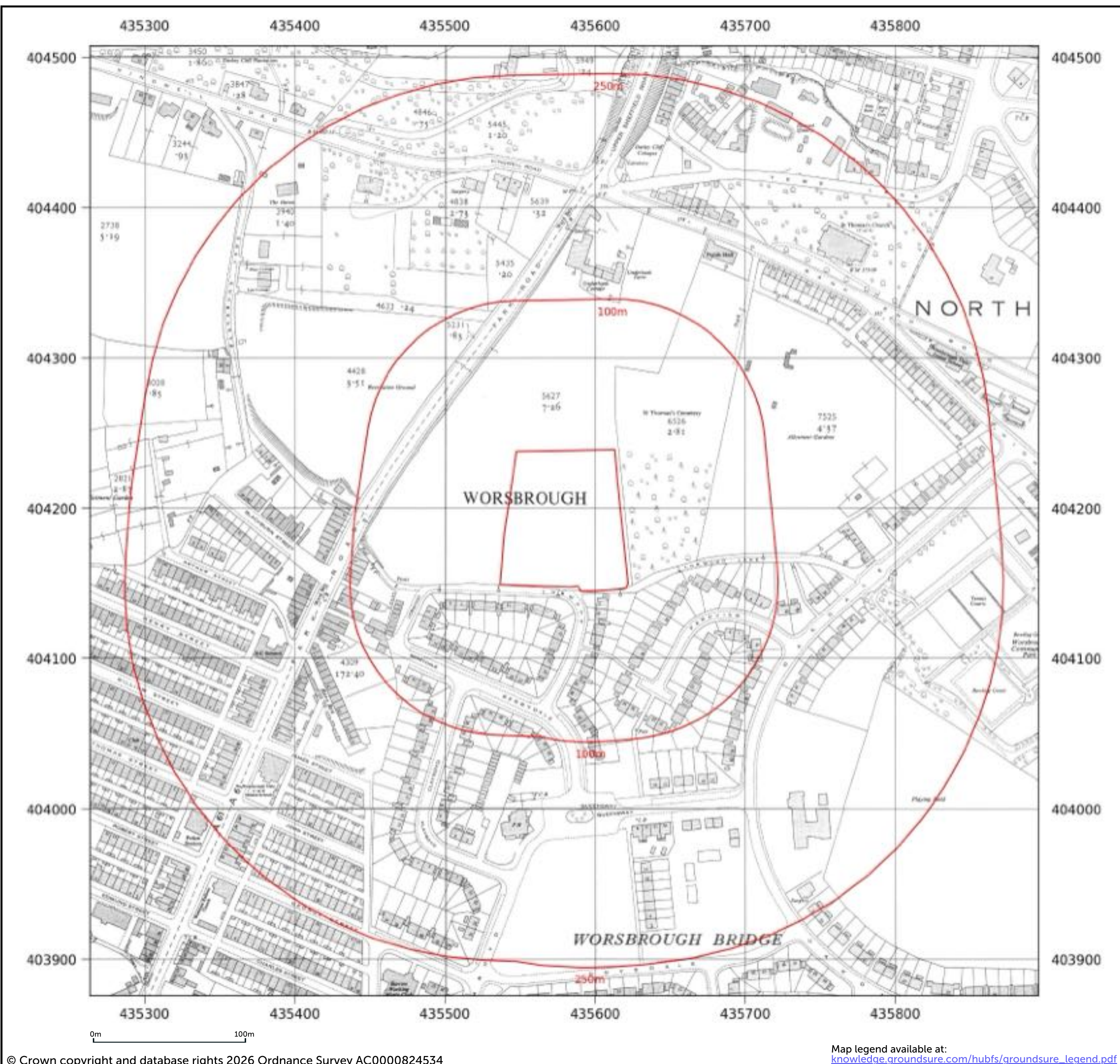
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 Surveyed: 1959
 Revised: 1959
 Edition: 1961
 Copyright: 1961
 Levelled: 1910

Date: 1961
 Surveyed: 1959
 Revised: 1960
 Edition: 1961
 Copyright: 1961
 Levelled: 1959

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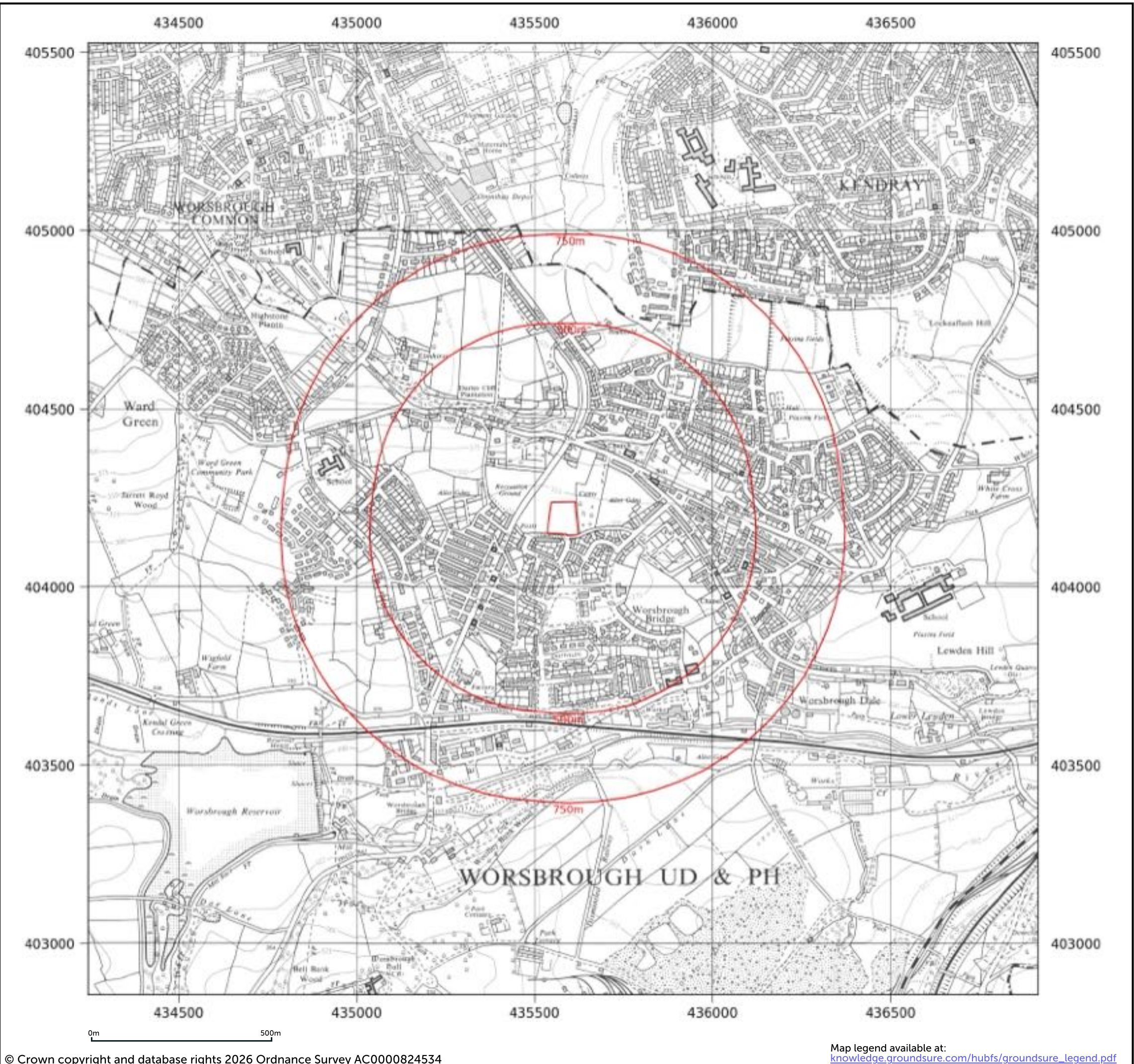
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Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
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Printed at: 1:10,560



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Date: 1965 Surveyed: 1965 Revised: 1965	Date: 1966 Surveyed: 1966 Revised: 1966

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: National Grid
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Printed at: 1:2,000



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 Revised: 1968
 Copyright: 1969
 Levelled: 1963

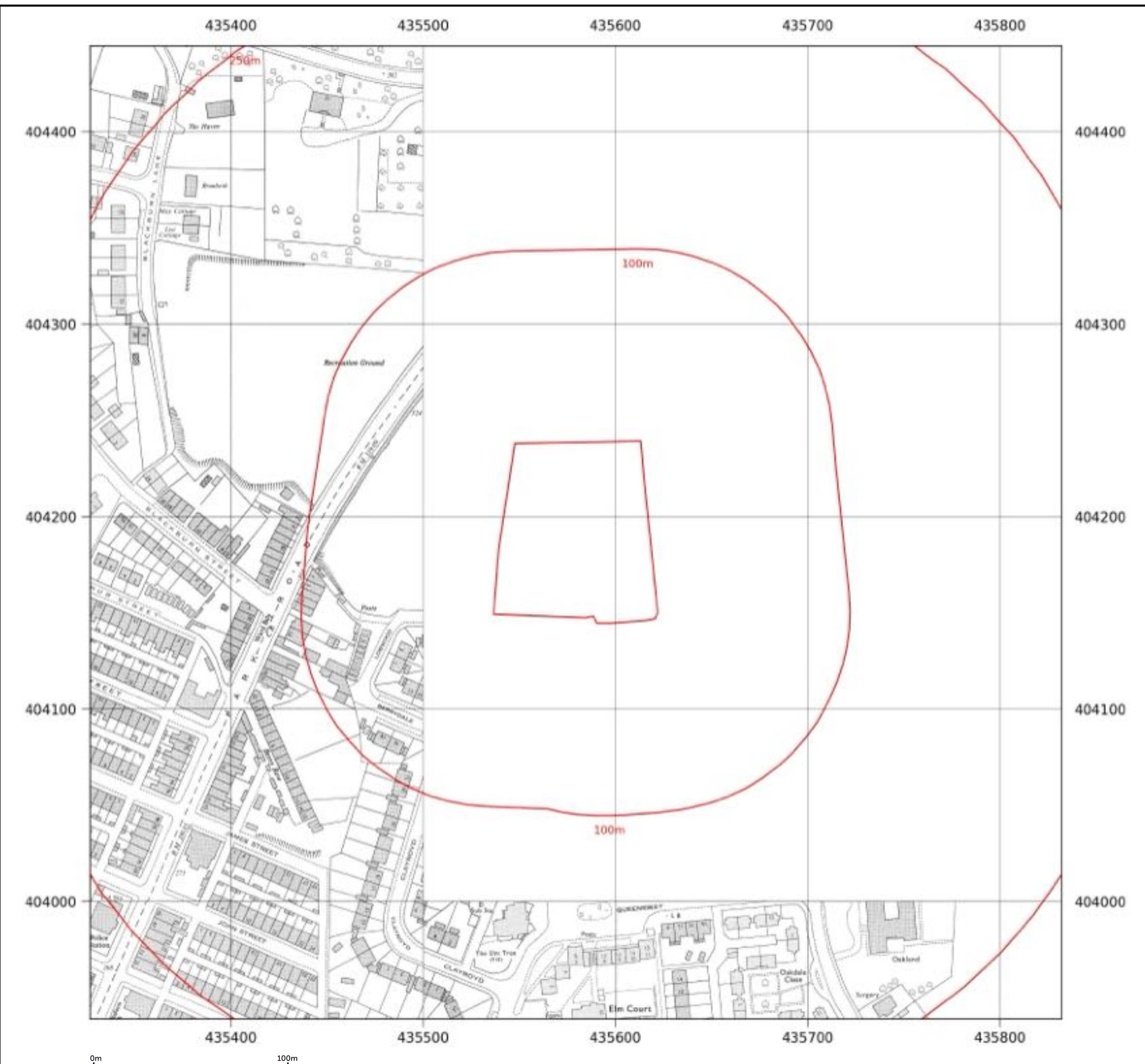
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 Revised: 1965
 Copyright: 1966
 Levelled: 1963

Date: 1971
 Surveyed: 1959
 Revised: 1970
 Copyright: 1971
 Levelled: 1963

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: National Grid
Map date: 1974-1977
Scale: 1:1,250
Printed at: 1:2,000



Date: 1977
Surveyed: 1977
Revised: 1977

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Surveyed: 1959
Revised: 1975
Copyright: 1974
Levelled: 1963

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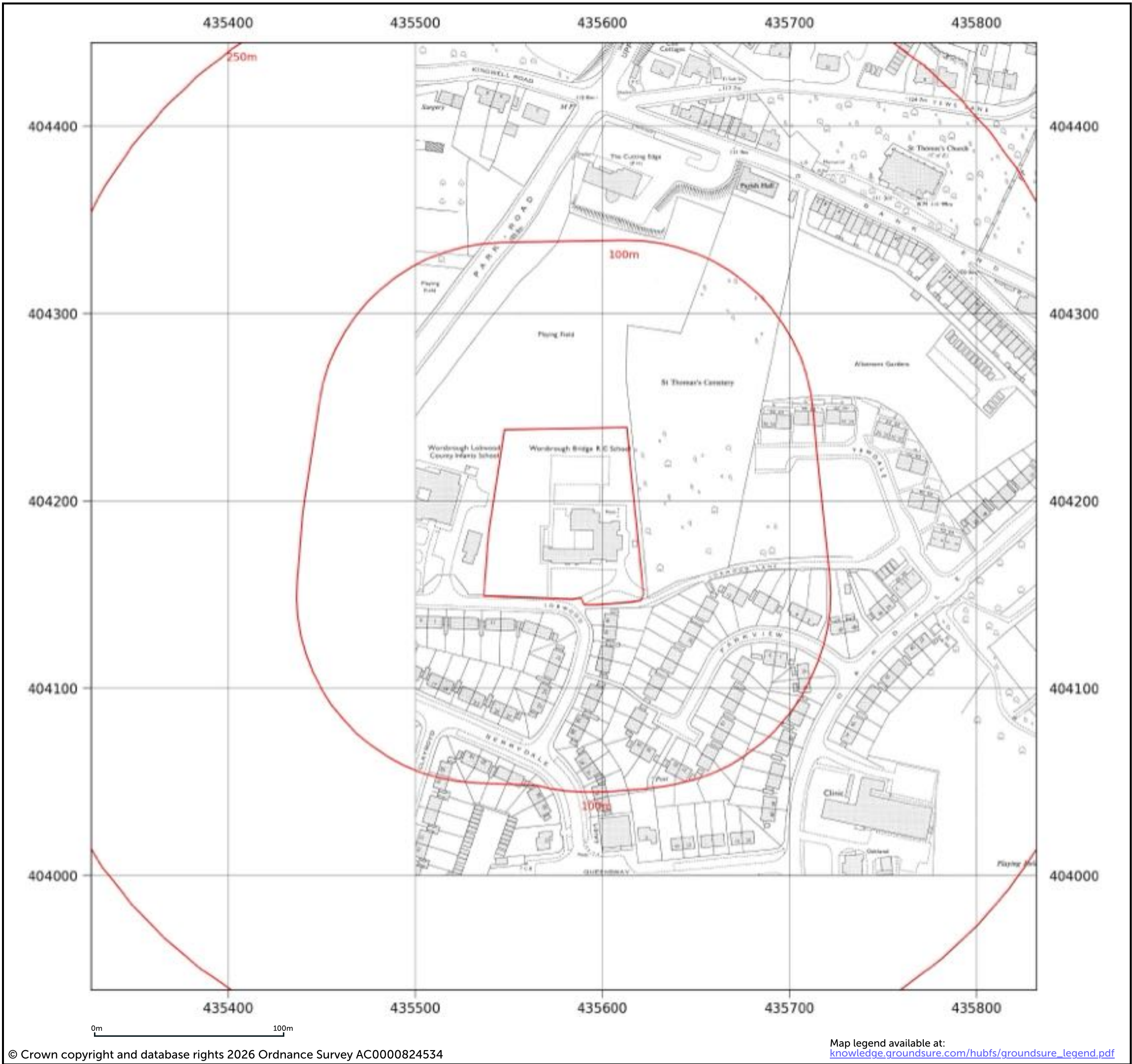
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Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: National Grid
Map date: 1977
Scale: 1:1,250
Printed at: 1:2,000



Date: 1977
Surveyed: 1959
Revised: 1975
Copyright: 1977
Levelled: 1963

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Site details:	The Mill Academy Barnsley
Client ref:	26063/4595
Report ref:	GS-7IC-VD7-2OV-K64
Grid ref:	435579.9, 404190.72
Production date:	14 April 2026

Map name:	National Grid
Map date:	1982-1987
Scale:	1:10,000
Printed at:	1:10,000



Date: 1982 Surveyed: 1982 Revised: 1982	Date: 1982 Surveyed: 1981 Revised: 1982
Date: 1987 Surveyed: 1986 Revised: 1987	

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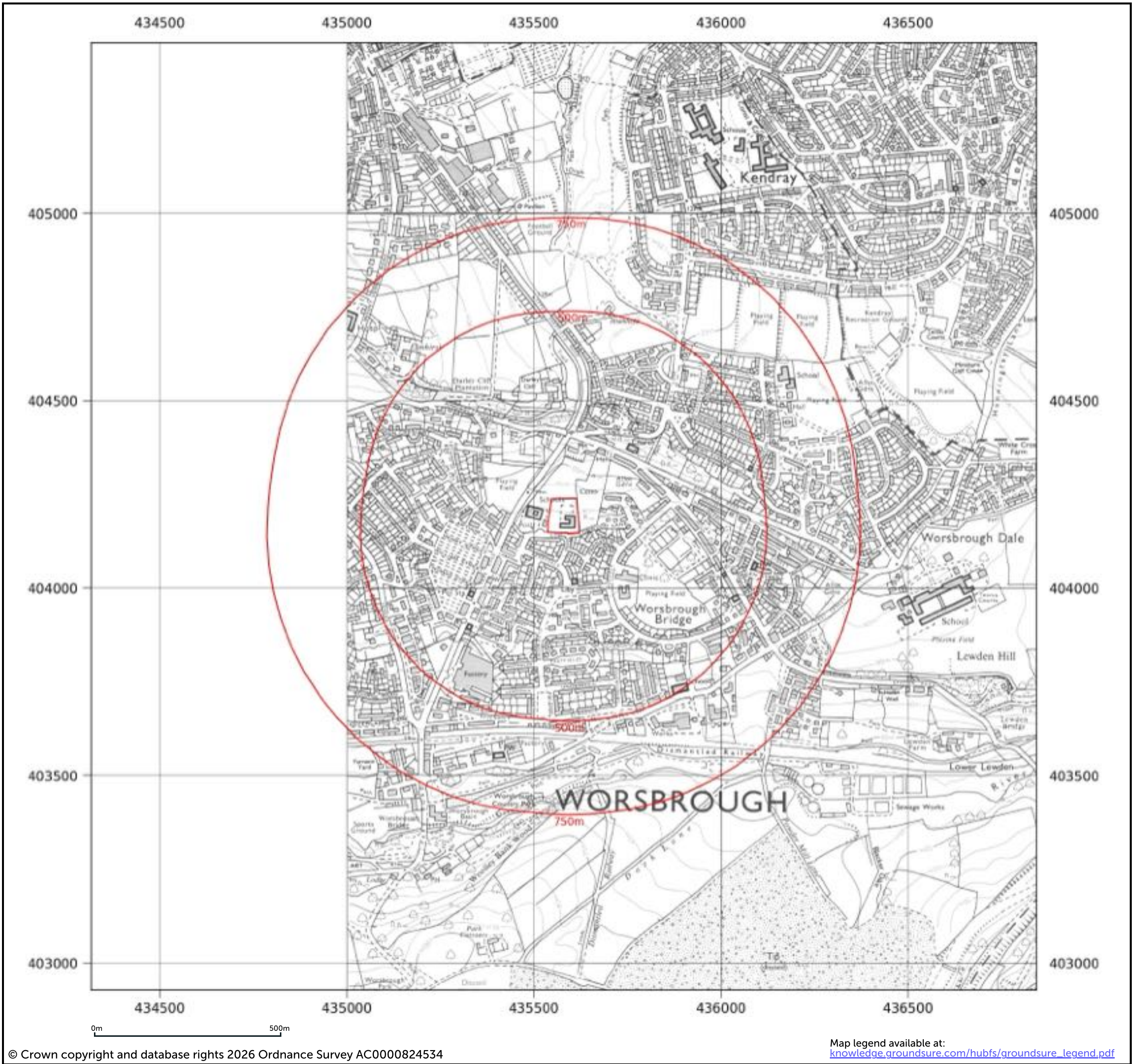
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Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: National Grid
Map date: 1987-1992
Scale: 1:10,000
Printed at: 1:10,000



