enzygo
environmental consultants

Proposed EV Charging Infrastructure, and Substation

The Old Post Office, 600 Huddersfield Road, Haigh, Barnsley, S75 4DE

Tesla Motors Ltd

CRM.3030.014.GE R001

'Experience and expertise working in union'

enzygo.com

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Geoenvironmental Phase One Assessment

Project:	The Old Post Office, 600 Huddersfield Road, Haigh, Barnsley, S75 4DE
For:	Tesla Motors Ltd
Status:	FINAL
Date:	April 2023
Author:	Gareth Hart **Senior Geoenvironmental Engineer**
Reviewer:	Richard Hamilton **Director of Geoenvironmental**

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1.0 Introduction

1.1 Background

1.1.1 Enzygo Geoenvironmental Limited has been commissioned by Tesla Motors Ltd to prepare a Phase I Desk Study Report for a development of 12no. Tesla supercharger electric vehicle (EV) charging points, with supporting electrical infrastructure including substations and equipment cabinets at The Old Post Office, 600 Huddersfield Road, Haigh, Barnsley, S75 4DE.

1.2 Proposed Development

1.2.1 Tesla Motors Ltd are seeking to develop the site to include 12 Tesla EV Electric charge points along with associated infrastructure. A site location plan and proposed layout is given in the drawing section of this report.

1.3 Objectives

1.3.1 The objectives of the study are to:

- Obtain desk study information, a copy of which is included within Appendix 1;
- Assess the implications of any potential environmental risks, liabilities and development constraints associated with the site in relation to the future use of the site and in relation to off-site receptors; and
- Provide a report relating to the desk study and provide a preliminary conceptual model and recommendations.

1.4 Risk Classification

1.4.1 Enzygo Geoenvironmental has utilised the available information, together with our experience to assess the likely risks to development from land quality issues. Definitions of the risk terms used are provided on the following table.

Table 1.4.1 Risk Classification

Risk	Description
Negligible	No contamination risk has been identified which is likely to affect development.
Low	No significant contaminated land risks have been encountered affecting development and a low risk that remediation will be required.
Low-Moderate	There are unlikely to be significant contaminated land issue associated with the site which will adversely affect its re-development. However, minor or localised contamination may be present requiring remediation. Remediation should be possible under a discovery strategy and with a call out service.
Moderate	Some potential contaminated land risks have been encountered or identified which may affect re- development. The risks identified are unlikely to affect the entire site or preclude development. Remediation is considered feasible as part of the development process and no further investigation is considered necessary.
Moderate-High	Some potentially significant contaminated land risks have been identified at the property that requires remediation. It is recommended that a separate remedial methodology is prepared supported by a site-specific risk assessment
High	Significant potential contaminated land risks have been identified and remediation is required supported by further intrusive ground investigation, risk assessment and remedial design.

1.4.2 Where adverse risks from ground instability are identified these are discussed within the report.

2.0 SITE SETTING

Table 2.0 Site Description

Item	Description
Site Address	The Old Post Office, 600 Huddersfield Road, Haigh, Barnsley, S75 4DE
National Grid Reference	429852 , 411577

2.1 Current Site Description

2.1.1 The following site description has been compiled from the aerial photography and a site inspection.

2.1.2 The site comprises an area of car parking consisting of tarmac hardstanding with areas of soft landscaping and mature trees.

2.1.3 The car park is associated with The Old Post Office Restaurant.

2.1.4 The known services within the car park are associated with the lighting columns located within the areas of soft landscaping withing the carpark, and an overhead powerline.

2.1.5 No significant contamination is noted to be present on site.

2.2 Surrounding Area

2.2.1 Land uses surrounding the site are summarised as follows:

Table 2.2.1 Land Use Surrounding the Area

Direction	Land Use
North	Gravel storage yard currently occupied with fairground rides and equipment.
South	Agricultural Fields.
East	M1 Motorway with agricultural fields beyond.
West	Huddersfield Road (A637) with agricultural fields beyond.

2.2.2 No significant risks have been identified.

3.0 SITE HISTORY

3.1 Historical Maps

3.1.1 A review of historical Ordnance Survey maps and information pertinent to the site and within a 250m radius is summarised below:

Table 3.1.1 Historical Maps

Map Dates	On Site	Surrounding Area
1854	Methodist Chapel.	Track 0m North. Agricultural fields in all directions. River Dearne 150m East. Reservoir 100m Southeast. Bleach works 200m Southeast. Haigh Quarry 400m Northwest. Railway 400m Northeast.
1891	No significant change.	No significant change.
1893	No significant change.	No significant change.
1904	No significant change.	No significant change.
1906	No significant change.	No significant change.
1913	Additional small outbuildings constructed.	No significant change.
1930	No significant change.	Bleach works now disused.
1938	No significant change.	No significant change.
1948	No significant change.	No significant change.
1951	No significant change.	No significant change.
1961	No significant change.	No significant change.
1966	Post office constructed in out buildings.	Farm established on former bleach works 400m Southeast.
1972	Post office Moved into former Methodist chapel and outbuildings demolished.	No significant change.
1974	No significant change.	No significant change.
1981	No significant change.	M1 motorway constructed 50m East. A637 road network constructed 50m West
1984	No significant change.	No significant change.
1990	No significant change.	No significant change.
1993	Now called the Old Post office and car parking constructed to the rear.	No significant change.
2001	No significant change.	No significant change.
2003	No significant change.	No significant change.
2010	No significant change.	No significant change.
2023	No significant change.	No significant change.

3.1.2 A contamination risks has been identified from historical maps and is associated with the bleach works. Given the distance to the site this is not considered a significant risk.

4.0 ENVIRONMENTAL SETTING

4.1.1 A review of historical Ordnance Survey maps and information pertinent to the site and within a 250m radius is summarised below:

4.2 Ground Conditions

4.2.1 The British Geological Survey (BGS) indicates that the site is underlain by the following geological sequence:

Table 4.1.1 Geological Sequence

Geological Unit	Type	Descriptions	Aquifer Classification
Drift	Alluvium	Clay and Silt	Secondary A
Bedrock	Pennine Middle Coal Measures	Mudstone, Siltstone and Sandstone	Secondary A

4.2.2 The BGS records show Made Ground covering the eastern and western edges of the site and is primarily associated with the construction of the M1 motorway and the A637 road network. This will be further assessed within the report.

4.2.3 There are no records of landslips on or near to the site.

4.2.4 Records of background soil chemistry for the site show no exceedances above soil guideline values for commercial use.

4.2.5 BGS borehole records close to the site show shallow Made Ground over firm to stiff clay and mudstone, consistent with the Pennine middle coal measures.

4.3 Groundwater

4.3.1 The published permeability of the solid geology is very high to low. Based on the BGS borehole records it is considered that the soils below the site will all be moderate permeability clay and mudstone due to their intergranular and potentially fractured nature.

4.3.2 The site is not located within a Source Protection Zone.

4.3.3 There are no other licensed groundwater abstractions within 500m of the site.

4.4 Coal Mining

4.4.1 The Groundsure Geo Insight report indicates the site is located within an area of potential historical coal mining.

4.4.2 Further information in relation to coal mining risks within the area are outlined in Appendix 2 as part of the Coal Authority CON29M coal mining report.

4.4.3 The site is in an area of historical coal mine workings. However, this is not considered a risk to the site or future proposed development due to the deep coal workings ranging from a depth of 190m to 290m.

4.4.4 Furthermore, any movement associated with any historical coal mining activity should have ceased and is also not noted to be at risk of any mine gas due to its depth.

4.5 Non Coal Mining and Cavities

4.5.1 The Groundsure GeoInsight report indicates the site is not at risk from non-coal mining activities within 250m of the site.

4.5.2 No significant risks are identified.

4.6 Natural Cavities

4.6.1 No natural cavities are identified below or near to the site.

4.7 Ground Workings

4.7.1 There are two historical surface ground workings within 250m of the site. These are the reservoirs associated with the historical bleach works.

4.7.2 No new significant risks are identified.

4.8 Hydrology

4.8.1 There is one surface watercourse on or within 250m of the site and is the river Dearne 150m East.

4.8.2 The site is not within a flood risk area.

4.8.3 The site is shown to be at a negligible risk of groundwater flooding.

4.9 Radon Risk Potential

4.9.1 The Groundsure GeoInsight Report indicates that the site is situated within an area of Radon Risk with a level between 3% and 5%. Therefore, basic radon measures are required for the future development of buildings.

4.10 Natural Hazards Finding

4.10.1 BGS information presented within the Groundsure report identified the following ground conditions:

Table 4.10.1 Natural Hazards

Hazard	Risk Designation (Groundsure)
Shrink Swell	Very Low
Landslides	Very Low
Soluble Rocks	Negligible
Compressible Ground	Moderate
Collapsible Rocks	Very Low
Running Sands	Low

4.10.2 There are no significant geotechnical risks.

4.11 Sensitive Land Uses

4.11.1 The site comprises a car park. The site at present is considered to be of low sensitivity.

4.11.2 No historical features are identified on the site.

4.12 Environmental Sensitivity

4.12.1 Overall, the site is currently considered to be of low environmental sensitivity due to the following:

- The underlying strata is designated as a secondary A Aquifer with moderate permeability clay soils;
- The site is not located within Source Protection Zone; and
- No potable abstraction licences are within 250m of the site.

4.12.2 The proposed end use of the site will remain car parking but with the additional of electrical vehicle charging points. The proposed end use will therefore be low.

4.13 Industrial Land Uses

4.13.1 No significant historical industrial land uses are identified on the site.

4.13.2 There are no fuel filling stations within 250m of the site.

4.13.3 Records indicate no high-pressure underground oil or gas pipelines within 250m of the site.

4.13.4 No new risks are identified from the register of industrial land uses.

4.14 Regulatory Database

4.14.1 The following information has been obtained from a commercially available environmental database.

Table 4.14.1 Regulatory Database

Environmental Permits, Incidents and Registers	0-250m	250-500m	Details
Site determined as contaminated land	0	0	Not applicable.
Authorised industrial processes	0	0	Not applicable.
Enforcements, prohibitions, or prosecutions	0	0	Not applicable.
Pollution Incidents	0	0	Not applicable.
Consents issued under the Planning (Hazardous Substances) Act 1990	0	2	Closest being 348m East associated with mine water treatment.
Control of Major Accident Hazard (COMAH)/ Notification of Installations Handling Hazardous Substances (NIHHS) sites	0	0	Not applicable.
Records of Licensed Discharge Consents	3	0	Closest being 171m South associated with Sewage discharge from a local farm.