Date: 1982 Surveyed: 1981 Revised: 1992
Date: 1987 Surveyed: 1986 Revised: 1987

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Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: National Grid
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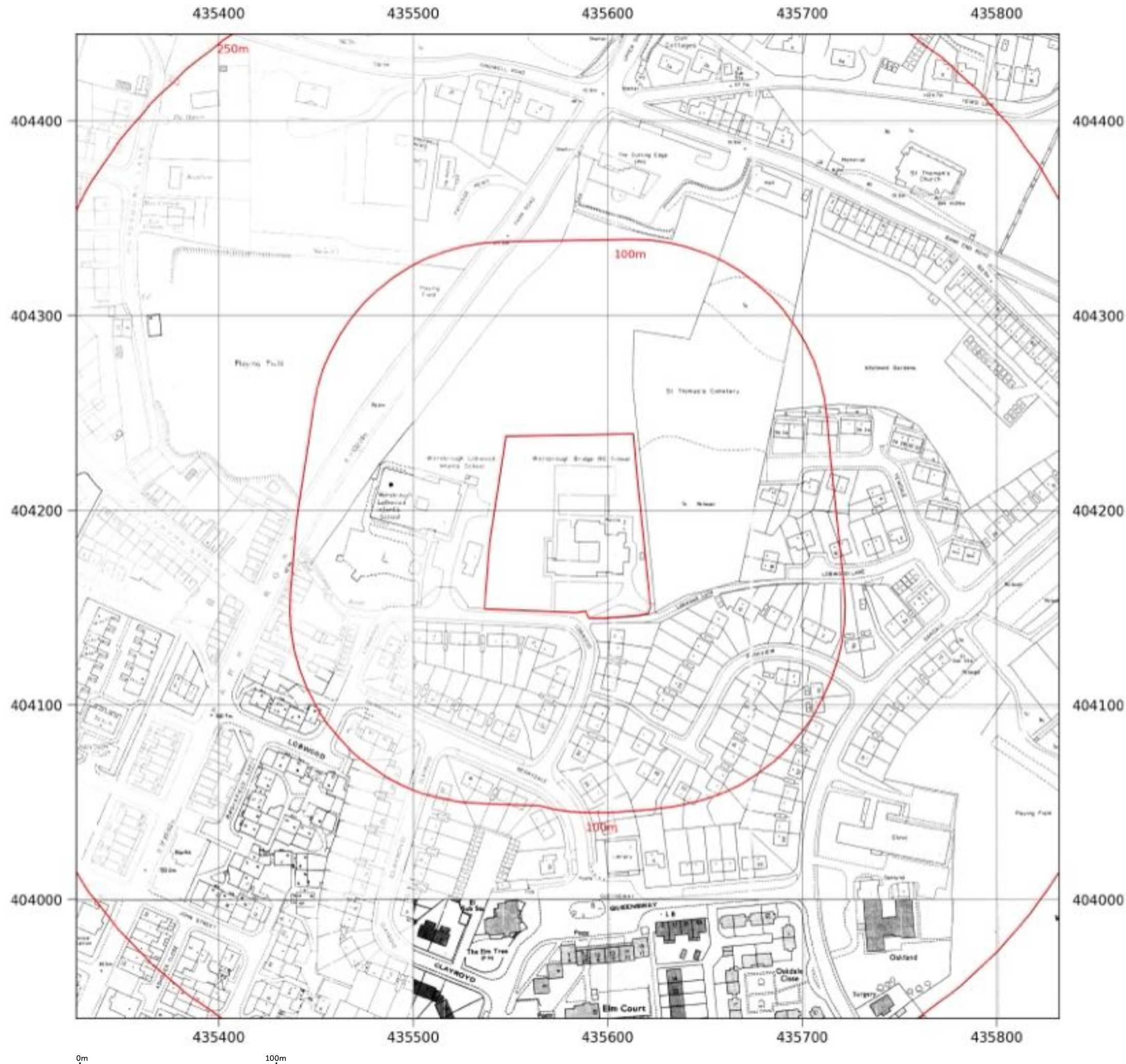


Date: 1991 Copyright: 1991 Levelled: 1963	Date: 1993 Surveyed: 1993 Revised: 1993
Date: 1993 Surveyed: 1993 Copyright: 1993	Date: 1988 Surveyed: 1963 Revised: 1988 Copyright: 1988 Levelled: 1963

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

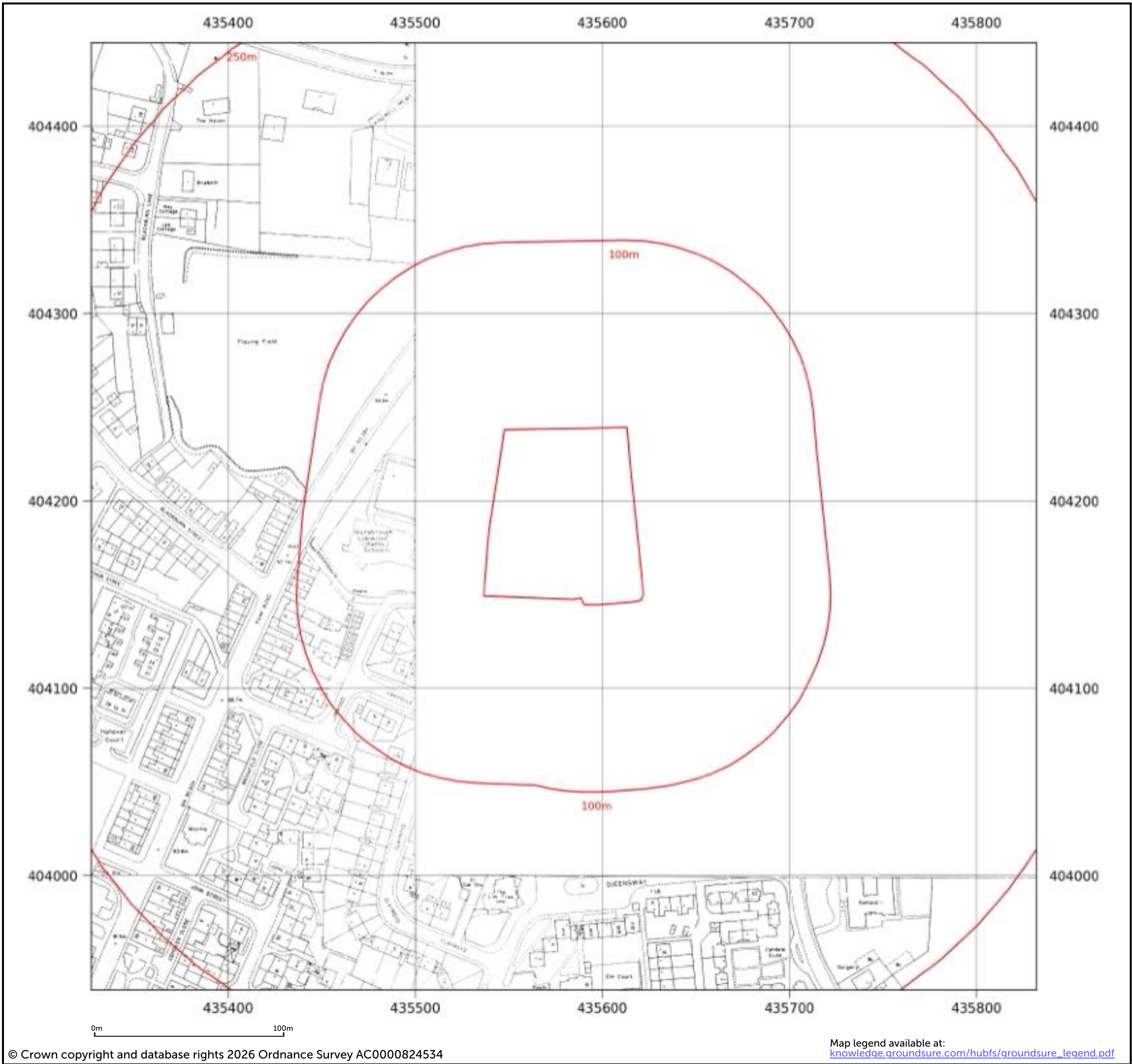
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Date: 1993
Surveyed: 1993
Copyright: 1993

Date: 1994
Surveyed: 1993
Copyright: 1993

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Site details: The Mill Academy Barnsley
 Client ref: 26063/4595
 Report ref: GS-7IC-VD7-2OV-K64
 Grid ref: 435579.9, 404190.72
 Production date: 14 April 2026

Map name: National Grid
 Map date: 2001
 Scale: 1:10,000
 Printed at: 1:10,000



Date: 2001	Date: 2001
Date: 2001	Date: 2001

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 01273 257 755



Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Site details:	The Mill Academy Barnsley
Client ref:	26063/4595
Report ref:	GS-7IC-VD7-2OV-K64
Grid ref:	435579.9, 404190.72
Production date:	14 April 2026

Map name:	LandLine
Map date:	2003
Scale:	1:1,250
Printed at:	1:1,250



Date: 2003

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 01273 257 755



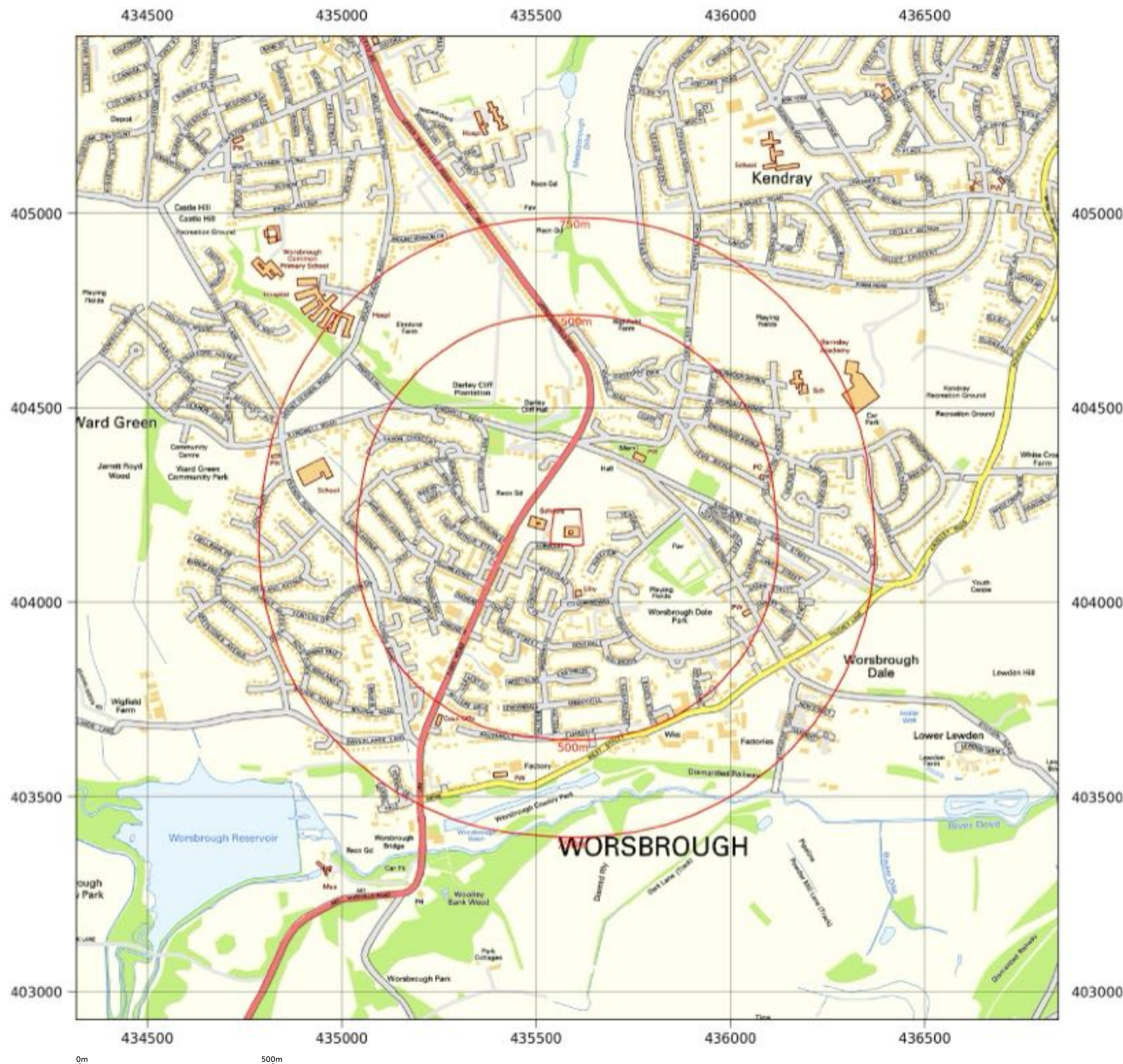
Site details: The Mill Academy Barnsley
 Client ref: 26063/4595
 Report ref: GS-7IC-VD7-2OV-K64
 Grid ref: 435579.9, 404190.72
 Production date: 14 April 2026

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



Date: 2010	Date: 2010
Date: 2010	Date: 2010

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 01273 257 755



Site details: The Mill Academy Barnsley
Client ref: 26063/4595
Report ref: GS-7IC-VD7-2OV-K64
Grid ref: 435579.9, 404190.72
Production date: 14 April 2026

Map name: National Grid
Map date: 2015
Scale: 1:10,000
Printed at: 1:10,000



Date: 2015	Date: 2015
Date: 2015	Date: 2015

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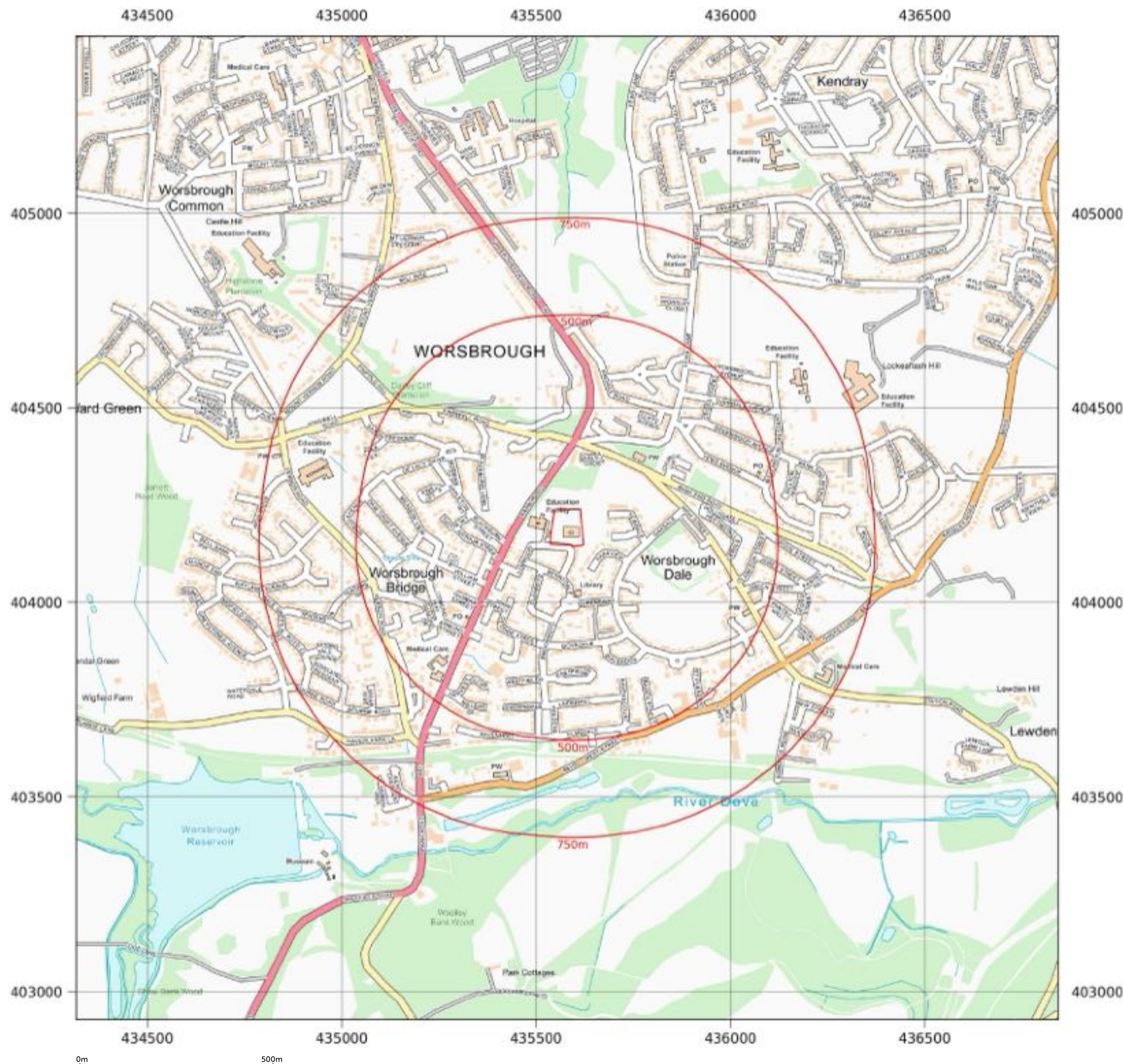
Site details: The Mill Academy Barnsley
 Client ref: 26063/4595
 Report ref: GS-7IC-VD7-2OV-K64
 Grid ref: 435579.9, 404190.72
 Production date: 14 April 2026

Map name: National Grid
 Map date: 2025
 Scale: 1:10,000
 Printed at: 1:10,000



Date: 2025	Date: 2025
Date: 2025	Date: 2025

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info@groundsure.com
 01273 257 755



APPENDIX C - CONSULTANTS COAL MINING REPORT



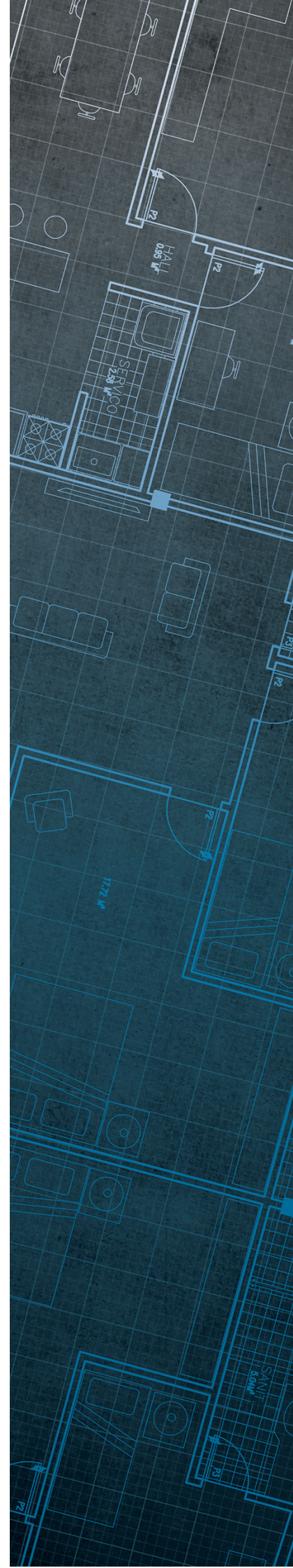
The Coal
Authority

Consultants Coal Mining Report

The Mill Academy Barnsley
South Yorkshire

Date of enquiry: 14 April 2026
Date enquiry received: 14 April 2026
Issue date: 14 April 2026

Our reference: 51003564365001
Your reference: GS-4PP-K5M-NBQ-XIN



Consultants

Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

GROUNDSURE LIMITED

Enquiry address

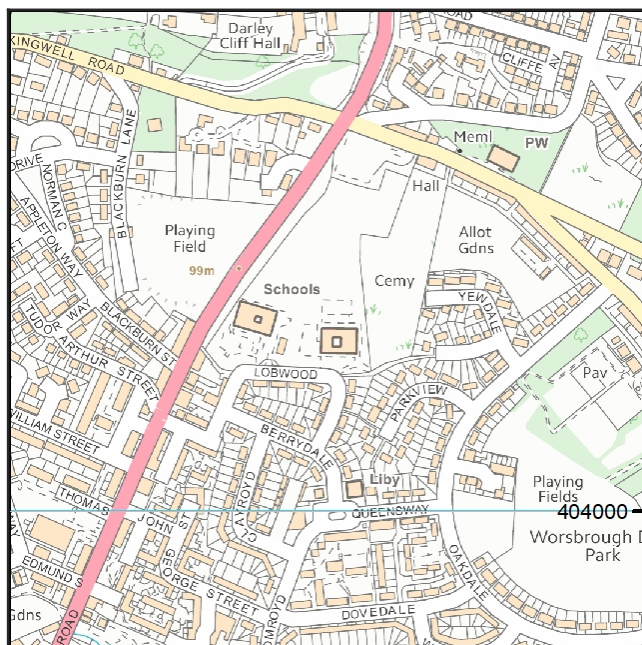
The Mill Academy Barnsley
South Yorkshire

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

reports@miningremediation.gov.uk



Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
unnamed	BARNSLEY	Coal	6Z8A	100	Beneath Property	4.6	North-East	252	1872
BARROW	LIDGETT	Coal	6Y89	204	South	4.5	North-East	117	1970
BARROW	LIDGETT	Coal	6Z8B	211	Beneath Property	3.7	North-East	119	1971
BARROW	TOP FENTON	Coal	6Y3A	331	South	4.6	North-East	102	1946
unnamed	TOP FENTON	Coal	6Z8H	339	Beneath Property	4.2	North-East	96	1946
unnamed	LOW FENTON	Coal	6Z8I	341	West	4.1	East	123	1949
BARROW	PARKGATE	Coal	6Y3B	352	South	4.7	North-East	175	1836
BARNSLEY	PARKGATE	Coal	6Z8N	355	Beneath Property	4.4	East	155	1933
BARROW	MIDDLETON MAIN	Coal	6Y1C	378	South	4.8	North-East	132	1942
BARROW	MIDDLETON MAIN	Coal	6Z8U	384	Beneath Property	4.4	East	132	1942
BARROW	SILKSTONE	Coal	6Z91	430	Beneath Property	4.6	North-East	200	1909
BARROW	SILKSTONE	Coal	6Y5C	431	South	4.7	North-East	200	1909
BARROW	SILKSTONE	Coal	6Z92	434	North-East	4.8	North-East	96	1970

Probable unrecorded shallow workings

None.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

None recorded within 100 metres of the enquiry boundary.

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

SY205	NE555	NE873
NE662	14372	R294
PO0	NE1075	13713

Our records show we have more plans than those shown above which could affect the enquiry boundary.

For assistance in identifying the specific abandoned mine plans relevant to your requirements, **please contact us at InformationManagers@MiningRemediation.gov.uk**.