4.14.2 No significant risks are identified from the regulatory data base.

4.15 Landfill Sites and Waste Treatment Sites

4.15.1 The Groundsure report indicates there is one historical licensed landfill site within 250m of the site. This is located 170m Northwest and was licensed for quarry waste.

4.15.2 Given the waste type, age, distance from the site, moderate permeability clay, the risk to the site is low.

4.15.3 No new risks are identified.

5.0 PRELIMINARY CONCEPTUAL MODEL

Table 5.1.1 Preliminary Conceptual Model

Source	Location	Exposure Pathway	Potential Receptor	Probability of Exposure	Details
Human Health					
Asbestos, metals and hydrocarbons.	On site sources.	Ingestion dermal and inhalation.	Construction Workers.	Negligible.	Historical sources from construction of motorway and road networks and use of Normal construction PPE and the use will mitigate risk under CDM.
			Site users.	Dismisses.	The use of hardstanding will break any potential pollutant linkages
Asbestos, metals and hydrocarbons.	Unforeseen Contamination.	Ingestion dermal and inhalation.	Construction Workers.	Negligible.	Normal construction PPE will address risk under CDM.
			Site users.	Dismissed.	Development utilises hardstanding which will break potential pollutant linkage.
Hydrocarbon and metals.	Migration from off-site sources.	Ingestion dermal and inhalation.	Construction Workers.	Negligible	Normal construction PPE will address risk under CDM.
			Site users.		
Ground Gas.	Landfill.	Inhalation & Explosive.	Construction Workers.	Negligible	Landfill within 250m requires investigation to confirm risk.
			Site users.		
	Potential Made Ground.	Inhalation & Explosive.	Construction Workers.	Negligible	Investigation required to determine extent of made ground. Development utilises hardstanding to encapsulate any potential source.
			Site users.		
Radon	On site Sources	Inhalation and ingestion	Site users	Dismissed	Basic Radon Measures at to be utilised.
Groundwater					
Hydrocarbon and metals.	Made Ground/ Infill materials	Vertical Migration.	Groundwater.	Dismissed	No significant source.
Surface Water					
Hydrocarbon and metals.	Made Ground/ infill Materials	Horizontal Migration.	River Network.	Dismissed	No significant source.
Environmental Receptors					
On site contaminants		Ingestion dermal and inhalation.	Ecology.	Dismissed	No significant source.
		Direct.	Archaeology.	Dismissed.	None present.
		Direct.	Geology.	Dismissed.	None present.
Building Services					
On site contaminants		Direct.	Historic Buildings.	Dismissed.	No receptors.
		Direct.	Proposed Buildings.	Dismissed.	No sources identified.
		Permeate into pipework.	Water Pipes/ HP Gas Main	Dismissed.	No potable water pipes anticipated.

5.1.1 No significant risks are identified in relation to the proposed development.

6.0 DISCUSSIONS AND RECOMMENDATIONS

6.1 Proposed Development

6.1.1 The proposed development is to comprise 12 Tesla EV supercharging stalls associated infrastructure with the reconfiguration of existing vehicle parking bays. The development will include retention of the existing car park.

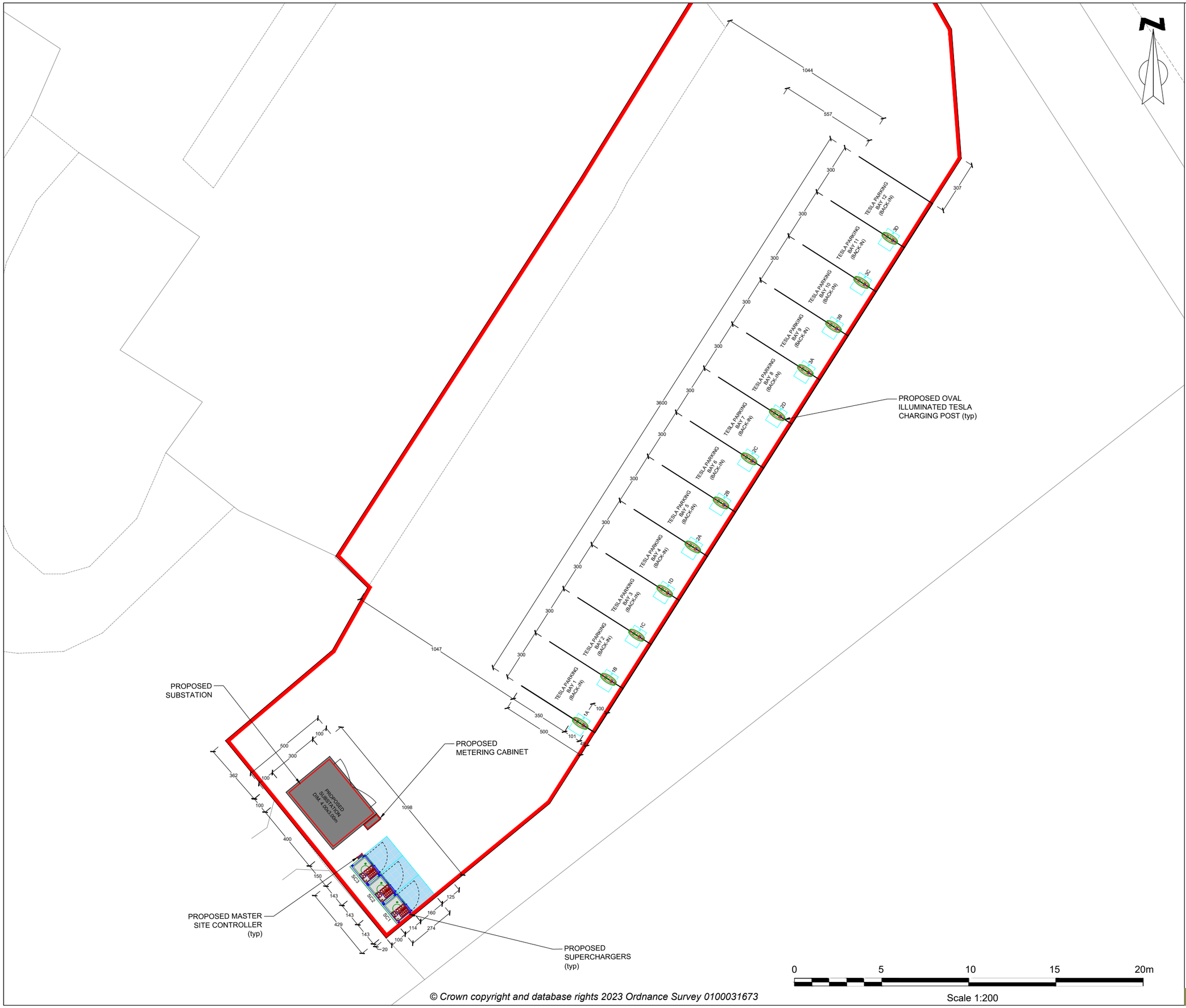
6.2 Discussion

6.2.1 No significant contamination risks have been identified at the site in relation to the low sensitivity end use which utilises hardstanding.

6.2.2 It is considered that should any unforeseen contamination be encountered during development works can be addressed through a source removal or encapsulation strategy using hardstanding.

6.3 Recommendations

6.3.1 It is considered that no further contamination assessment is necessary prior to planning. No gas monitoring is required, and investigation is recommended associated with shallow Made Ground Under a suitably worded planning condition.



Key

Application Boundary

enzygo environmental consultants

Samuel House, 5 Fox Valley Way, Stocksbridge, Sheffield, S36 2AA

CLIENT:
Tesla Motors Ltd

SCALE:
1:200@A3

PROJECT REF:
CRM.3030.014

DRAWN:
KR

CHECKED:
TB

DATE:
May 2023

PROJECT:
The Post Office,
600 Huddersfield Rd,
Haigh, Barnsley S75 4DE, UK

TITLE:
Proposed Site Layout Plan

DRAWING NO:
CRM.3030.014.PL.D.004

Appendix 1 – Desk Study Information

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

unspecified

Order Details

Date: 17/04/2023

Your ref: EMS_859987_1063443

Our Ref: EMS-859987_1102282

Site Details

Location: 429852 411577

Area: 3.05 ha

Authority: Barnsley Metropolitan Borough Council

Summary of findings p. 2

OS MasterMap site plan p.13

Aerial image p. 8

groundsure.com/insightuserguide

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

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	Historical industrial land uses	0	2	10	34	-
16	1.2	Historical tanks	0	0	0	5	-
17	1.3	Historical energy features	0	0	0	1	-
17	1.4	Historical petrol stations	0	0	0	0	-
18	1.5	Historical garages	0	0	0	0	-
18	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
19	2.1	Historical industrial land uses	0	3	14	44	-
22	2.2	Historical tanks	0	0	0	5	-
22	2.3	Historical energy features	0	0	0	1	-
23	2.4	Historical petrol stations	0	0	0	0	-
23	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
24	3.1	Active or recent landfill	0	0	0	0	-
24	3.2	Historical landfill (BGS records)	0	0	0	1	-
25	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
25	3.4	Historical landfill (EA/NRW records)	0	1	2	0	-
26	3.5	Historical waste sites	0	0	0	0	-
26	3.6	Licensed waste sites	0	0	0	0	-
26	3.7	Waste exemptions	0	0	1	3	-
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	1	-	-
29	4.2	Current or recent petrol stations	0	0	0	0	-
29	4.3	Electricity cables	0	0	0	0	-
29	4.4	Gas pipelines	0	0	0	0	-
29	4.5	Sites determined as Contaminated Land	0	0	0	0	-