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
BEAMSHAW TOP	Coal	Yes	18.4	South-West	131

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

None recorded within 50 metres of the enquiry boundary.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

Court orders

None recorded.

Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please email us at reports@miningremediation.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **email us at reports@miningremediation.gov.uk**.

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Mine water treatment schemes

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

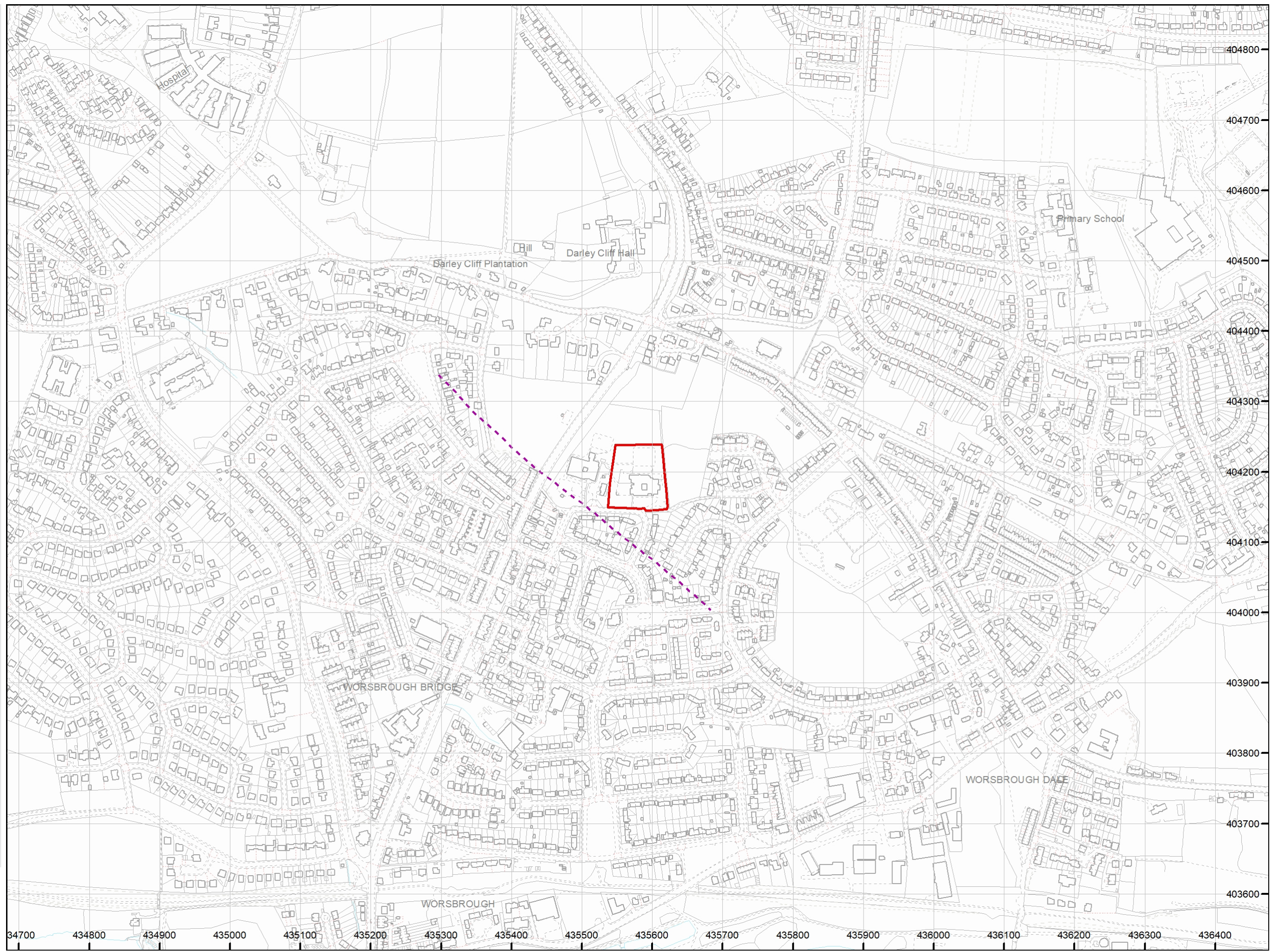
The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

Approximate position of the enquiry boundary shown 

Outcrop (Conjectured) 

How to contact us
0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
reports@miningremediation.gov.uk



APPENDIX D - GROUNDSURE REPORT

The Mill Academy Barnsley

Order Details

Date: 14/04/2026
Your ref: 26063/4595
Our Ref: GS-LR3-9QM-GZP-B8B

Site Details

Location: 435579 404190
Area: 0.7 ha
Authority: [Barnsley Metropolitan Borough Council](#) ↗

Site plan



Quick Links

[Summary of findings](#) [p. 2 >](#)
[OS MasterMap site plan](#) [p.14 >](#)
[Aerial image](#) [p. 9 >](#)

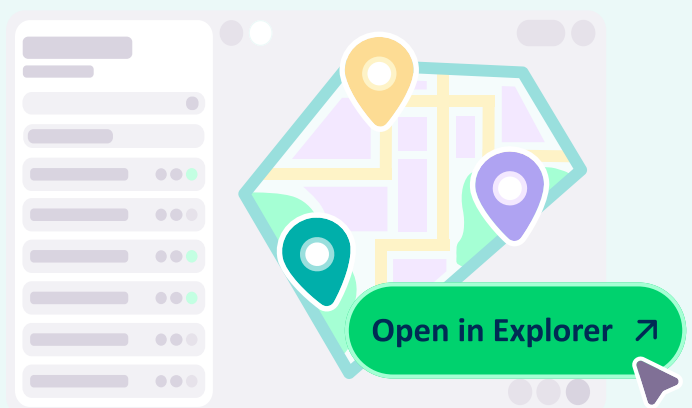
[Insight User Guide](#) ↗

Open this site in Explorer!

Access the data now in our interactive workspace.

- Map and interpret 130+ datasets across 170 years
- Generate insights and visuals quickly
- Revisit and collaborate with your team

Access to Groundsure Explorer requires an Insights account.
12 months access begins at purchase.



Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	3	2	11	27	-
17 >	1.2 >	Historical tanks >	0	0	0	1	-
18 >	1.3 >	Historical energy features >	0	0	5	8	-
18	1.4	Historical petrol stations	0	0	0	0	-
19 >	1.5 >	Historical garages >	0	0	0	2	-
19	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
20 >	2.1 >	Historical industrial land uses >	5	3	13	31	-
22 >	2.2 >	Historical tanks >	0	0	0	2	-
23 >	2.3 >	Historical energy features >	0	0	10	17	-
24	2.4	Historical petrol stations	0	0	0	0	-
24 >	2.5 >	Historical garages >	0	0	0	2	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
25	3.1	Active or recent landfill	0	0	0	0	-
25	3.2	Historical landfill (BGS records)	0	0	0	0	-
26	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
26 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	0	1	-
26	3.5	Historical waste sites	0	0	0	0	-
26	3.6	Licensed waste sites	0	0	0	0	-
27 >	3.7 >	Waste exemptions >	0	0	0	6	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
28 >	4.1 >	Recent industrial land uses >	0	0	4	-	-
29	4.2	National Geographic Database (NGD) - Current or recent tanks	0	0	0	-	-
29	4.3	Current or recent petrol stations	0	0	0	0	-
29	4.4	Electricity cables	0	0	0	0	-
29	4.5	Gas pipelines	0	0	0	0	-



29	4.6	Sites determined as Contaminated Land	0	0	0	0	-
30	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
30	4.8	Regulated explosive sites	0	0	0	0	-
30	4.9	Hazardous substance storage/usage	0	0	0	0	-
30	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
30	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
31	4.12	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
31	4.13	Radioactive Substance Authorisations	0	0	0	0	-
31 >	4.14 >	<u>Licensed Discharges to controlled waters</u> >	0	0	0	2	-
32	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
32	4.16	Pollutant release to public sewer	0	0	0	0	-
32	4.17	List 1 Dangerous Substances	0	0	0	0	-
32	4.18	List 2 Dangerous Substances	0	0	0	0	-
32	4.19	Pollution Incidents (EA/NRW)	0	0	0	0	-
33	4.20	Pollution inventory substances	0	0	0	0	-
33	4.21	Pollution inventory waste transfers	0	0	0	0	-
33	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
34	5.1	Superficial aquifer	None (within 500m)				
35 >	5.2 >	<u>Bedrock aquifer</u> >	Identified (within 500m)				
36 >	5.3 >	<u>Groundwater vulnerability</u> >	Identified (within 50m)				
37	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
37	5.5	Groundwater vulnerability- local information	None (within 0m)				
38 >	5.6 >	<u>Groundwater abstractions</u> >	0	0	0	0	1
39 >	5.7 >	<u>Surface water abstractions</u> >	0	0	0	0	16
43	5.8	Potable abstractions	0	0	0	0	0
43	5.9	Source Protection Zones	0	0	0	0	-
44	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology</u> >	On site	0-50m	50-250m	250-500m	500-2000m



45	6.1	Water Network (OS NGD)	0	0	0	-	-
45	6.2	Surface water features	0	0	0	-	-
46 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
46 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
47 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
48	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
48	7.2	Historical Flood Events	0	0	0	-	-
48	7.3	Flood Defences	0	0	0	-	-
49	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
49	7.5	Flood Storage Areas	0	0	0	-	-
50	7.6	Flood Zone 2	None (within 50m)				
50	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
51 >	8.1 >	Surface water flooding >	1 in 1000 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding >					
53 >	9.1 >	Groundwater flooding >	Negligible (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
54 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	6
55	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
55	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
55	10.4	Special Protection Areas (SPA)	0	0	0	0	0
56	10.5	National Nature Reserves (NNR)	0	0	0	0	0
56 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	2
56 >	10.7 >	Designated Ancient Woodland >	0	0	1	0	15
57	10.8	Biosphere Reserves	0	0	0	0	0
57	10.9	Forest Parks	0	0	0	0	0
58	10.10	Marine Conservation Zones	0	0	0	0	0
58 >	10.11 >	Green Belt >	0	0	1	1	0



58	10.12	Proposed Ramsar sites	0	0	0	0	0
58	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
59	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
59	10.15	Nitrate Sensitive Areas	0	0	0	0	0
59 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	2
60 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
61 >	10.18 >	SSSI Units >	0	0	0	0	2
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
62	11.1	World Heritage Sites	0	0	0	-	-
63	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
63	11.3	National Parks	0	0	0	-	-
63 >	11.4 >	Listed Buildings >	0	0	3	-	-
64	11.5	Conservation Areas	0	0	0	-	-
64	11.6	Scheduled Ancient Monuments	0	0	0	-	-
64	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
65 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
66	12.2	Open Access Land	0	0	0	-	-
66	12.3	Tree Felling Licences	0	0	0	-	-
66	12.4	Environmental Stewardship Schemes	0	0	0	-	-
66	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
67 >	13.1 >	Priority Habitat Inventory >	0	0	11	-	-
68	13.2	Habitat Networks	0	0	0	-	-
68 >	13.3 >	Open Mosaic Habitat >	0	0	1	-	-
69	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
70 >	14.1 >	10k Availability >	Identified (within 500m)				
71 >	14.2 >	Artificial and made ground (10k) >	0	0	1	0	-



72	14.3	Superficial geology (10k)	0	0	0	0	-
72 >	14.4 >	Landslip (10k) >	0	0	1	0	-
74 >	14.5 >	Bedrock geology (10k) >	1	1	5	15	-
76 >	14.6 >	Bedrock faults and other linear features (10k) >	0	2	8	9	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
77 >	15.1 >	50k Availability >	Identified (within 500m)				
78	15.2	Artificial and made ground (50k)	0	0	0	0	-
78	15.3	Artificial ground permeability (50k)	0	0	-	-	-
79	15.4	Superficial geology (50k)	0	0	0	0	-
79	15.5	Superficial permeability (50k)	None (within 50m)				
79	15.6	Landslip (50k)	0	0	0	0	-
79	15.7	Landslip permeability (50k)	None (within 50m)				
80 >	15.8 >	Bedrock geology (50k) >	1	1	5	11	-
81 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
82 >	15.10 >	Bedrock faults and other linear features (50k) >	0	2	6	9	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
83 >	16.1 >	BGS Boreholes >	0	4	9	-	-
Page	Section	Natural ground subsidence >					
85 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
86 >	17.2 >	Running sands >	Negligible (within 50m)				
87 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
88 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
89 >	17.5 >	Landslides >	Low (within 50m)				
91 >	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
93 >	18.1 >	BritPits >	0	0	1	7	-
96 >	18.2 >	Surface ground workings >	5	3	9	-	-
97 >	18.3 >	Underground workings >	0	0	0	5	9
98	18.4	Underground mining extents	0	0	0	0	-



98	18.5	Historical Mineral Planning Areas	0	0	0	0	-
98 >	18.6 >	Non-coal mining >	1	1	2	8	24
103	18.7	JPB mining areas	None (within 0m)				
103	18.8	The Coal Authority non-coal mining	0	0	0	0	-
103	18.9	Researched mining	0	0	0	0	-
103	18.10	Mining record office plans	0	0	0	0	-
104	18.11	BGS mine plans	0	0	0	0	-
104 >	18.12 >	Coal mining >	Identified (within 0m)				
104	18.13	Brine areas	None (within 0m)				
104	18.14	Gypsum areas	None (within 0m)				
104	18.15	Tin mining	None (within 0m)				
105	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
106	19.1	Natural cavities	0	0	0	0	-
106	19.2	Mining cavities	0	0	0	0	0
106	19.3	Reported recent incidents	0	0	0	0	-
106	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
108 >	20.1 >	Radon >	Between 1% and 3% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
110 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	2	-	-	-
110	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
110	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
111	22.1	Underground railways (London)	0	0	0	-	-
111	22.2	Underground railways (Non-London)	0	0	0	-	-
111	22.3	Railway tunnels	0	0	0	-	-
111	22.4	Historical railway and tunnel features	0	0	0	-	-
111	22.5	Royal Mail tunnels	0	0	0	-	-



112	22.6	Historical railways	0	0	0	-	-
112	22.7	Railways	0	0	0	-	-
112	22.8	Crossrail 2	0	0	0	0	-
112	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 11/07/2025

Site Area: 0.7ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 14 April 2026

Recent site history - 2021 aerial photograph



Capture Date: 19/04/2021

Site Area: 0.7ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 14 April 2026

Recent site history - 2013 aerial photograph



Capture Date: 07/06/2013

Site Area: 0.7ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 14 April 2026

Recent site history - 2009 aerial photograph



Capture Date: 11/09/2009

Site Area: 0.7ha



Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Date: 14 April 2026

Recent site history - 1999 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2026. All Rights Reserved.

Capture Date: 10/07/1999

Site Area: 0.7ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 14 April 2026

OS MasterMap site plan



Site Area: 0.7ha



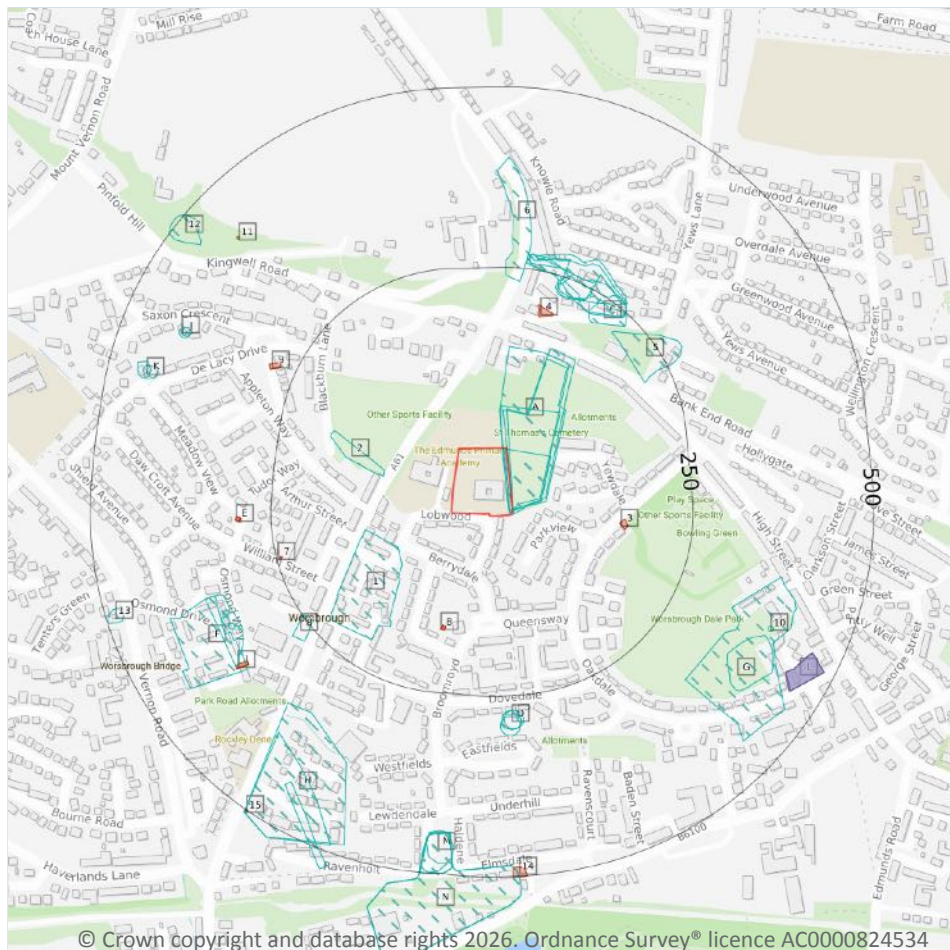
Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 14 April 2026

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

43

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

Features are displayed on the Past land use map on [page 15](#) >

ID	Location	Land use	Dates present	Group ID
A	On site	Cemetery	1951	1503784



ID	Location	Land use	Dates present	Group ID
A	On site	Cemetery	1938 - 1948	1526157
A	On site	Cemetery	1890 - 1904	1571580
A	1m E	Cemetery	1987	1535477
A	1m E	Cemetery	1966 - 1977	1579843
1	88m SW	Unspecified Works	1977 - 1987	1486296
2	98m W	Unspecified Ground Workings	1966	1440948
C	210m NE	Sandstone Quarries	1850	1471620
5	210m NE	Sandstone Quarries	1850	1471621
C	219m NE	Unspecified Quarry	1890	1524921
C	219m NE	Unspecified Quarry	1904	1573200
C	223m N	Unspecified Heap	1951	1468713
C	224m N	Unspecified Quarry	1938	1516831
C	227m N	Unspecified Quarry	1948	1488411
6	231m N	Cuttings	1948	1433754
8	242m SW	Police Station	1977 - 1987	1577810
D	270m S	Unspecified Heap	1948	1481992
D	270m S	Unspecified Heap	1938	1531514
D	270m S	Unspecified Heap	1904	1578819
D	278m S	Unspecified Heap	1850	1537638
F	330m SW	Colliery	1850	1469152
G	331m SE	Colliery	1850	1469155
F	337m SW	Coal Pit	1850	1454545
F	338m SW	Unspecified Tank	1850	1473905
H	338m SW	Unspecified Factory	1977 - 1987	1581468
F	340m SW	Railway Sidings	1850	1479908
F	343m SW	Engine House	1850	1446261
G	356m SE	Refuse Heap	1890 - 1904	1506545
H	387m SW	Unspecified Factory	1966	1556349



ID	Location	Land use	Dates present	Group ID
10	389m SE	Unspecified Tank	1850	1473922
J	404m NW	Unspecified Tank	1850	1549098
J	406m NW	Unspecified Tank	1904	1563817
K	431m W	Unspecified Heap	1966	1489886
H	434m SW	Cuttings	1850	1433753
M	440m S	Unspecified Heap	1951	1481846
K	441m W	Unspecified Heap	1890	1507026
M	442m S	Unspecified Heap	1948	1515880
M	442m S	Refuse Heap	1904	1435670
M	442m S	Unspecified Heap	1938	1522377
N	442m S	Unspecified Commercial/Industrial	1890	1432113
N	442m S	Steel Works	1904	1475098
12	456m NW	Sandstone Quarry	1850	1444892
13	475m W	Refuse Heap	1890	1435478

This data is sourced from Ordnance Survey® / Groundsure.

1.2 Historical tanks

Records within 500m

1

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

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
11	421m NW	Unspecified Tank	1973 - 1993	254046

This data is sourced from Ordnance Survey® / Groundsure.



1.3 Historical energy features

Records within 500m

13

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

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
3	150m E	Electricity Substation	1977 - 1993	147553
B	156m S	Electricity Substation	1971	159477
B	156m S	Electricity Substation	1988 - 1994	161467
4	187m N	Electricity Substation	1977 - 1993	149187
7	242m W	Electricity Substation	1996	143724
9	272m NW	Electricity Substation	1969 - 1996	150306
E	291m W	Electricity Substation	1993 - 1996	145714
E	292m W	Electricity Substation	1969	148987
E	293m W	Electricity Substation	1991	153382
I	349m SW	Electricity Substation	1994 - 1995	156556
I	349m SW	Electricity Substation	1974	154117
14	488m S	Electricity Substation	1971 - 1994	147046
15	500m SW	Electricity Substation	1994 - 1995	152986

This data is sourced from Ordnance Survey® / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey® / Groundsure.



1.5 Historical garages

Records within 500m

2

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

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
L	438m SE	Garage	1967	46309
L	438m SE	Garage	1968	48418

This data is sourced from Ordnance Survey® / Groundsure.