29	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
30	4.7	Regulated explosive sites	0	0	0	0	-
30	4.8	Hazardous substance storage/usage	0	0	0	0	-
30	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
30	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
30	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
31	4.12	Radioactive Substance Authorisations	0	0	0	0	-
31	**4.13**	**Licensed Discharges to controlled waters**	0	0	3	17	-
34	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
34	4.15	Pollutant release to public sewer	0	0	0	0	-
34	**4.16**	**List 1 Dangerous Substances**	0	0	0	1	-
34	**4.17**	**List 2 Dangerous Substances**	0	0	0	1	-
35	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
35	4.19	Pollution inventory substances	0	0	0	0	-
35	4.20	Pollution inventory waste transfers	0	0	0	0	-
35	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
36	**5.1**	**Superficial aquifer**	Identified (within 500m)				
38	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
40	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
41	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
41	5.5	Groundwater vulnerability- local information	None (within 0m)				
42	**5.6**	**Groundwater abstractions**	0	0	0	0	3
43	5.7	Surface water abstractions	0	0	0	0	0
44	5.8	Potable abstractions	0	0	0	0	0
44	5.9	Source Protection Zones	0	0	0	0	-
44	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
45	**6.1**	**Water Network (OS MasterMap)**	0	2	9	-	-

46	**6.2**	**Surface water features**	0	1	6	-	-
47	**6.3**	**WFD Surface water body catchments**	1	-	-	-	-
47	**6.4**	**WFD Surface water bodies**	0	0	1	-	-
48	**6.5**	**WFD Groundwater bodies**	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
49	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
50	**7.2**	**Historical Flood Events**	0	0	1	-	-
50	7.3	Flood Defences	0	0	0	-	-
50	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
50	7.5	Flood Storage Areas	0	0	0	-	-
51	7.6	Flood Zone 2	None (within 50m)				
51	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
52	**8.1**	**Surface water flooding**	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding					
54	**9.1**	**Groundwater flooding**	Negligible (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
55	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
56	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
56	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
56	10.4	Special Protection Areas (SPA)	0	0	0	0	0
56	10.5	National Nature Reserves (NNR)	0	0	0	0	0
57	**10.6**	**Local Nature Reserves (LNR)**	0	0	0	0	1
57	**10.7**	**Designated Ancient Woodland**	0	0	0	1	7
58	10.8	Biosphere Reserves	0	0	0	0	0
58	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**	1	0	1	0	1
59	10.12	Proposed Ramsar sites	0	0	0	0	0

59	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
60	**10.16**	**Nitrate Vulnerable Zones**	1	0	0	0	1
61	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
62	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
63	11.1	World Heritage Sites	0	0	0	-	-
64	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
64	11.3	National Parks	0	0	0	-	-
64	**11.4**	**Listed Buildings**	0	0	1	-	-
65	11.5	Conservation Areas	0	0	0	-	-
65	11.6	Scheduled Ancient Monuments	0	0	0	-	-
65	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
66	**12.1**	**Agricultural Land Classification**	Grade 3 (within 250m)				
67	12.2	Open Access Land	0	0	0	-	-
67	**12.3**	**Tree Felling Licences**	1	1	11	-	-
68	12.4	Environmental Stewardship Schemes	0	0	0	-	-
68	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
69	**13.1**	**Priority Habitat Inventory**	0	0	2	-	-
70	13.2	Habitat Networks	0	0	0	-	-
70	13.3	Open Mosaic Habitat	0	0	0	-	-
70	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
71	**14.1**	**10k Availability**	Identified (within 500m)				
72	**14.2**	**Artificial and made ground (10k)**	1	1	2	7	-
74	**14.3**	**Superficial geology (10k)**	1	1	1	0	-

75	14.4	Landslip (10k)	0	0	0	0	-
76	14.5	Bedrock geology (10k)	4	2	3	9	-
77	14.6	Bedrock faults and other linear features (10k)	3	1	1	16	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
79	15.1	50k Availability	Identified (within 500m)				
80	15.2	Artificial and made ground (50k)	1	0	1	5	-
81	15.3	Artificial ground permeability (50k)	1	1	-	-	-
82	15.4	Superficial geology (50k)	1	0	1	0	-
83	15.5	Superficial permeability (50k)	Identified (within 50m)				
83	15.6	Landslip (50k)	0	0	0	0	-
83	15.7	Landslip permeability (50k)	None (within 50m)				
84	15.8	Bedrock geology (50k)	3	1	2	3	-
85	15.9	Bedrock permeability (50k)	Identified (within 50m)				
85	15.10	Bedrock faults and other linear features (50k)	3	1	2	7	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
87	16.1	BGS Boreholes	0	7	17	-	-
Page	Section	Natural ground subsidence					
89	17.1	Shrink swell clays	Very low (within 50m)				
91	17.2	Running sands	Low (within 50m)				
93	17.3	Compressible deposits	Moderate (within 50m)				
95	17.4	Collapsible deposits	Very low (within 50m)				
97	17.5	Landslides	Very low (within 50m)				
99	17.6	Ground dissolution of soluble rocks	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
101	18.1	Natural cavities	0	0	0	0	-
102	18.2	BritPits	0	0	0	1	-
102	18.3	Surface ground workings	0	0	19	-	-
103	18.4	Underground workings	0	0	0	3	7
104	18.5	Historical Mineral Planning Areas	0	0	1	0	-

104	**18.6**	**Non-coal mining**	1	1	0	0	1
105	18.7	Mining cavities	0	0	0	0	0
105	18.8	JPB mining areas	None (within 0m)				
105	**18.9**	**Coal mining**	Identified (within 0m)				
105	18.10	Brine areas	None (within 0m)				
106	18.11	Gypsum areas	None (within 0m)				
106	18.12	Tin mining	None (within 0m)				
106	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
107	**19.1**	**Radon**	Between 3% and 5% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
109	**20.1**	**BGS Estimated Background Soil Chemistry**	4	2	-	-	-
109	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
110	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
111	21.1	Underground railways (London)	0	0	0	-	-
111	21.2	Underground railways (Non-London)	0	0	0	-	-
111	21.3	Railway tunnels	0	0	0	-	-
111	21.4	Historical railway and tunnel features	0	0	0	-	-
111	21.5	Royal Mail tunnels	0	0	0	-	-
112	21.6	Historical railways	0	0	0	-	-
112	21.7	Railways	0	0	0	-	-
112	21.8	Crossrail 1	0	0	0	0	-
112	21.9	Crossrail 2	0	0	0	0	-
112	21.10	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 30/05/2021

Site Area: 3.05ha

Recent site history - 2018 aerial photograph

Capture Date: 01/07/2018

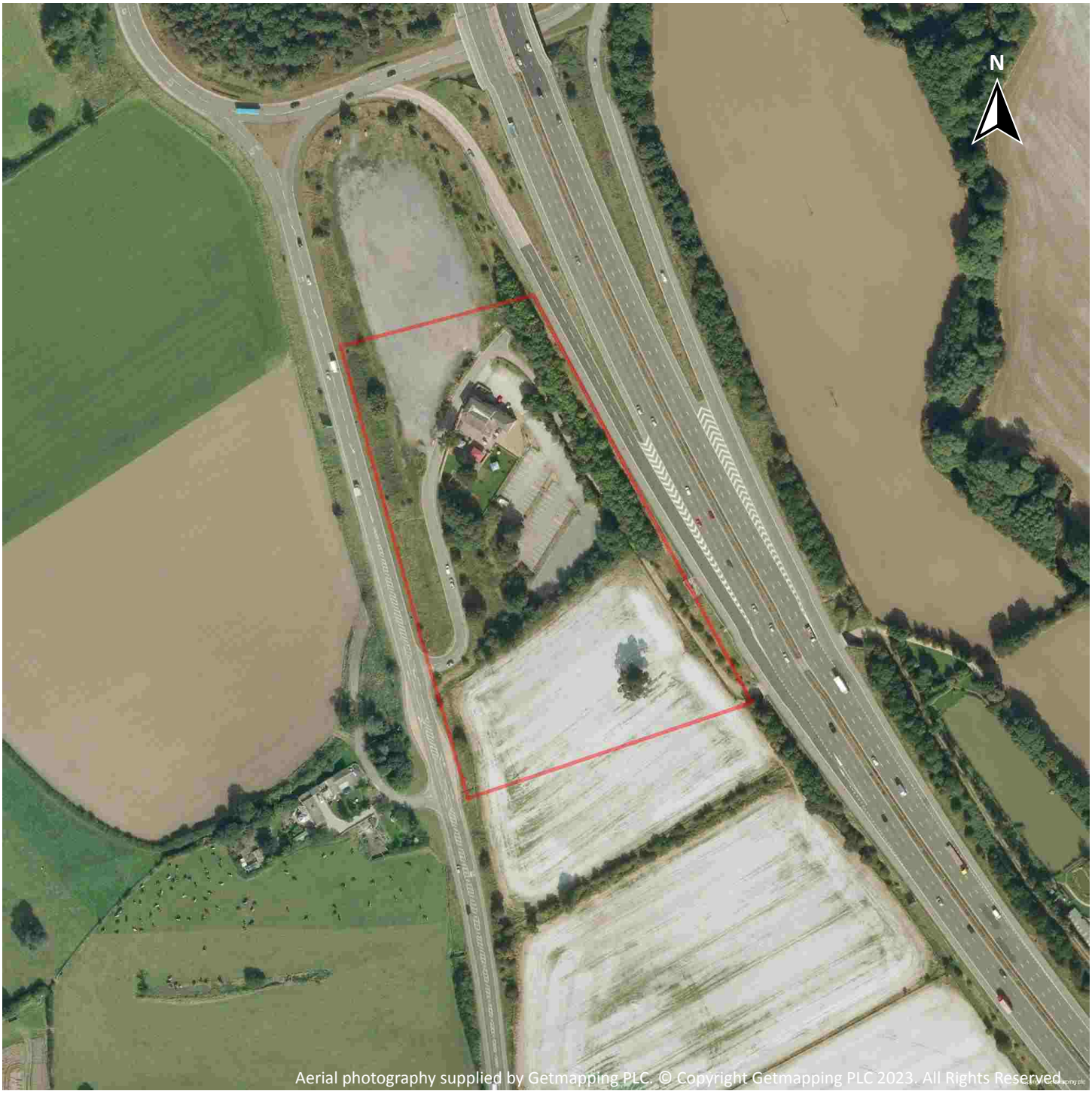
Site Area: 3.05ha

Recent site history - 2012 aerial photograph

Capture Date: 26/03/2012

Site Area: 3.05ha

Recent site history - 2009 aerial photograph



Capture Date: 11/09/2009

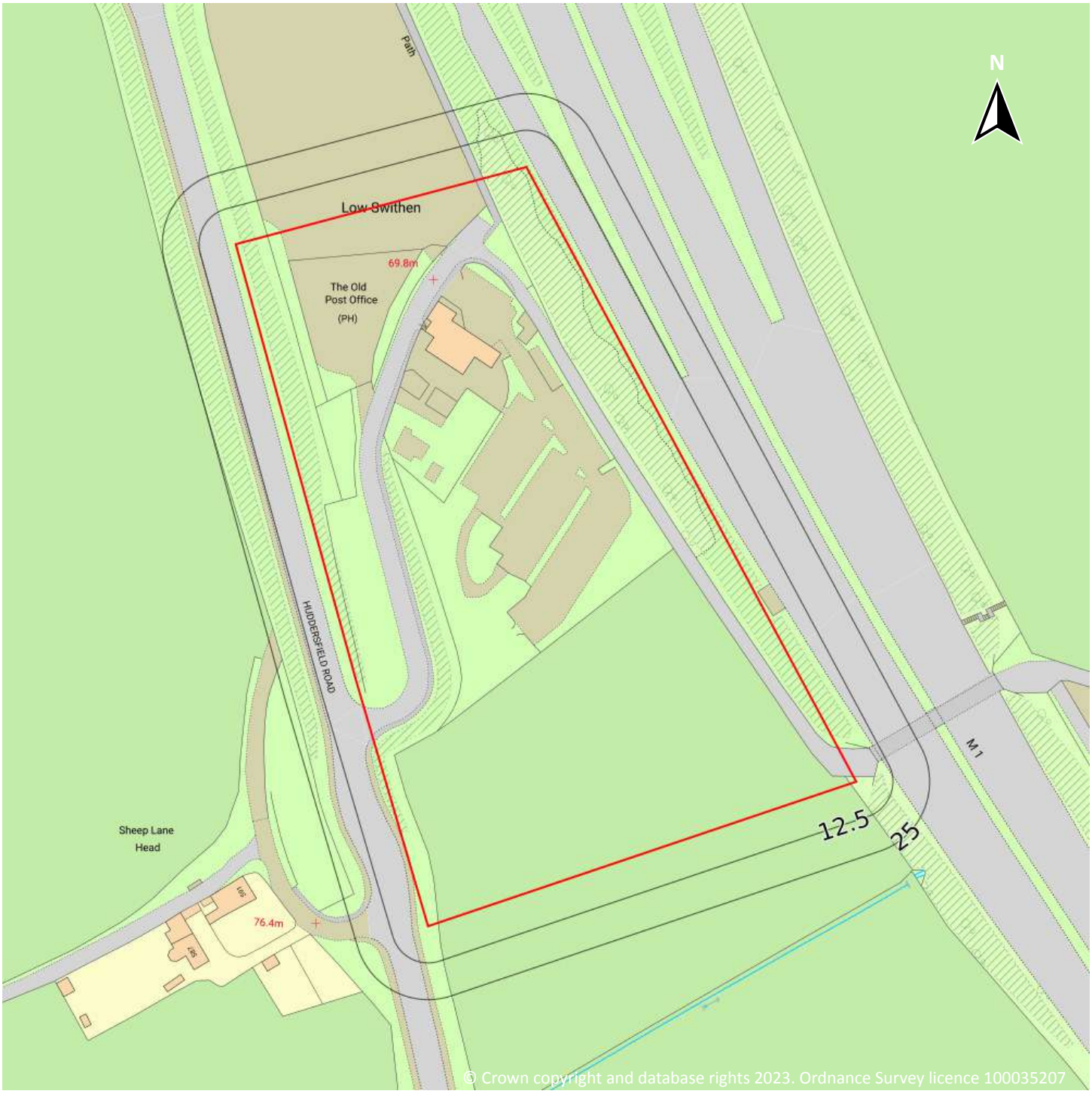
Site Area: 3.05ha

Recent site history - 1999 aerial photograph

Capture Date: 10/07/1999

Site Area: 3.05ha

OS MasterMap site plan



Site Area: 3.05ha

1 Past land use

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

1.1 Historical industrial land uses

Records within 500m	46

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

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

ID	Location	Land use	Dates present	Group ID
A	31m SE	Bleach Works	1854	1547103

ID	Location	Land use	Dates present	Group ID
A	37m SE	Disused Bleach Works	1951	1462909
A	82m SE	Disused Bleach Works	1930 - 1938	1509356