1.6 Historical military land

Records within 500m

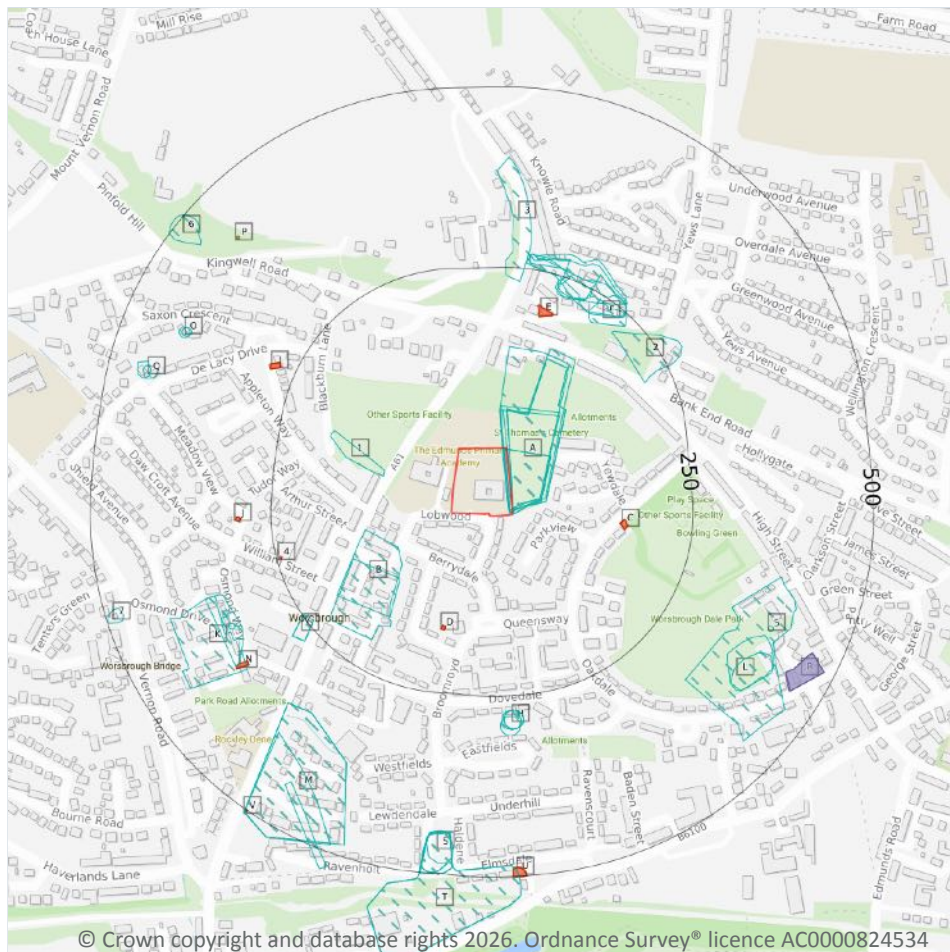
0

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

52

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 20](#) >

ID	Location	Land Use	Date	Group ID
A	On site	Cemetery	1938	1526157
A	On site	Cemetery	1904	1571580
A	On site	Cemetery	1890	1571580



ID	Location	Land Use	Date	Group ID
A	On site	Cemetery	1951	1503784
A	On site	Cemetery	1948	1526157
A	1m E	Cemetery	1987	1535477
A	1m E	Cemetery	1966	1579843
A	1m E	Cemetery	1977	1579843
B	88m SW	Unspecified Works	1977	1486296
1	98m W	Unspecified Ground Workings	1966	1440948
B	115m SW	Unspecified Works	1987	1486296
F	210m NE	Sandstone Quarries	1850	1471620
2	210m NE	Sandstone Quarries	1850	1471621
F	219m NE	Unspecified Quarry	1890	1524921
F	219m NE	Unspecified Quarry	1904	1573200
F	223m N	Unspecified Heap	1951	1468713
F	224m N	Unspecified Quarry	1938	1516831
F	227m N	Unspecified Quarry	1948	1488411
3	231m N	Cuttings	1948	1433754
G	242m SW	Police Station	1977	1577810
G	242m SW	Police Station	1987	1577810
H	270m S	Unspecified Heap	1948	1481992
H	270m S	Unspecified Heap	1948	1481992
H	270m S	Unspecified Heap	1938	1531514
H	270m S	Unspecified Heap	1904	1578819
H	278m S	Unspecified Heap	1850	1537638
K	330m SW	Colliery	1850	1469152
L	331m SE	Colliery	1850	1469155
K	337m SW	Coal Pit	1850	1454545
K	338m SW	Unspecified Tank	1850	1473905
M	338m SW	Unspecified Factory	1977	1581468



ID	Location	Land Use	Date	Group ID
M	338m SW	Unspecified Factory	1987	1581468
K	340m SW	Railway Sidings	1850	1479908
K	343m SW	Engine House	1850	1446261
L	356m SE	Refuse Heap	1890	1506545
L	376m SE	Refuse Heap	1904	1506545
M	387m SW	Unspecified Factory	1966	1556349
5	389m SE	Unspecified Tank	1850	1473922
O	404m NW	Unspecified Tank	1850	1549098
O	406m NW	Unspecified Tank	1904	1563817
Q	431m W	Unspecified Heap	1966	1489886
M	434m SW	Cuttings	1850	1433753
S	440m S	Unspecified Heap	1951	1481846
Q	441m W	Unspecified Heap	1890	1507026
S	442m S	Unspecified Heap	1948	1515880
S	442m S	Unspecified Heap	1948	1515880
S	442m S	Unspecified Heap	1938	1522377
S	442m S	Refuse Heap	1904	1435670
T	442m S	Steel Works	1904	1475098
T	442m S	Unspecified Commercial/Industrial	1890	1432113
6	456m NW	Sandstone Quarry	1850	1444892
7	475m W	Refuse Heap	1890	1435478

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m

2

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

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



ID	Location	Land Use	Date	Group ID
P	421m NW	Unspecified Tank	1973	254046
P	421m NW	Unspecified Tank	1993	254046

This data is sourced from Ordnance Survey® / Groundsure.

2.3 Historical energy features

Records within 500m

27

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

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

ID	Location	Land Use	Date	Group ID
C	150m E	Electricity Substation	1977	147553
C	150m E	Electricity Substation	1977	147553
C	150m E	Electricity Substation	1993	147553
D	156m S	Electricity Substation	1971	159477
D	156m S	Electricity Substation	1988	161467
D	156m S	Electricity Substation	1994	161467
E	187m N	Electricity Substation	1977	149187
E	187m N	Electricity Substation	1993	149187
E	188m N	Electricity Substation	1977	149187
4	242m W	Electricity Substation	1996	143724
I	272m NW	Electricity Substation	1969	150306
I	272m NW	Electricity Substation	1996	150306
I	272m NW	Electricity Substation	1993	150306
I	272m NW	Electricity Substation	1991	150306
J	291m W	Electricity Substation	1996	145714
J	291m W	Electricity Substation	1993	145714
J	292m W	Electricity Substation	1969	148987
J	293m W	Electricity Substation	1991	153382



ID	Location	Land Use	Date	Group ID
N	349m SW	Electricity Substation	1994	156556
N	349m SW	Electricity Substation	1995	156556
N	349m SW	Electricity Substation	1994	156556
N	349m SW	Electricity Substation	1974	154117
U	488m S	Electricity Substation	1971	147046
U	488m S	Electricity Substation	1988	147046
U	489m S	Electricity Substation	1994	147046
V	500m SW	Electricity Substation	1994	152986
V	500m SW	Electricity Substation	1995	152986

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

2

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

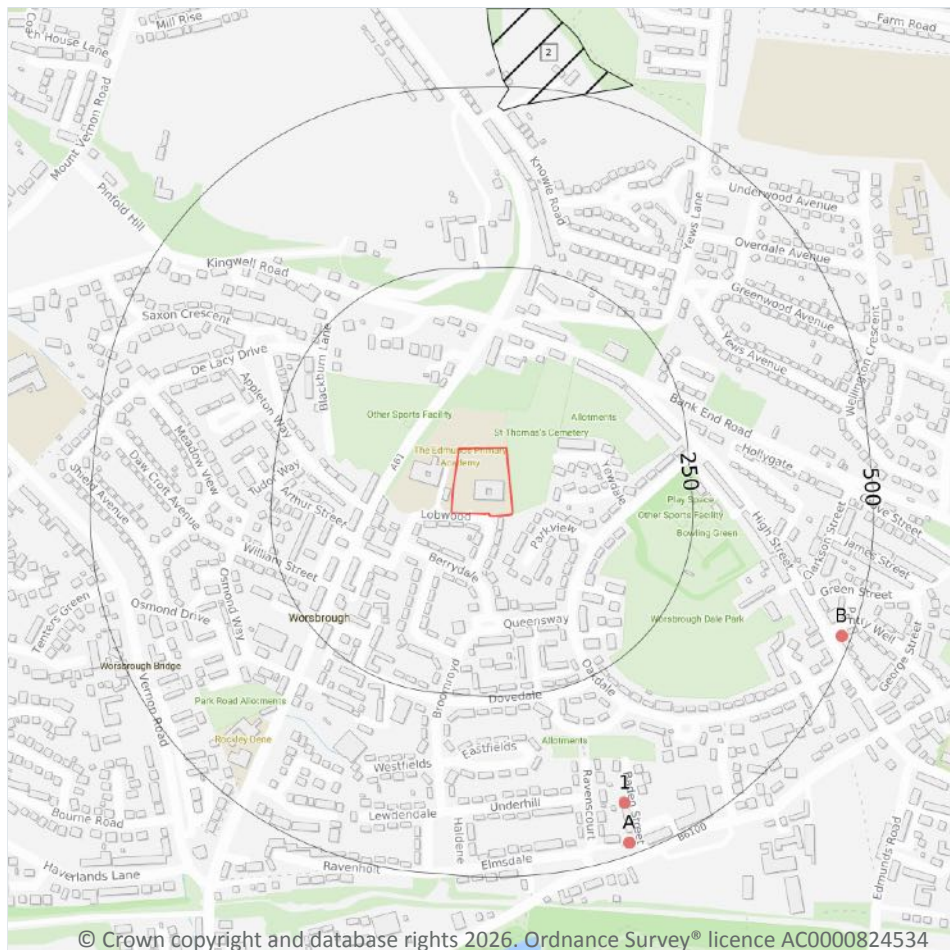
Features are displayed on the Past land use - un-grouped map on [page 20 >](#)

ID	Location	Land Use	Date	Group ID
R	438m SE	Garage	1967	46309
R	438m SE	Garage	1968	48418

This data is sourced from Ordnance Survey® / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- 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

1

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

Features are displayed on the Waste and landfill map on [page 25 >](#)

ID	Location	Details		
2	467m N	Site Address: Highfield Farm, Knowle Road, Barnsley Licence Holder Address: Highfield Farm, Knowle Road, Barnsley	Waste Licence: Yes Site Reference: WD20 B311, 4400/B311, 20B311(78) Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 16/01/1981 Licence Surrender: -	Operator: R J Norman Licence Holder: R J Norman First Recorded 31/01/1981 Last Recorded: 31/12/1983

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

3.5 Historical waste sites

Records within 500m

0

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

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

3.6 Licensed waste sites

Records within 500m

0

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

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



3.7 Waste exemptions

Records within 500m

6

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

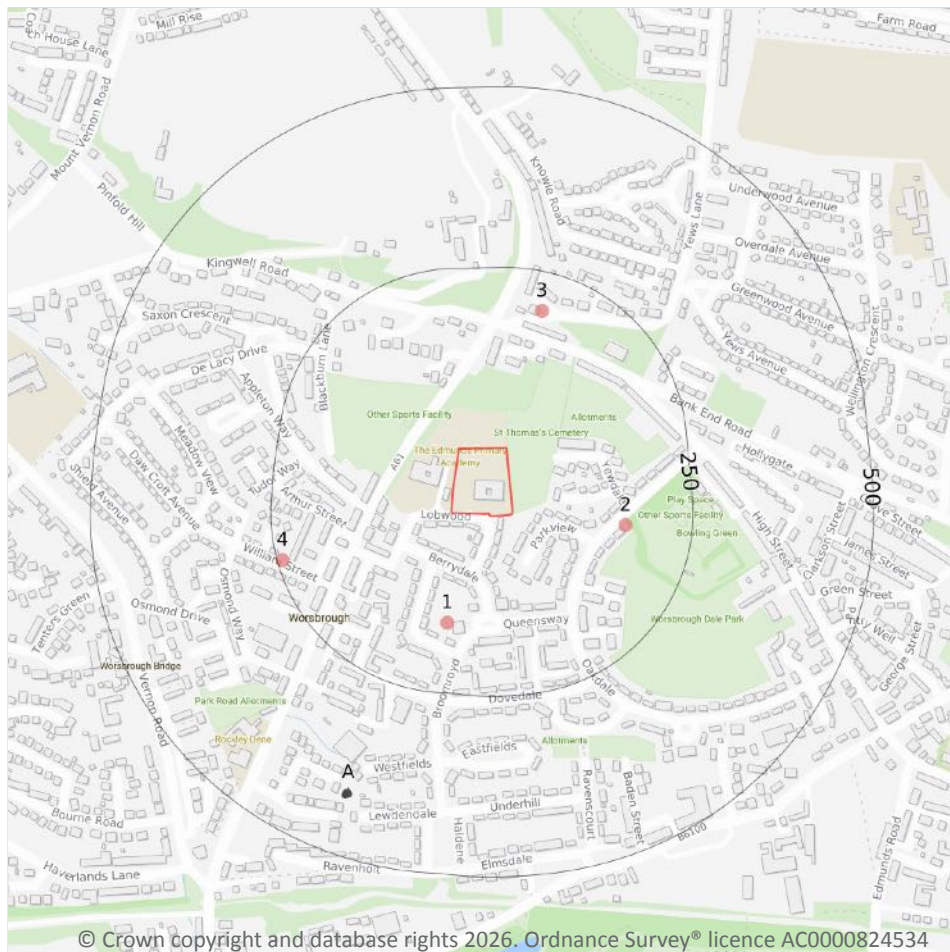
Features are displayed on the Waste and landfill map on [page 25 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
1	429m S	2a, Baden Street, Worsbrough, Barnsley, S70 5pa	WEX476450	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
A	483m S	2a, Baden Street, Worsbrough, Barnsley, S70 5pa	WEX184428	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
A	483m S	2a, Baden Street, Worsbrough, Barnsley, S70 5pa	WEX313901	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
B	486m E	51 High Street Barnsley South Yorkshire S70 4sq	EPR/NE5485V Y/A001	Treating waste exemption	Non- agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
B	486m E	51, High Street, Worsbrough, Barnsley, S70 4sq	WEX072789	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
B	486m E	51, High Street, Worsbrough, Barnsley, S70 4sq	WEX025116	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m

4

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 28 >](#)

ID	Location	Company	Address	Activity	Category
1	152m S	Electricity Sub Station	South Yorkshire, S70	Electrical Features	Infrastructure and Facilities
2	157m E	Electricity Sub Station	South Yorkshire, S70	Electrical Features	Infrastructure and Facilities
3	196m N	Electricity Sub Station	South Yorkshire, S70	Electrical Features	Infrastructure and Facilities



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 14 April 2026

ID	Location	Company	Address	Activity	Category
4	243m W	Electricity Sub Station	South Yorkshire, S70	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey®.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	0
---------------------	---

Current or recent tanks identified from the Ordnance Survey® NGD.

This data is sourced from Ordnance Survey®.

4.3 Current or recent petrol stations

Records within 500m	0
---------------------	---

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m	0
---------------------	---

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m	0
---------------------	---

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 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.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.8 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.

4.9 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.10 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.

4.11 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.

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

Records within 500m

0

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

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.14 Licensed Discharges to controlled waters

Records within 500m

2

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 28](#) >

ID	Location	Address	Details	
A	413m S	WESTFIELDS CSO, WESTFIELDS (REAR OF NO 13), WORSBOROUGH, BARNSLEY, SOUTH YORKSHIRE, S70 5DY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA7982 Permit Version: 2 Receiving Water: SNAPE SIKE (CULVERTED)	Status: VARIED UNDER EPR 2010 Issue date: 16/10/2024 Effective Date: 16/10/2024 Revocation Date: -
A	416m S	WESTFIELDS CSO, WESTFIELDS (REAR OF NO 13), WORSBOROUGH, BARNSLEY, SOUTH YORKSHIRE, S70 5DY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA7982 Permit Version: 1 Receiving Water: SNAPE DIKE	Status: REVISED BY APPLICATION, GRANTED BY SEC.OF STATE -SEC 35 Issue date: 03/02/2004 Effective Date: 31/03/2004 Revocation Date: 15/10/2024

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



4.15 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.

4.16 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.

4.17 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.

4.18 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.

4.19 Pollution Incidents (EA/NRW)

Records within 500m**0**

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

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

4.20 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.

4.21 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.

4.22 Pollution inventory radioactive waste

Records within 500m

0

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

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

5 Hydrogeology - Superficial aquifer

5.1 Superficial aquifer

Records within 500m

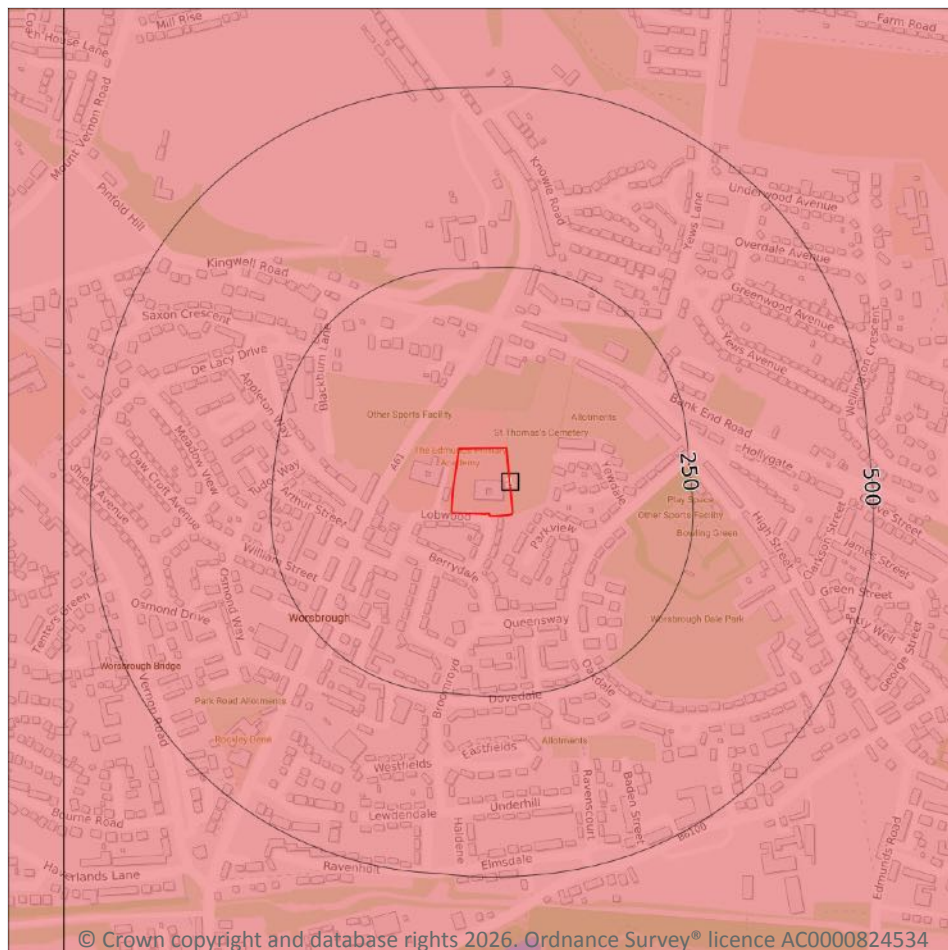
0

Aquifer status of groundwater held within superficial geology.