A	195m SE	Disused Bleach Works	1948	1540306
A	200m SE	Bleach Works	1904	1550542
A	202m SE	Bleach Works	1891	1506898
1	215m NW	Refuse Heap	1981 - 1988	1475749
B	236m NW	Unspecified Quarry	1930 - 1938	1547060
B	238m NW	Unspecified Disused Quarry	1966	1449502
B	238m NW	Unspecified Quarry	1948	1532656
B	238m NW	Unspecified Quarry	1951	1541124
2	241m S	Unspecified Pump	1854	1483068
A	265m SE	Unspecified Tanks	1904	1425820
B	281m NW	Unspecified Quarry	1891 - 1904	1499007
A	282m E	Unspecified Tanks	1904	1425822
C	311m NW	Sandstone Quarry	1854	1552445
C	324m NW	Unspecified Heap	1948	1501977
C	324m NW	Unspecified Heap	1904	1531374
C	329m NW	Unspecified Heap	1938	1508333
C	330m NW	Unspecified Ground Workings	1930	1414380
C	335m NW	Unspecified Heap	1951	1518354
D	422m N	Railway Sidings	1938	1532106
D	424m N	Railway Sidings	1904	1544122
D	436m N	Railway Sidings	1948	1546722
E	443m E	Colliery	1978	1501483
E	443m E	Refuse Heap	1978	1539194
D	445m N	Railway Sidings	1951	1460900
D	445m N	Railway Station	1930	1476170
E	453m E	Unspecified Mine	1965	1455552

ID	Location	Land use	Dates present	Group ID
3	456m E	Refuse Heap	1990	1508697
F	457m N	Unspecified Disused Mill	1948 - 1966	1509856
4	464m E	Colliery	1990	1537452
5	464m E	Refuse Heap	1965	1549199
D	467m N	Unspecified Mine	1965	1455558
D	471m N	Unspecified Commercial/Industrial	1951	1555668
D	478m N	Railway Sidings	1930	1478008
D	478m N	Unspecified Station	1966	1457523
6	480m W	Unspecified Pump	1854	1456537
7	484m E	Railway Sidings	1990	1534258
D	484m N	Railway Station	1854 - 1904	1517141
D	485m N	Railway Station	1938	1494109
D	489m N	Railway Station	1948 - 1951	1514342
D	490m N	Unspecified Commercial/Industrial	1938	1540271
D	491m N	Unspecified Commercial/Industrial	1930	1481387
F	498m NW	Unspecified Mill	1891 - 1904	1516672
F	498m NW	Unspecified Mill	1854	1501097

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**5**

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

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

ID	Location	Land use	Dates present	Group ID