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

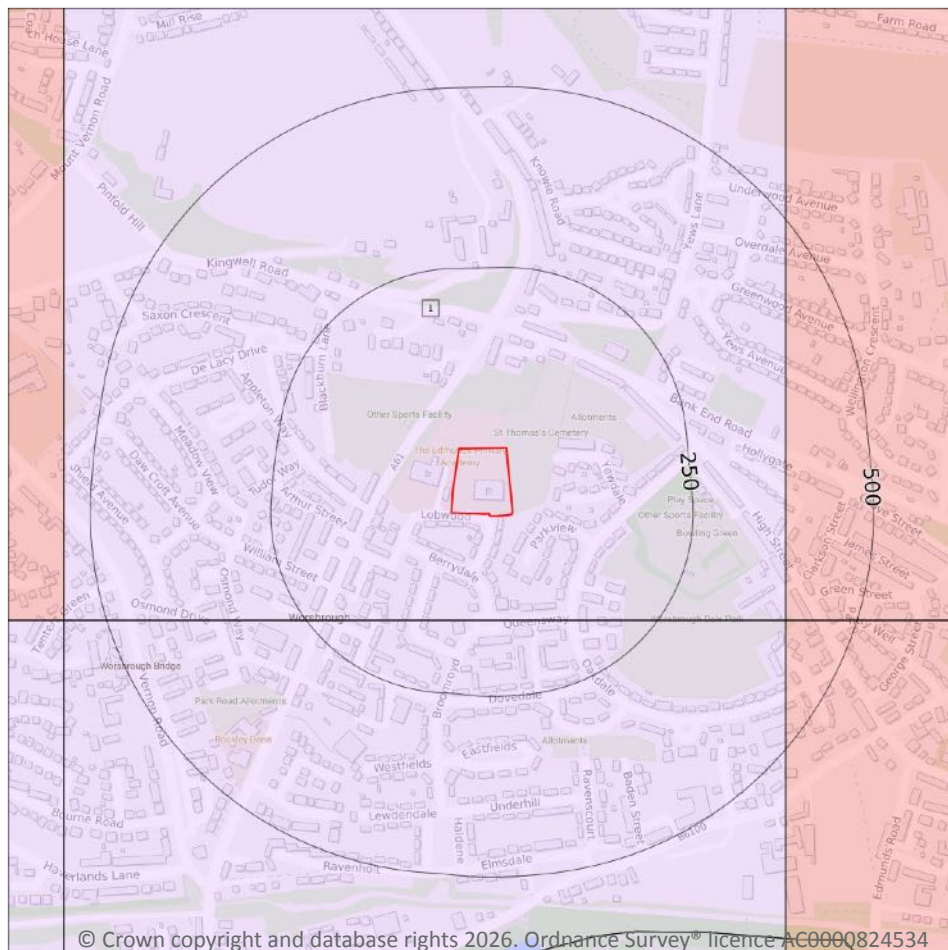
Features are displayed on the Bedrock aquifer map on [page 35](#) >

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

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



Groundwater vulnerability



— Site Outline

Search buffers in metres (m)

Superficial vulnerability

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

Bedrock vulnerability

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

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m

1

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 36](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium 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
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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
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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
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

1

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 38](#) >

ID	Location	Details	
-	1715m SW	Status: Historical Licence No: 2/27/08/040 Details: General Farming & Domestic Direct Source: GROUNDWATERS Point: WELL - COAL MEASURES - WORSBOROUGH Data Type: Point Name: BROWN Easting: 434800 Northing: 402600	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: -

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

5.7 Surface water abstractions

Records within 2000m	16
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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 38 >](#)

ID	Location	Details	
-	904m S	Status: Historical Licence No: 2/27/08/129 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER Point: INLAND WATER - RIVER DOVE Data Type: Line Name: WORSBROUGH BRIDGE SPORTS & DEVELOPMENT ASSOCIATION Easting: 435000 Northing: 403300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 04/09/2002 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 04/09/2002 Version End Date: -
-	1023m SW	Status: Active Licence No: 2/27/08/143/R01 Details: Milling & Water Power Other Than Electricity Generation Direct Source: SURFACE WATER Point: WORSBOROUGH MILL POND Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434947 Northing: 403313	Annual Volume (m ³): 174314 Max Daily Volume (m ³): 633 Original Application No: NPS/WR/033523 Original Start Date: 01/04/2017 Expiry Date: 31/03/2029 Issue No: 3 Version Start Date: 08/07/2020 Version End Date: -



ID	Location	Details	
-	1061m SW	Status: Historical Licence No: 2/27/08/118 Details: Milling & Water Power Other Than Electricity Generation Direct Source: SURFACE WATER Point: WORSBOROUGH MILL POND Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434900 Northing: 403300	Annual Volume (m ³): 45359 Max Daily Volume (m ³): 633 Original Application No: - Original Start Date: 04/07/1997 Expiry Date: 31/12/2007 Issue No: 102 Version Start Date: 01/08/2002 Version End Date: -
-	1061m SW	Status: Historical Licence No: 2/27/08/143 Details: Milling & Water Power Other Than Electricity Generation Direct Source: SURFACE WATER Point: WORSBOROUGH MILL POND Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434900 Northing: 403300	Annual Volume (m ³): 45359 Max Daily Volume (m ³): 1125 Original Application No: - Original Start Date: 14/02/2008 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 14/02/2008 Version End Date: -
-	1085m SW	Status: Active Licence No: NE/027/0008/023 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER Point: WORSBOROUGH RESERVOIR Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434862 Northing: 403299	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/029960 Original Start Date: 25/07/2019 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 25/07/2019 Version End Date: -
-	1085m SW	Status: Historical Licence No: NE/027/0008/019 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER Point: WORSBOROUGH RESERVOIR Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434862 Northing: 403299	Annual Volume (m ³): 13789 Max Daily Volume (m ³): 492 Original Application No: - Original Start Date: 01/04/2017 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 01/04/2017 Version End Date: -



ID	Location	Details	
-	1124m SW	Status: Historical Licence No: 2/27/08/118 Details: Milling & Water power other than electricity generation Direct Source: SURFACE WATER Point: WORSBOROUGH RESERVOIR Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434800 Northing: 403300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 04/07/1997 Expiry Date: 31/12/2007 Issue No: 100 Version Start Date: 04/07/1997 Version End Date: -
-	1124m SW	Status: Historical Licence No: 2/27/08/118 Details: Lake & Pond Throughflow Direct Source: SURFACE WATER Point: WORSBOROUGH RESERVOIR Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434800 Northing: 403300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 04/07/1997 Expiry Date: 31/12/2007 Issue No: 102 Version Start Date: 01/08/2002 Version End Date: -
-	1124m SW	Status: Historical Licence No: 2/27/08/118 Details: Make-Up Or Top Up Water Direct Source: SURFACE WATER Point: WORSBOROUGH RESERVOIR Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434800 Northing: 403300	Annual Volume (m ³): 45359 Max Daily Volume (m ³): 633 Original Application No: - Original Start Date: 04/07/1997 Expiry Date: 31/12/2007 Issue No: 102 Version Start Date: 01/08/2002 Version End Date: -
-	1124m SW	Status: Historical Licence No: 2/27/08/143 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: SURFACE WATER Point: WORSBOROUGH RESERVOIR Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434800 Northing: 403300	Annual Volume (m ³): 45359 Max Daily Volume (m ³): 1125 Original Application No: - Original Start Date: 14/02/2008 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 14/02/2008 Version End Date: -



ID	Location	Details	
-	1162m SE	Status: Historical Licence No: 2/27/08/128 Details: Make-Up or Top Up Water Direct Source: SURFACE WATER Point: INLAND WATER - RIVER DOVE Data Type: Line Name: NUTTALL Easting: 436550 Northing: 403450	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 13/09/2002 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 13/09/2002 Version End Date: -
-	1744m SW	Status: Active Licence No: NE/027/0008/022 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER Point: ROCKLEY DIKE Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434416 Northing: 402813	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/029959 Original Start Date: 25/07/2019 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 25/07/2019 Version End Date: -
-	1744m SW	Status: Historical Licence No: NE/027/0008/018 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER Point: ROCKLEY DIKE Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434416 Northing: 402813	Annual Volume (m ³): 13789 Max Daily Volume (m ³): 492 Original Application No: - Original Start Date: 01/04/2017 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 01/04/2017 Version End Date: -
-	1764m SW	Status: Historical Licence No: 2/27/08/118 Details: Lake & Pond Throughflow Direct Source: SURFACE WATER Point: ROCKLEY DIKE Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434400 Northing: 402800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 04/07/1997 Expiry Date: 31/12/2007 Issue No: 102 Version Start Date: 01/08/2002 Version End Date: -

ID	Location	Details	
-	1764m SW	Status: Historical Licence No: 2/27/08/118 Details: Make-Up Or Top Up Water Direct Source: SURFACE WATER Point: ROCKLEY DIKE Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434400 Northing: 402800	Annual Volume (m ³): 45359 Max Daily Volume (m ³): 633 Original Application No: - Original Start Date: 04/07/1997 Expiry Date: 31/12/2007 Issue No: 102 Version Start Date: 01/08/2002 Version End Date: -
-	1764m SW	Status: Historical Licence No: 2/27/08/143 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: SURFACE WATER Point: ROCKLEY DIKE Data Type: Point Name: BARNSELY METROPOLITAN BOROUGH COUNCIL Easting: 434400 Northing: 402800	Annual Volume (m ³): 45359 Max Daily Volume (m ³): 1125 Original Application No: - Original Start Date: 14/02/2008 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 14/02/2008 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

0

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

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

5.9 Source Protection Zones

Records within 500m

0

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

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



5.10 Source Protection Zones (confined aquifer)

Records within 500m

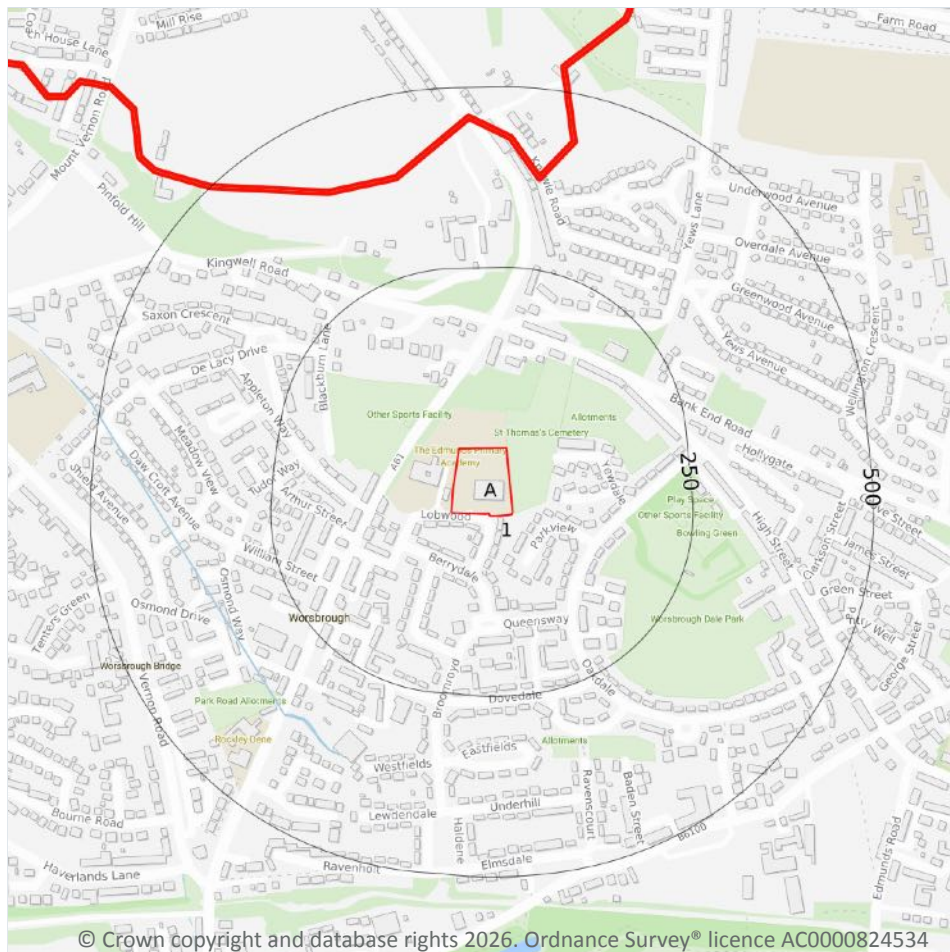
0

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

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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS NGD)
- 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 NGD)

Records within 250m

0

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

This data is sourced from the Ordnance Survey®.

6.2 Surface water features

Records within 250m

0

Covering rivers, streams and lakes (some overlap with OS NGD 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.



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 45](#) >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Dove from Source to River Dearne	GB104027057510	Dearne	Don and Rother

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

6.4 WFD Surface water bodies

Records identified

1

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

Features are displayed on the Hydrology map on [page 45](#) >

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	645m S	River	Dove from Source to River Dearne	GB104027057510 ↗	No longer applicable	Does not require assessment	Moderate	2022

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 45](#) >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Don & Rother Millstone grit & Coal Measures	GB40402G992300 ↗	Poor	Poor	Good	2019

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



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

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

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

7.2 Historical Flood Events

Records within 250m

0

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

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

7.3 Flood Defences

Records within 250m

0

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

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



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

0

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

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

8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

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

1 in 250 return period

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

1 in 100 return period

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

1 in 30 return period

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

8.1 Surface water flooding

Highest risk on site

1 in 1000 year, 0.1m - 0.3m

Highest risk within 50m

1 in 1000 year, 0.1m - 0.3m

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

Features are displayed on the Surface water flooding map on [page 51](#) >

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



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

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

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

Negligible

Highest risk within 50m

Negligible

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

Features are displayed on the Groundwater flooding map on [page 53 >](#)

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- ▢ Sites of Special Scientific Interest (SSSI)
- + Local Nature Reserves (LNR)
- ▢ Designated Ancient Woodland
- ▢ Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

6

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

Features are displayed on the Environmental designations map on [page 54 >](#)

ID	Location	Name	Data source
5	783m SE	Dearne Valley Wetlands SSSI	Natural England



ID	Location	Name	Data source
8	1123m SW	Dearne Valley Wetlands SSSI	Natural England
9	1206m SW	Dearne Valley Wetlands SSSI	Natural England
10	1250m SW	Dearne Valley Wetlands SSSI	Natural England
11	1314m SW	Dearne Valley Wetlands SSSI	Natural England
-	1786m S	Dearne Valley Wetlands SSSI	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

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

2

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 54 >](#)

ID	Location	Name	Data source
A	543m S	Worsborough Country Park	Natural England
6	862m SW	Worsborough Country Park	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m

16

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 54 >](#)

ID	Location	Name	Woodland Type
2	185m N	Darley Cliff Plantation	Ancient & Semi-Natural Woodland
A	656m S	Unknown	Ancient & Semi-Natural Woodland
A	658m S	Unknown	Ancient & Semi-Natural Woodland
4	678m NW	Highstead Plantation	Ancient & Semi-Natural Woodland
7	1016m SW	Unknown	Ancient & Semi-Natural Woodland



ID	Location	Name	Woodland Type
B	1131m SW	Unknown	Ancient & Semi-Natural Woodland
B	1134m SW	Unknown	Ancient & Semi-Natural Woodland
12	1463m SW	Shaw Bank Wood	Ancient & Semi-Natural Woodland
13	1588m SE	Wombwell Wood	Ancient & Semi-Natural Woodland
14	1591m SE	Wombwell Wood	Ancient & Semi-Natural Woodland
15	1597m SE	Wombwell Wood	Ancient & Semi-Natural Woodland
-	1656m SE	Wombwell Wood	Ancient Replanted Woodland
-	1763m E	Swaithe Wood	Ancient & Semi-Natural Woodland
-	1778m SE	Wombwell Wood	Ancient Replanted Woodland
-	1779m SE	Wombwell Wood	Ancient Replanted Woodland
-	1954m S	Short Wood Dyke	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

2

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

Features are displayed on the Environmental designations map on [page 54 >](#)

ID	Location	Name	Local Authority name
1	185m N	South and West Yorkshire Green Belt	Barnsley
3	375m N	South and West Yorkshire Green Belt	Barnsley

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

3

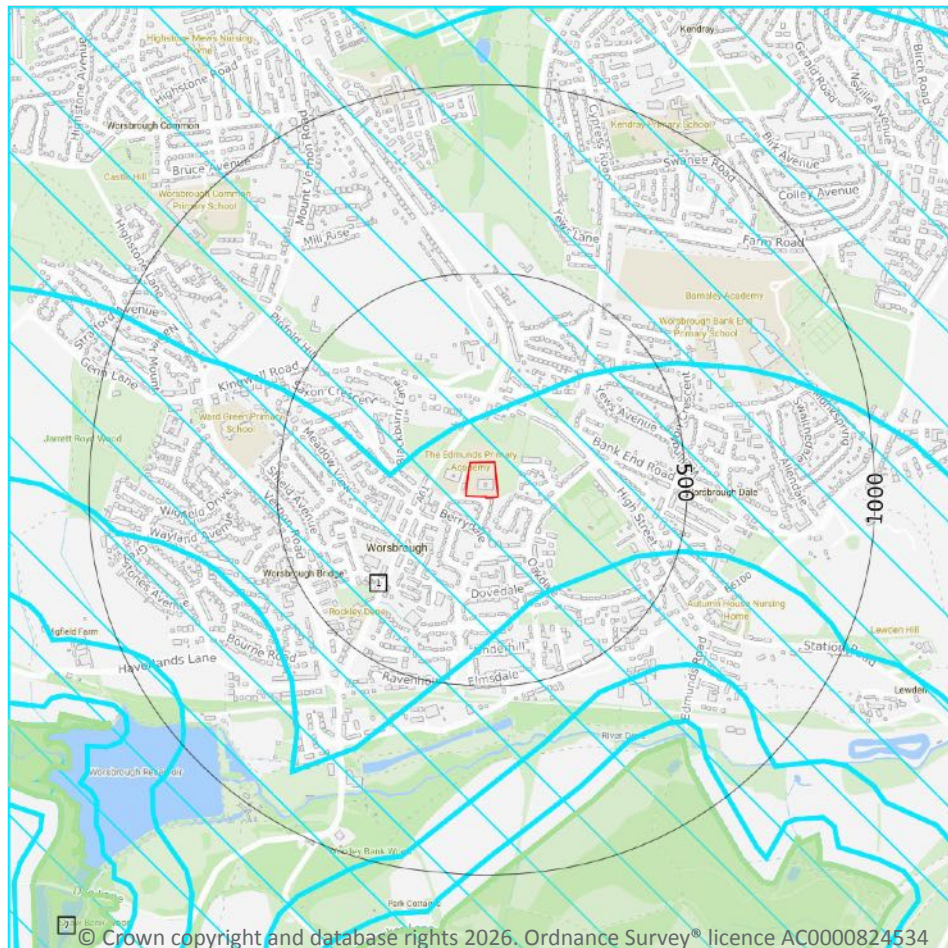
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	River Dearne NVZ	Surface Water	278	Existing
1445m W	River Dearne NVZ	Surface Water	278	Existing
1743m N	River Dearne NVZ	Surface Water	278	Existing

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 60](#) >

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0121254322231&notes=&location=437860,402604%20(IRZ%20polygon%20centre)

This data is sourced from Natural England.



10.18 SSSI Units

Records within 2000m

2

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

Features are displayed on the SSSI Impact Zones and Units map on [page 60 >](#)

ID: 4
 Location: 783m SE
 SSSI name: Dearne Valley Wetlands
 Unit name: Barrow Colliery Site
 Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

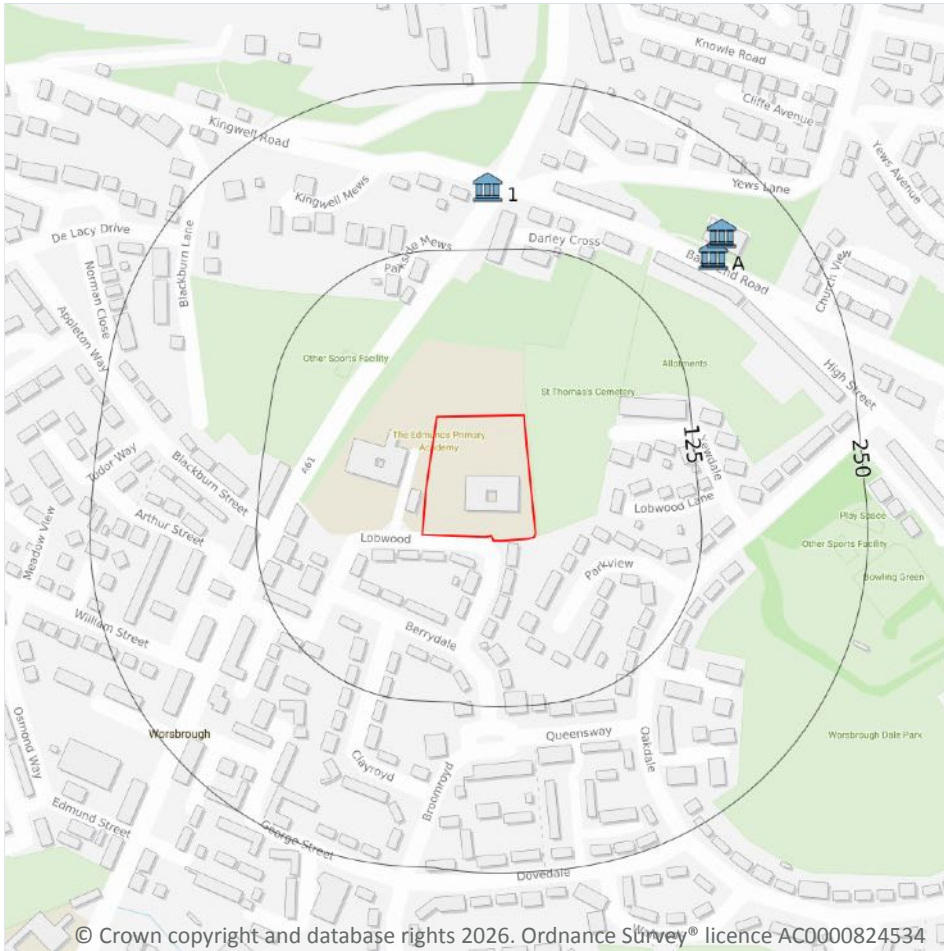
ID: 7
 Location: 1123m SW
 SSSI name: Dearne Valley Wetlands
 Unit name: Worsbrough Reservoir
 Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

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

3

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 62 >](#)

ID	Location	Name	Grade	Reference Number	Listed date
1	172m N	Milepost At South Side Of Junction With Kingwell Road	II	1192299	04/12/1986
A	186m NE	Colliery Explosion Monument Approximately 5 Metres To South Of Porch To Church Of St Thomas And St James	II	1315056	04/12/1986
A	202m NE	Church Of St Thomas And St James	II	1192000	04/12/1986

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



11.5 Conservation Areas

Records within 250m

0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

Records within 250m

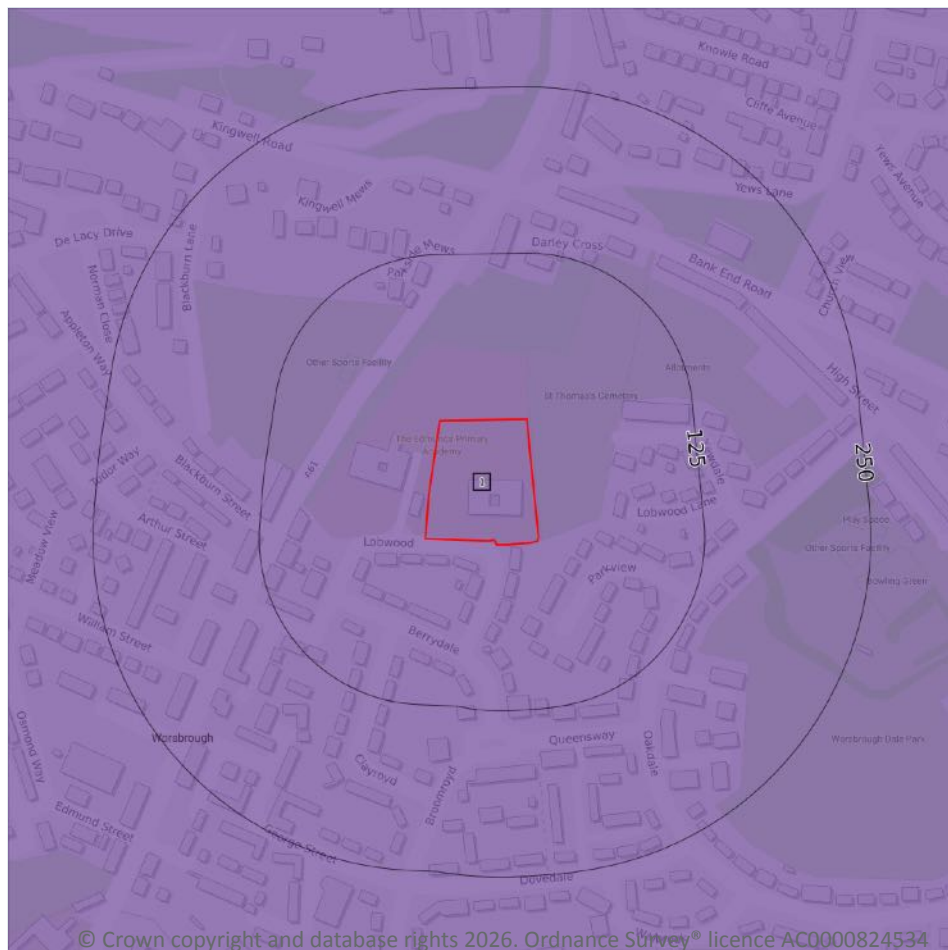
0

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

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



12 Agricultural designations



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

12.1 Agricultural Land Classification

Records within 250m

1

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

Features are displayed on the Agricultural designations map on [page 65](#) >

ID	Location	Classification	Description
1	On site	Urban	Non-agricultural/no quality assigned

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

11

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 67](#) >

ID	Location	Main Habitat	Other habitats
1	54m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	170m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	173m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	185m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



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Date: 14 April 2026

67

ID	Location	Main Habitat	Other habitats
3	185m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	187m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	191m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	199m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	211m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	212m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	222m N	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

1

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 67 >](#)

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
B	211m NE	NLUD Ref: 440800249	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	British Geological Survey BRITPITS database

This data is sourced from Natural England.



13.4 Limestone Pavement Orders

Records within 250m

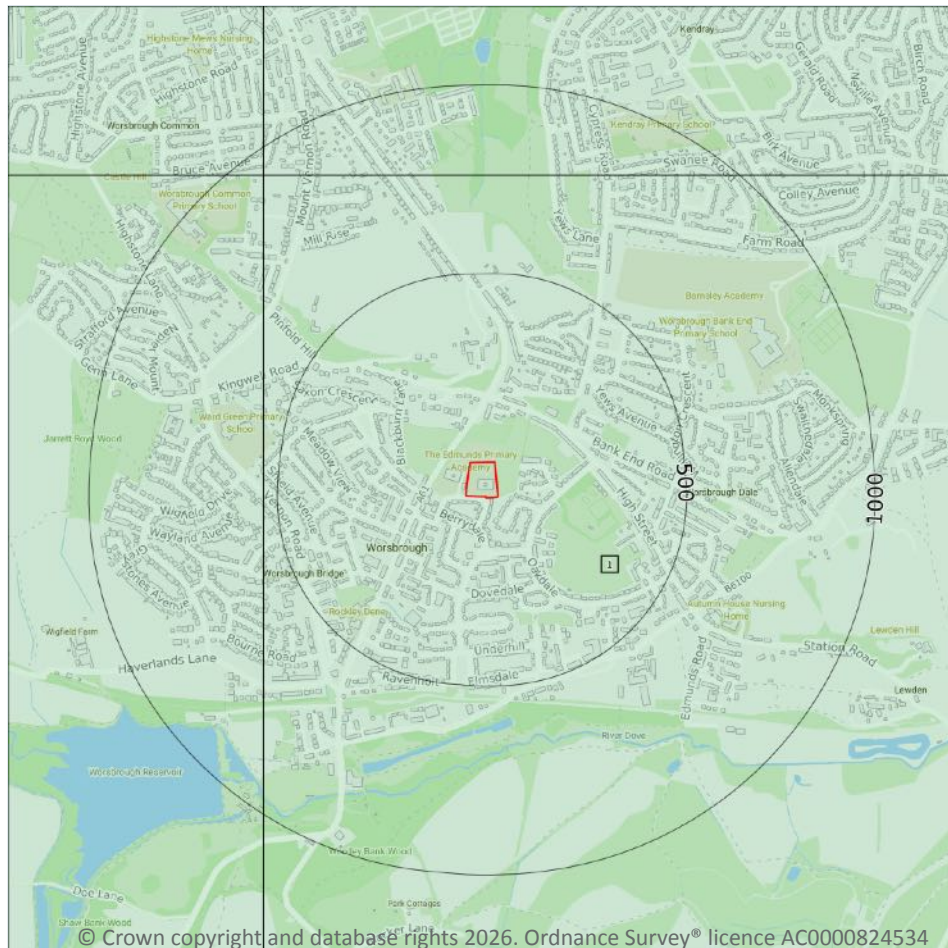
0

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

1

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.

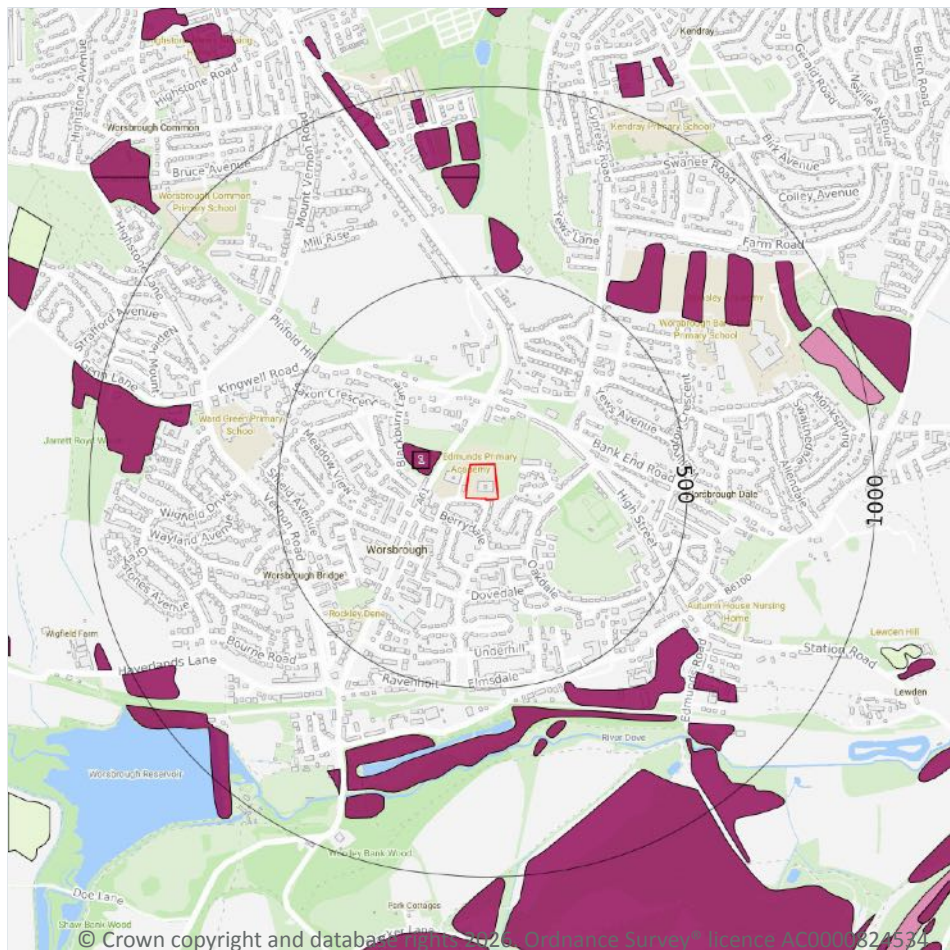
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 70](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	SE30SE

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

1

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.

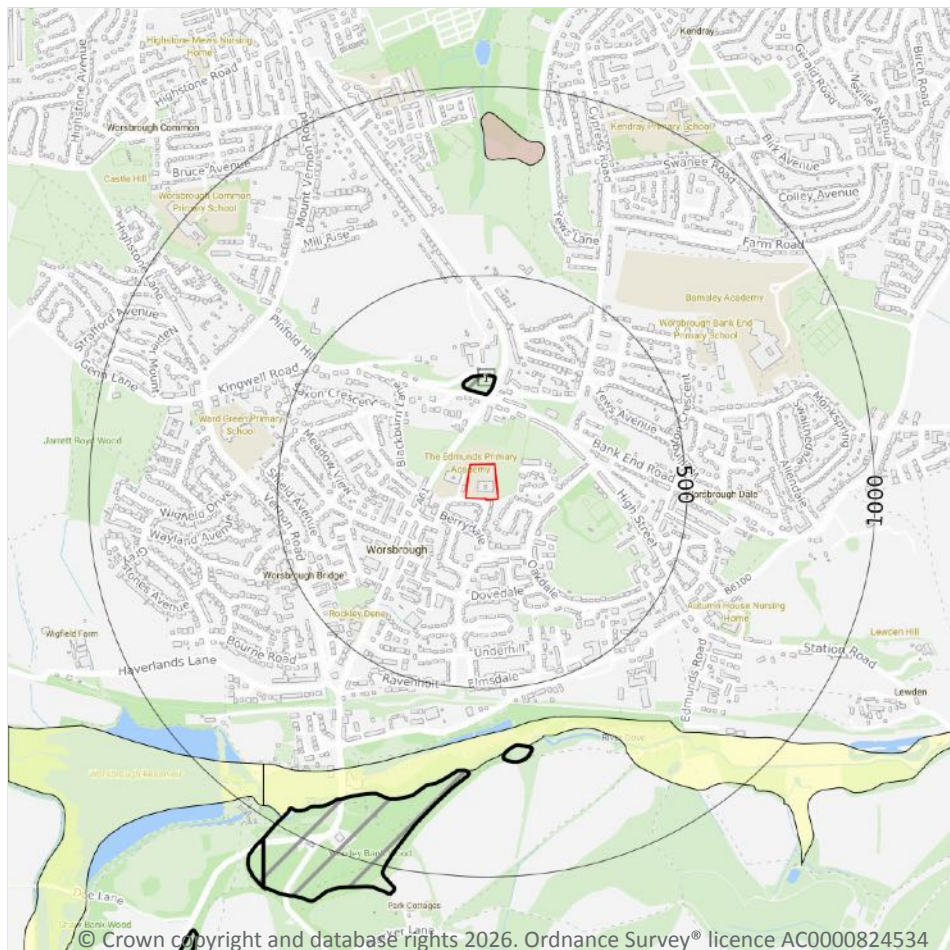
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 71](#) >

ID	Location	LEX Code	Description	Rock description
1	81m W	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



— Site Outline

Search buffers in metres (m)

▨ Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

1

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



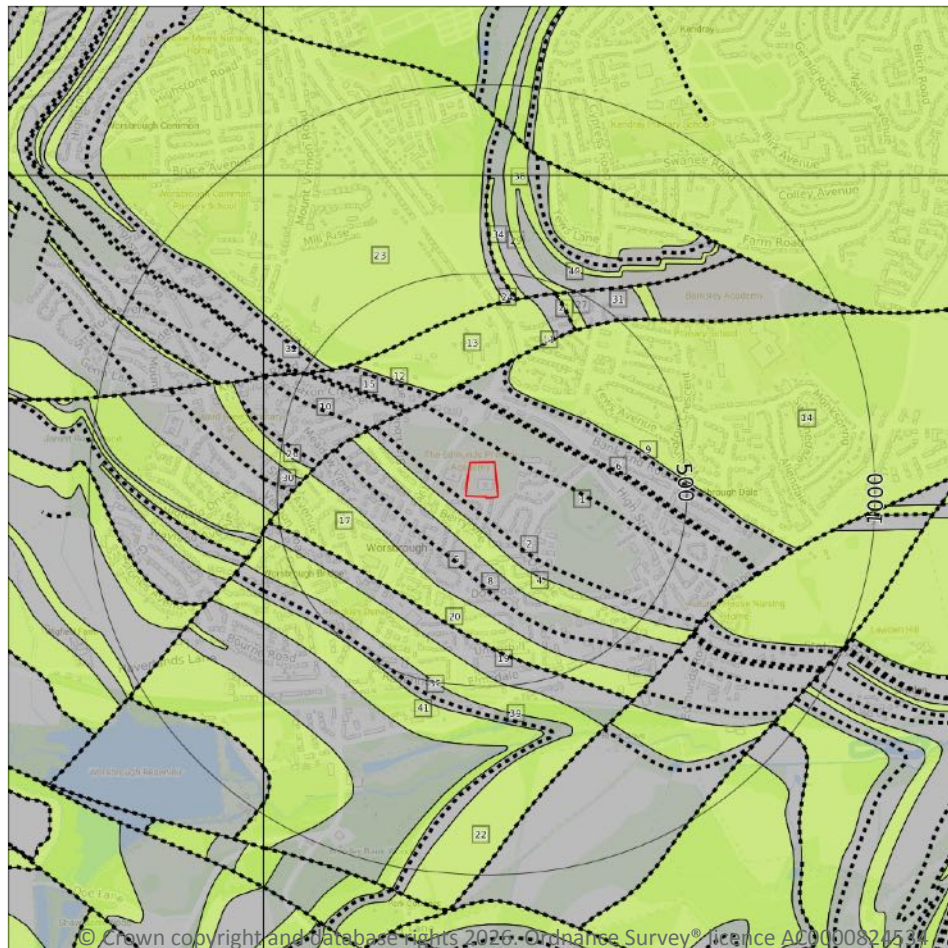
Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 72 >](#)

ID	Location	LEX Code	Description	Rock description
1	185m N	SLIP-UNKNOWN	Landslide deposits	Unknown/unclassified entry

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (10k)
- Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

22

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 74 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
4	44m SW	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
5	97m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian



ID	Location	LEX Code	Description	Rock age
10	195m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
13	196m N	WE-SDST	Woolley Edge Rock-Sandstone	Westphalian
14	196m NE	WE-SDST	Woolley Edge Rock-Sandstone	Westphalian
17	226m SW	KNR-SDST	Kent's Rock-Sandstone	Westphalian
19	315m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
21	361m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
22	364m SW	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
23	364m NW	WE-SDST	Woolley Edge Rock-Sandstone	Westphalian
26	408m W	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
27	409m NE	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
29	427m N	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
30	432m W	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
31	434m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
32	435m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
33	435m N	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
35	446m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
38	480m N	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
40	498m N	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
41	499m SW	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian

This data is sourced from the British Geological Survey.



14.6 Bedrock faults and other linear features (10k)

Records within 500m

19

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.

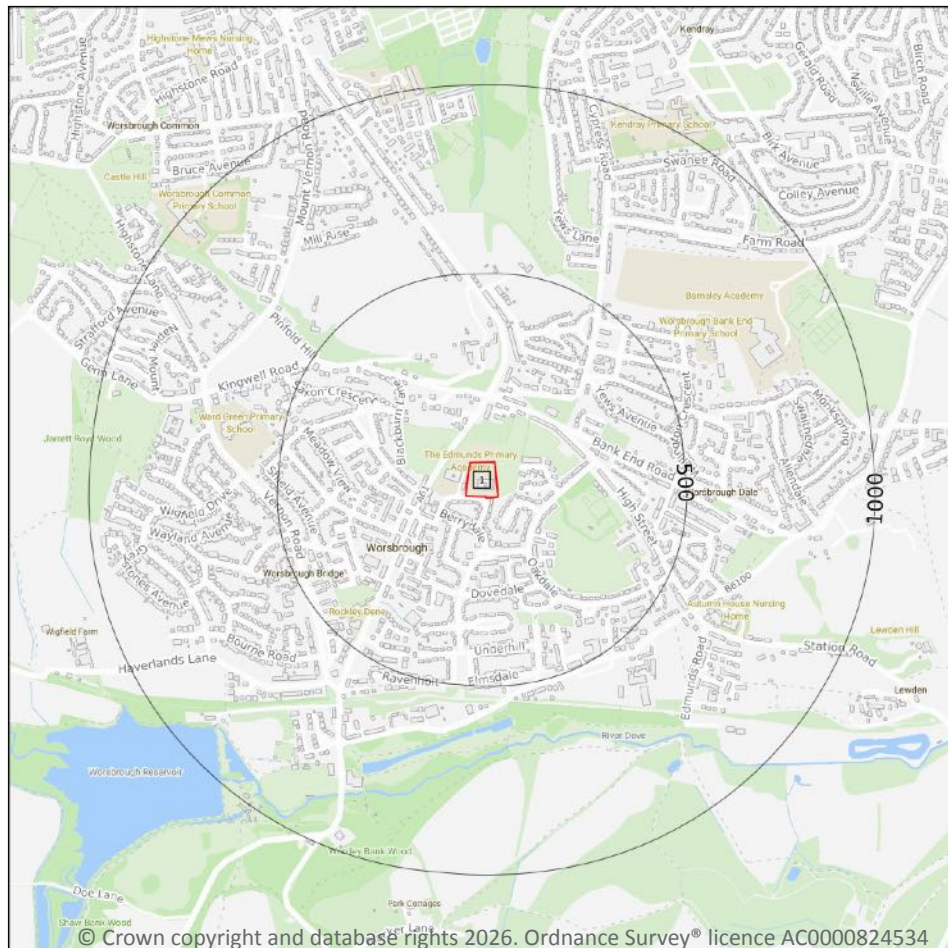
Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 74 >](#)

ID	Location	Category	Description
2	14m SW	ROCK	Coal seam, inferred
3	34m NE	ROCK	Coal seam, inferred
6	122m NE	ROCK	Coal seam, inferred
7	129m NE	FOSSIL_HORIZON	Marine band
8	154m SW	ROCK	Coal seam, inferred
9	185m NE	ROCK	Coal seam, inferred
11	195m NW	FAULT	Fault, inferred, displacement unknown
12	195m NW	ROCK	Coal seam, inferred
15	212m NW	FOSSIL_HORIZON	Marine band
16	216m NW	ROCK	Coal seam, inferred
18	279m W	ROCK	Coal seam, inferred
20	315m SW	ROCK	Coal seam, inferred
24	364m NW	FAULT	Fault, inferred, displacement unknown
25	395m W	ROCK	Coal seam, inferred
28	409m NE	ROCK	Coal seam, inferred
34	436m N	ROCK	Coal seam, inferred
36	457m NW	ROCK	Coal seam, inferred
37	457m W	ROCK	Coal seam, inferred
39	485m SW	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 77](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	Full	EW087_barnsley_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial

15.4 Superficial geology (50k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

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

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)

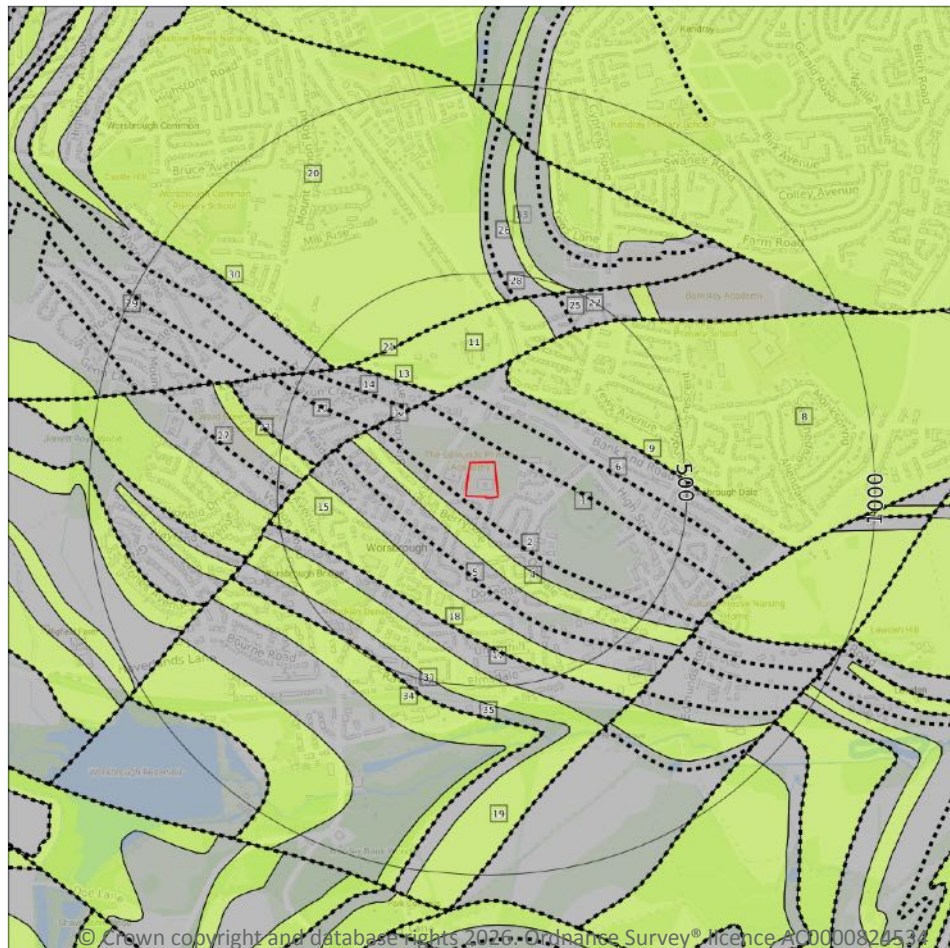
Records within 50m

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

18

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 80 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
4	46m SW	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
5	98m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian



ID	Location	LEX Code	Description	Rock age
8	195m NE	WE-SDST	Woolley Edge Rock-Sandstone	Westphalian
10	196m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
11	196m NW	WE-SDST	Woolley Edge Rock-Sandstone	Westphalian
15	224m SW	KNR-SDST	Kent's Rock-Sandstone	Westphalian
17	315m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
19	363m SW	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
20	363m NW	WE-SDST	Woolley Edge Rock-Sandstone	Westphalian
22	366m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
23	401m W	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
26	427m N	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
27	433m W	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
29	436m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
31	445m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
33	476m N	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian
34	492m SW	PMCM-SDST	Pennine Middle Coal Measures Formation-Sandstone	Westphalian

This data is sourced from the British Geological Survey.

15.9 Bedrock 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 bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low
46m SW	Fracture	High	Moderate



This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

17

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.

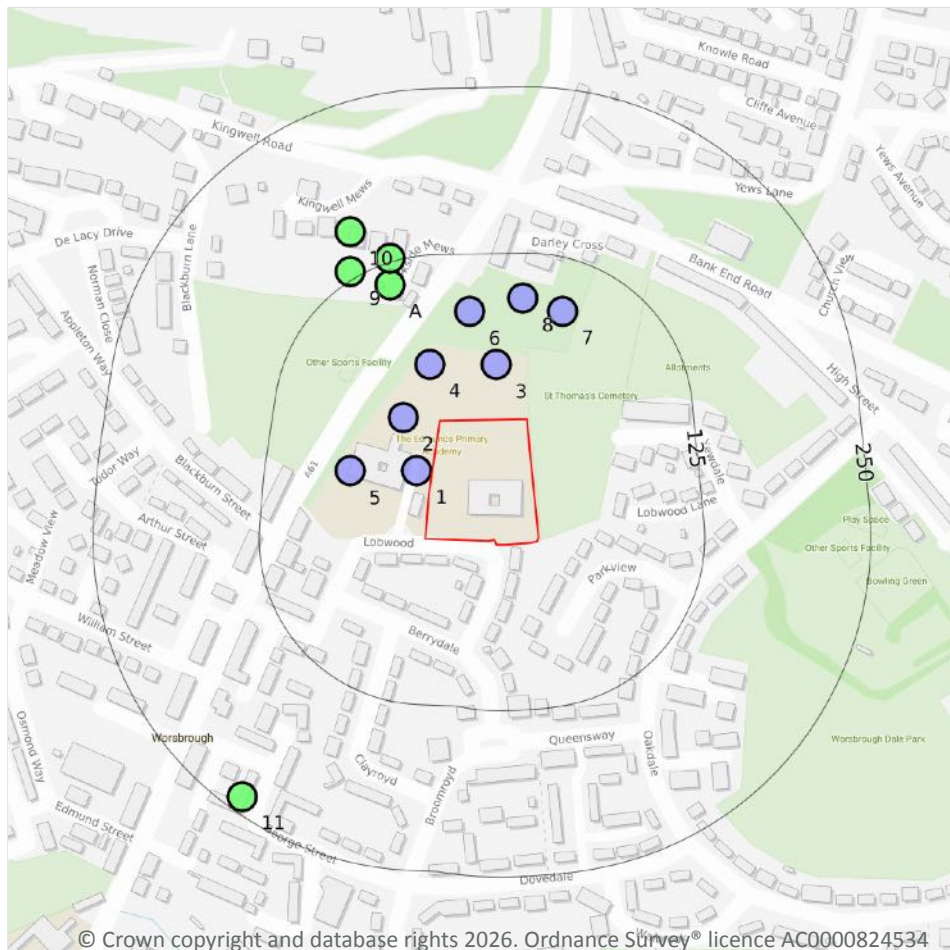
Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 80](#) >

ID	Location	Category	Description
2	12m SW	ROCK	Coal seam, inferred
3	37m NE	ROCK	Coal seam, inferred
6	121m NE	ROCK	Coal seam, inferred
7	154m SW	ROCK	Coal seam, inferred
9	195m NE	ROCK	Coal seam, inferred
12	196m NW	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
13	196m NW	ROCK	Coal seam, inferred
14	212m NW	ROCK	Coal seam, inferred
16	276m W	ROCK	Coal seam, inferred
18	315m SW	ROCK	Coal seam, inferred
21	364m NW	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
24	401m W	ROCK	Coal seam, inferred
25	409m NE	ROCK	Coal seam, inferred
28	435m N	ROCK	Coal seam, inferred
30	436m NW	ROCK	Coal seam, inferred
32	463m W	ROCK	Coal seam, inferred
35	492m SW	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

13

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 83](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	12m W	435530 404200	WORSBOROUGH DALE PRIM SCH 7	3.05	N	84522 ↗
2	28m W	435520 404240	WORSBOROUGH DALE PRIM SCH 5	3.05	N	84520 ↗
3	41m N	435590 404280	WORSBOROUGH DALE PRIM SCH 4	3.05	N	84519 ↗

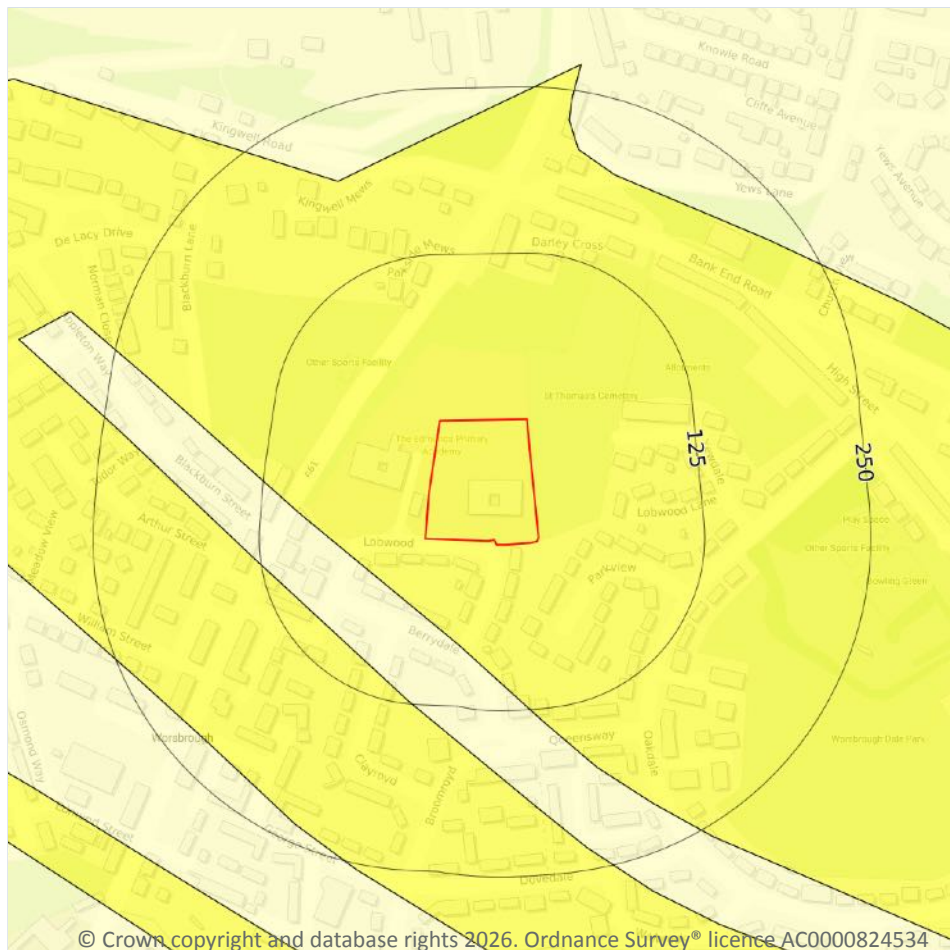


ID	Location	Grid reference	Name	Length	Confidential	Web link
4	43m N	435540 404280	WORSBOROUGH DALE PRIM SCH 3	3.05	N	84518 ↗
5	61m W	435480 404200	WORSBOROUGH DALE PRIM SCH 6	3.05	N	84521 ↗
6	82m N	435570 404320	WORSBOROUGH DALE PRIM SCH 1	3.05	N	84516 ↗
7	85m N	435640 404320	WORSBOROUGH DALE PRIM SCH 2	3.05	N	84517 ↗
8	91m N	435610 404330	WORSBOROUGH DALE PRIM SCH 8	3.05	N	84523 ↗
A	109m N	435510 404340	KINGWELL ROAD WORSBROUGH DALE BARNLEY 1	15.0	N	15635731 ↗
A	128m N	435510 404360	KINGWELL ROAD WORSBROUGH DALE BARNLEY 3	15.0	N	15635733 ↗
9	131m NW	435480 404350	KINGWELL ROAD WORSBROUGH DALE BARNLEY 2	15.0	N	15635732 ↗
10	157m NW	435480 404380	KINGWELL ROAD WORSBROUGH DALE BARNLEY 4	15.0	N	15635734 ↗
11	238m SW	435399 403955	WORSBOROUGH BRIDGE 6	13.72	N	84463 ↗

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

2

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).

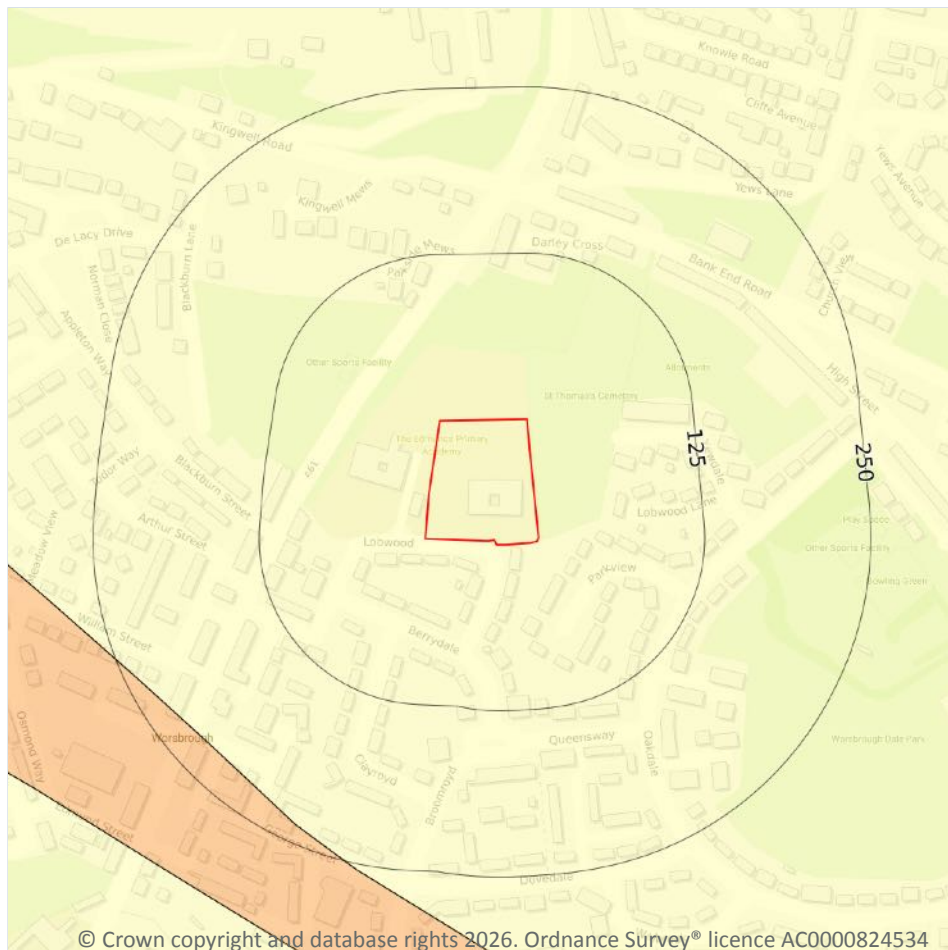
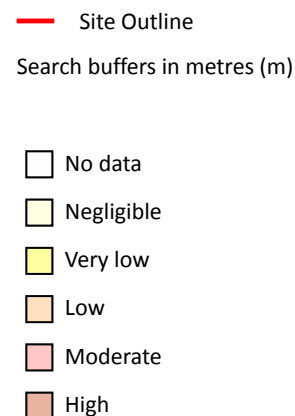
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 85 >](#)

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.
46m SW	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

1

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.

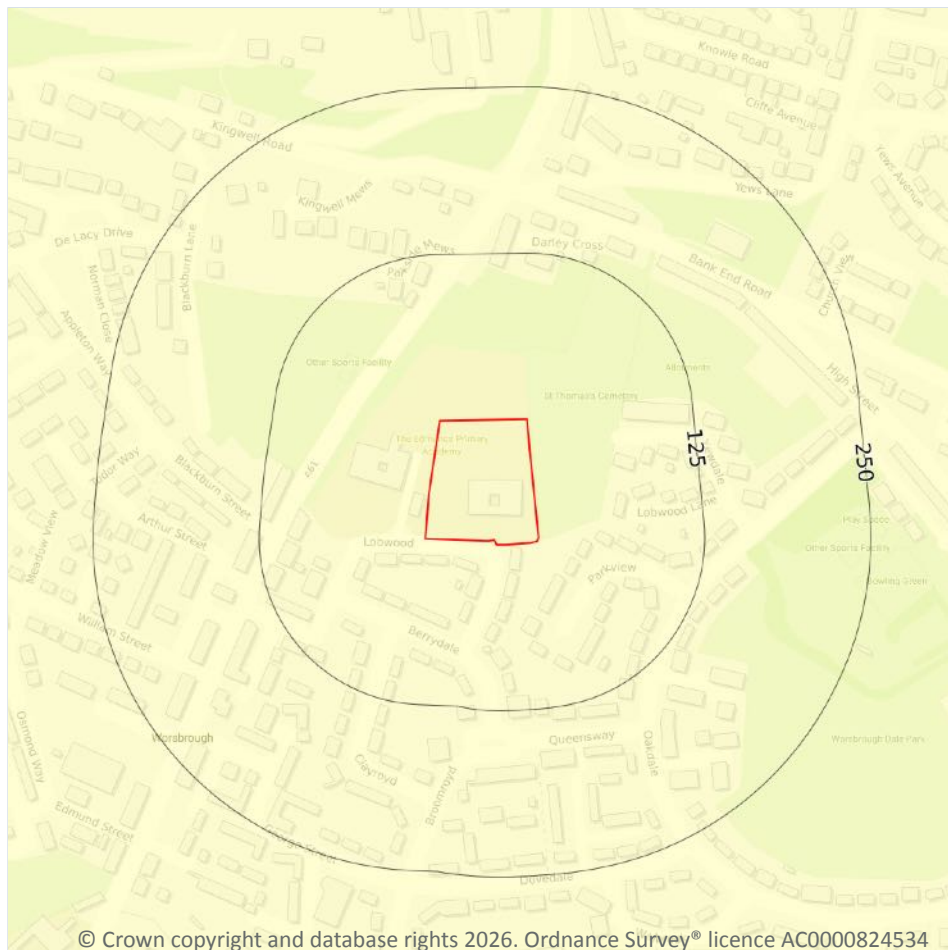
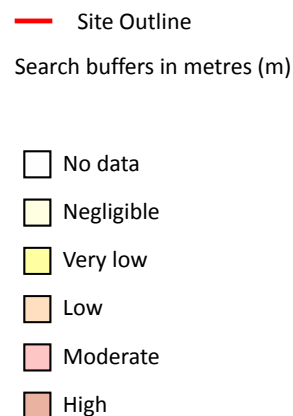
Features are displayed on the Natural ground subsidence - Running sands map on [page 86 >](#)

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

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.

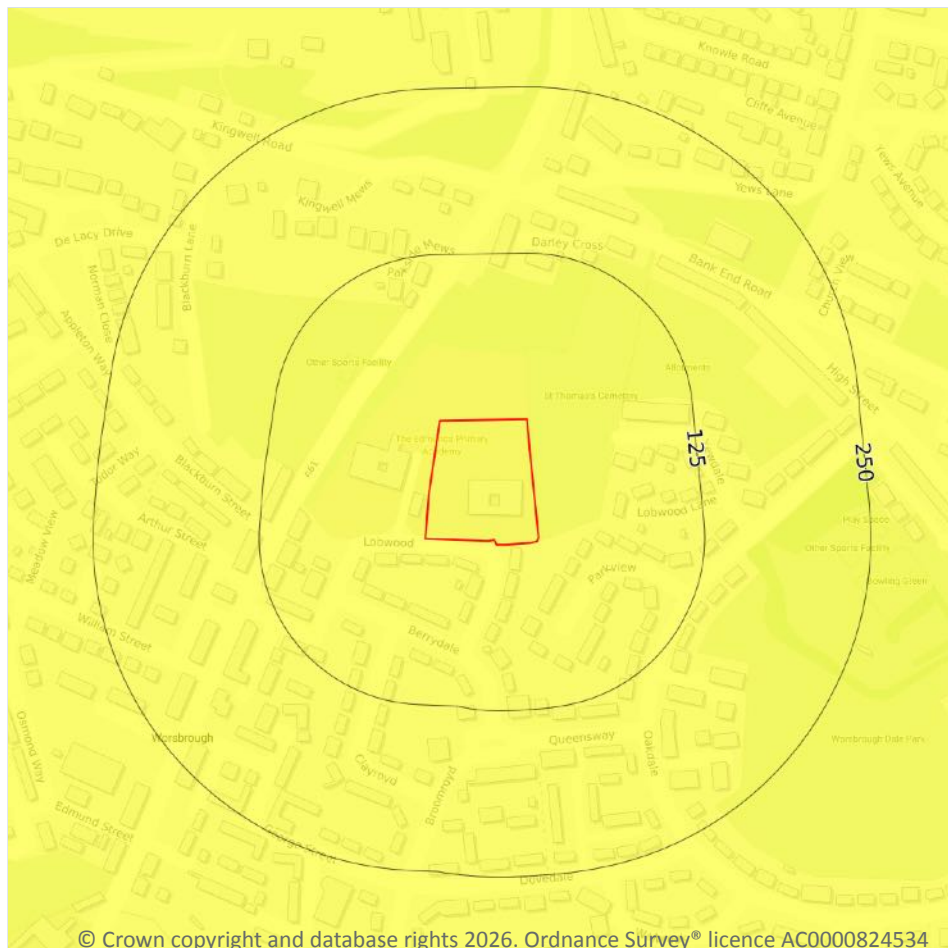
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 87 >](#)

Location	Hazard rating	Details
On site	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

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17.4 Collapsible deposits

Records within 50m

1

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

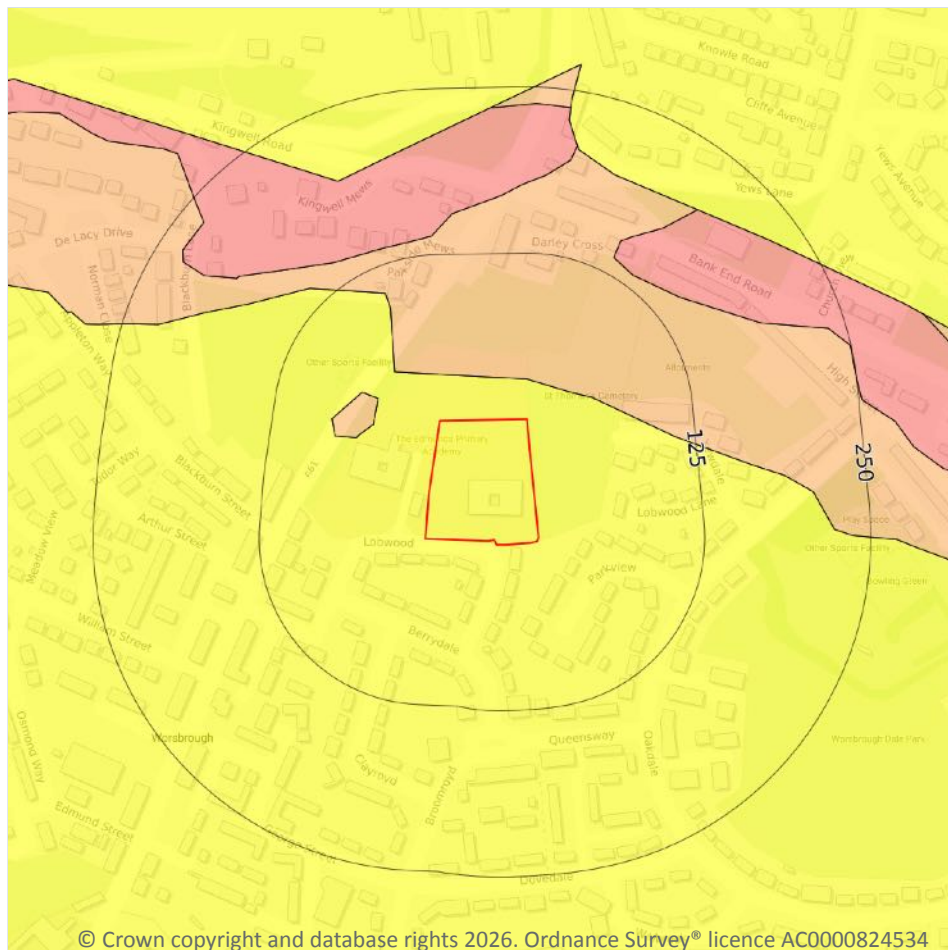
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 88](#) >

Location	Hazard rating	Details
On site	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

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17.5 Landslides

Records within 50m

3

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 89](#) >

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

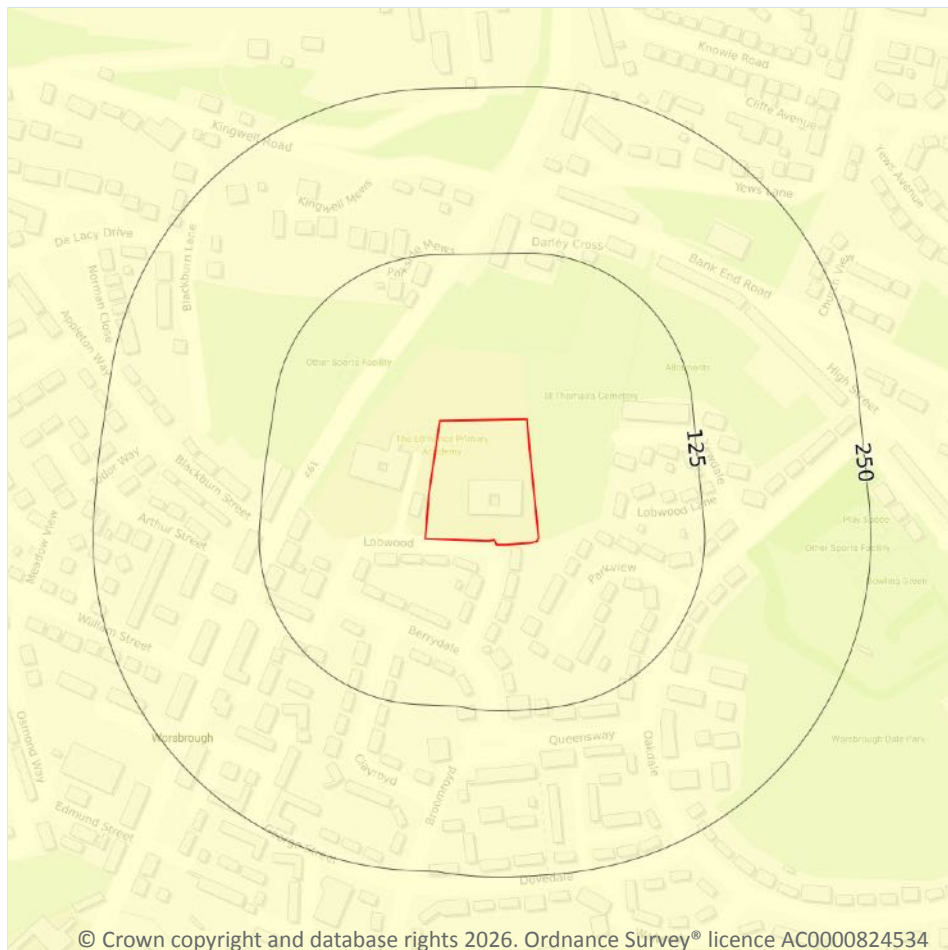
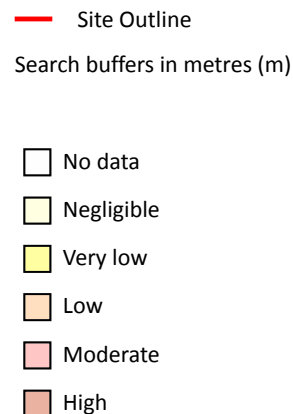


Location	Hazard rating	Details
29m N	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
49m W	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

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 91](#)

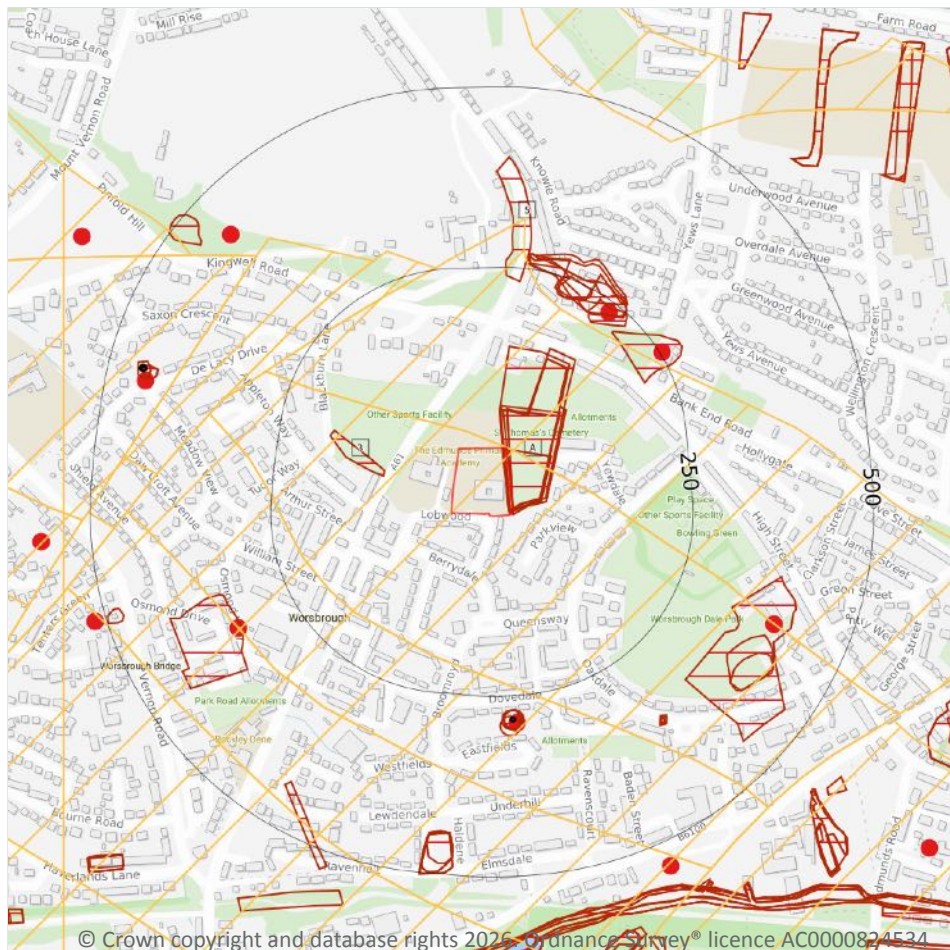
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



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

8

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 93](#) >



ID	Location	Details	Description
B	236m NE	Name: Yews Lane Quarries Address: WORSBROUGH, South Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
C	253m NE	Name: Yews Lane Quarries Address: WORSBROUGH, South Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
D	288m S	Name: Darley Main Colliery Address: WORSBOROUGH, South Yorkshire Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit, drift or incline. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun' Ee' - Scots). May also be locally termed 'Quarry' or 'Underground Quarry' when referring to sites extracting building stone (e.g. in Dorset and Wiltshire). The location given is that of the mine entrance and may be approximate for older sites shown on contemporaneous mapping by the Geological Survey used as the source document. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.



ID	Location	Details	Description
E	336m SW	Name: Bell Ing Colliery Address: WORSBROUGH, South Yorkshire Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit, drift or incline. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun' Ee' - Scots). May also be locally termed 'Quarry' or 'Underground Quarry' when referring to sites extracting building stone (e.g. in Dorset and Wiltshire). The location given is that of the mine entrance and may be approximate for older sites shown on contemporaneous mapping by the Geological Survey used as the source document. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
E	336m SW	Name: Bell Ing Colliery Address: Worsbrough Bridge, WORSBOROUGH, South Yorkshire Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit, drift or incline. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun' Ee' - Scots). May also be locally termed 'Quarry' or 'Underground Quarry' when referring to sites extracting building stone (e.g. in Dorset and Wiltshire). The location given is that of the mine entrance and may be approximate for older sites shown on contemporaneous mapping by the Geological Survey used as the source document. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
9	394m SE	Name: Darley Main Colliery, No. 1 Shaft Address: WORSBROUGH, South Yorkshire Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit, drift or incline. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun' Ee' - Scots). May also be locally termed 'Quarry' or 'Underground Quarry' when referring to sites extracting building stone (e.g. in Dorset and Wiltshire). The location given is that of the mine entrance and may be approximate for older sites shown on contemporaneous mapping by the Geological Survey used as the source document. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.



ID	Location	Details	Description
11	433m NW	Name: King Well Quarry Address: WORSBROUGH, South Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
H	445m W	Name: Bell Ing Colliery Air Pit Address: WORSBOROUGH, South Yorkshire Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit, drift or incline. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun' Ee' - Scots). May also be locally termed 'Quarry' or 'Underground Quarry' when referring to sites extracting building stone (e.g. in Dorset and Wiltshire). The location given is that of the mine entrance and may be approximate for older sites shown on contemporaneous mapping by the Geological Survey used as the source document. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

17

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 93](#) >

ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Cemetery	1938	1:10560
A	On site	Cemetery	1904	1:10560
A	On site	Cemetery	1890	1:10560
A	On site	Cemetery	1948	1:10560
A	On site	Cemetery	1951	1:10560
A	1m E	Cemetery	1987	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
A	1m E	Cemetery	1966	1:10560
A	1m E	Cemetery	1977	1:10000
3	98m W	Unspecified Ground Workings	1966	1:10560
B	210m NE	Sandstone Quarries	1850	1:10560
C	210m NE	Sandstone Quarries	1850	1:10560
B	219m NE	Unspecified Quarry	1890	1:10560
B	219m NE	Unspecified Quarry	1904	1:10560
B	223m N	Unspecified Heap	1951	1:10560
B	224m N	Unspecified Quarry	1938	1:10560
B	227m N	Unspecified Quarry	1948	1:10560
5	231m N	Cuttings	1948	1:10560

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

18.3 Underground workings

Records within 1000m

14

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 93 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
D	280m S	Air Shaft	1938	1:10560
D	280m S	Air Shaft	1904	1:10560
H	447m W	Air Shaft	1938	1:10560
H	447m W	Air Shaft	1904	1:10560
H	448m W	Air Shaft	1951	1:10560
-	708m S	Unspecified Old Shaft	1951	1:10560
-	714m S	Unspecified Old Shaft	1938	1:10560
-	856m SE	Colliery	1890	1:10560
-	893m NW	Colliery	1890	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
-	909m NW	Unspecified Shafts	1904	1:10560
-	911m NW	Unspecified Shafts	1904	1:10560
-	913m N	Unspecified Disused Shaft	1982	1:10000
-	915m N	Unspecified Old Shafts	1938	1:10560
-	963m N	Unspecified Old Shafts	1955	1:10560

This 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

36

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

Features are displayed on the Mining and ground workings map on [page 93 >](#)



ID	Location	Name	Commodity	Class	Likelihood
1	On site	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
2	1m N	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
4	186m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
6	234m NW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
7	277m NW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
8	321m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
H	382m NW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
10	411m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
J	453m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.



ID	Location	Name	Commodity	Class	Likelihood
K	458m NW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
L	467m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
14	481m NE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
L	511m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
16	537m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
17	537m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
18	539m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
19	539m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
20	548m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.



ID	Location	Name	Commodity	Class	Likelihood
22	600m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
23	608m NW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
24	709m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	715m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
26	733m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	761m N	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	766m E	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	832m N	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	837m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.



ID	Location	Name	Commodity	Class	Likelihood
-	896m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	936m S	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	938m S	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	943m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	945m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	958m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	995m S	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	999m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	999m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.



This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site

0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m

0

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m

0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m

0

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

This data is sourced from Groundsure.



18.11 BGS mine plans

Records within 500m**0**

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site**1**

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

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site**0**

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

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

18.14 Gypsum areas

Records on site**0**

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site**0**

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.



18.16 Clay mining

Records on site	0
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Generalised areas that may be affected by kaolin and ball clay extraction.

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



19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

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

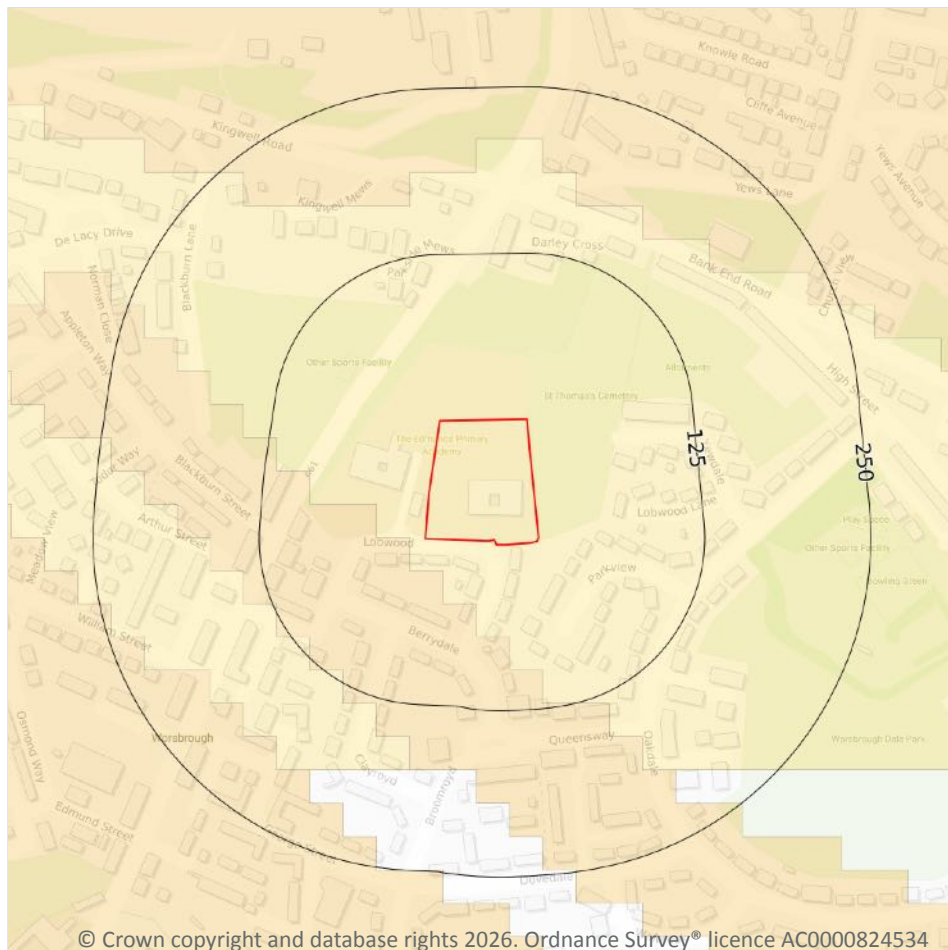
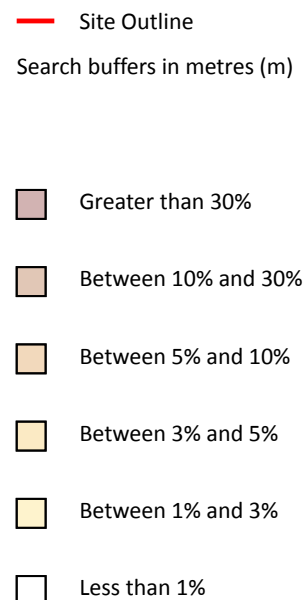
Not all 'holes' noted on Ordnance Survey® mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

1

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

Features are displayed on the Radon map on [page 108](#) >

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 1% and 3%	None



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



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

3

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². 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 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
1m N	25 - 35 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
37m W	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

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 km².

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**0**

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.

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 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.

22.9 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-conditions-april-2026/ ↗.



APPENDIX E - HISTORICAL CONTAMINATION RISK ASSESSMENT

Desk Study Assessment of Potential Contamination Risk

Land Use Risk Assessment

An assessment has been carried out for a number of common past land uses, indicating the severity of risk rating that should be used. Where little is known about the site a more precautionary approach of the potential risks should be taken to highlight the uncertainty of knowledge regarding the potential risks. Where application recommendation is given to specific chemical testing that should be considered associated with an intrusive Ground Investigation (GI), however the exact scope of testing will be determined on a site-specific basis depending on the ground conditions present after completion of an appropriate intrusive GI.

Depending on the hydrogeology of the area and presence of any water-based receptors, leachate or groundwater testing may also need to be considered to classify the risks to these receptors.

Risk Classification

Based on the risk classification system set out in CIRIA C552, the following risk classifications have been used to define the potential risks to the identified potential future receptors.

Risk Term	Definition
Very High risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without appropriate remedial action being taken. Urgent investigation (if not already undertaken) and remediation very likely to be required.
High risk	Harm is likely to arise to a designated receptor for an identified hazard at the site without appropriate remedial action. Urgent investigation (if not already undertaken) and remediation likely to be required.
Moderate risk	It is possible that harm could arise to a designated receptor. It is relatively unlikely that such harm would be severe, or if any harm were to occur it is more likely that such harm would be relatively mild. Investigation normally required (if not already undertaken) to clarify risk; remediation may be required in the long-term.
Low risk	It is possible that harm could arise to a designated receptor from an identified hazard. It is likely that, at worst if any harm was realised, any effects would be mild. Investigation may be required (if not already undertaken) but remediation is unlikely to be required.
Very Low risk	There is a low possibility that harm could arise to a receptor. In the event of such harm occurring it is not likely to be severe. Investigation may be required (if not already undertaken) to confirm.

Potential Risk		Land Use	Contamination Testing			Comments
Risk Term	GI Colour Rating		Basic Screen	TPH CWG	BTEX & PCBs	
Very High	Red	Radioactive site	Specialist assessment required			
		Petrol/chemical plant	X	X		
		Metal works	X	X		Toxic metals
		Landfill site	X			Depending on infill used
		Dye works	X	X	X	
		Coke works	X	X	X	
		Gas works	X	X	X	
		Tannery	X			
		Petrol station	X	X	X	
		Oil depot	X	X	X	
High	Yellow	Infilled ground	X			Depending on infill used
		Heavy industry	X		X	
		Soap works	X		X	
		Power station	X			
		Garage	X	X		
		Timber yard	X			
		Abattoir	X			
		Colliery	X			
Moderate		Fabric mill	X		X	Very High if dye on site
		Foundry	X			
		Hospital	X			
		Food factory	X			
		Sewage works	X		X	
		Brewery	X			
		Coal yard	X			
		Light industry	X			
		Colliery spoil	X			
Low		Green	Offices/commercial	X		
	Storage/warehouse		X			
	Residential		X			
	Quarry		X			Unfilled
	Gardens/park		X			
Very Low	Farm/agricultural		X			Unless chemicals used

APPENDIX F - CONCEPTUAL SITE MODEL

Ref.	Hazard	Source	Pathway	Receptor	Pollutant Linkage ?	Current anticipated risk (1) *	Comment	Action	Residual Risk ^{*^}
1	Heavy metals	Made Ground	Ingestion of soil & indoor dust	Residents	✓	Very low / 100%	Ground investigation required to confirm risk potential	Subject to findings of Ground Investigation	Very Low
2	Carcinogenic PAHs	Made Ground	Ingestion of soil & indoor dust	Residents	✓	Very low / 100%	Ground investigation required to confirm risk potential	Subject to findings of Ground Investigation	Very Low
3	TPH	Made Ground	Ingestion of soil & indoor dust	Residents	✓	Very low / 100%	Ground investigation required to confirm risk potential	Subject to findings of Ground Investigation	Very Low
4	Sulphate	Made Ground	Ingestion of soil & indoor dust	Residents	✓	Very low / 100%	Ground investigation required to confirm risk potential	Subject to findings of Ground Investigation	Very Low
5	Leachable metals	Made Ground	Leaching to groundwater	Groundwater	✓	Very low / 100%	Ground investigation required to confirm risk potential	Subject to findings of Ground Investigation	Very Low
6	Leachable PAH	Made Ground	Leaching to groundwater	Groundwater	✓	Very low / 100%	Ground investigation required to confirm risk potential	Subject to findings of Ground Investigation	Very Low
7	Ground gases	Made Ground	Vertical migration through	Residents	✓	Very low / 100%	Further action not required	No further action deemed necessary	Very Low
8	Mine gases	Bedrock	Vertical migration through	Residents	✓	Moderate / 25%	Ground investigation required to confirm risk potential	Subject to findings of Ground Investigation	Very Low
9	Radon	Bedrock	Vertical migration through	Residents	✓	Very low / 100%	No risks at levels present	No further action deemed necessary	Very Low
10	Invasive plant species	Invasive plant species	Contact with concrete substructures	On site buildings	✓	Very low / 100%	None identified during site walkover survey undertaken	Maintain vigilance during construction	Very Low
11	Trees	On site trees	Changes to soil moisture regime	On site buildings	✓	Moderate / 25%	Ground investigation required to confirm risk potential	Subject to findings of Ground Investigation	Very Low
12	Flooding	River	Over land flow	Residents	✓	Very low / 100%	Site not within designated flood risk zone	No further action deemed necessary	Very Low

NOTES:

(1) Anticipated risk over percentage site area.
* Refer to Risk Matrix Table within report text.
^ Anticipated risk after carrying out action

CONCEPTUAL MODEL TABLE

Client : Barnsley Metropolitan Borough Council
Project : The Mill Academy, Worsbrough, Barnsley
Job No : 26063