A	251m SE	Tanks	1906	232690

ID	Location	Land use	Dates present	Group ID
A	256m SE	Tanks	1906	232688
A	265m SE	Tanks	1906	232689
A	273m SE	Gasometer	1893	229685
A	283m E	Tanks	1906	232687

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**1**

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

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

ID	Location	Land use	Dates present	Group ID
A	273m SE	Gasometer	1893	131542

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	**0**

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 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

2.1 Historical industrial land uses

Records within 500m	61

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 19**

ID	Location	Land Use	Date	Group ID
A	31m SE	Bleach Works	1854	1547103
A	31m SE	Bleach Works	1854	1547103
A	37m SE	Disused Bleach Works	1951	1462909

ID	Location	Land Use	Date	Group ID
A	82m SE	Disused Bleach Works	1938	1509356
A	195m SE	Disused Bleach Works	1948	1540306
A	199m SE	Disused Bleach Works	1930	1509356
A	200m SE	Bleach Works	1904	1550542
A	202m SE	Bleach Works	1891	1506898
B	215m NW	Refuse Heap	1981	1475749
B	215m NW	Refuse Heap	1988	1475749
C	236m NW	Unspecified Quarry	1930	1547060
C	238m NW	Unspecified Disused Quarry	1966	1449502
C	238m NW	Unspecified Quarry	1948	1532656
C	238m NW	Unspecified Quarry	1938	1547060
C	238m NW	Unspecified Quarry	1951	1541124
D	241m S	Unspecified Pump	1854	1483068
D	241m S	Unspecified Pump	1854	1483068
A	265m SE	Unspecified Tanks	1904	1425820
C	281m NW	Unspecified Quarry	1904	1499007
A	282m E	Unspecified Tanks	1904	1425822
C	288m NW	Unspecified Quarry	1891	1499007
C	311m NW	Sandstone Quarry	1854	1552445
C	311m NW	Sandstone Quarry	1854	1552445
C	324m NW	Unspecified Heap	1948	1501977
C	324m NW	Unspecified Heap	1904	1531374
C	329m NW	Unspecified Heap	1938	1508333
C	329m NW	Unspecified Heap	1938	1508333
C	330m NW	Unspecified Ground Workings	1930	1414380
C	335m NW	Unspecified Heap	1951	1518354
E	422m N	Railway Sidings	1938	1532106
E	424m N	Railway Sidings	1904	1544122

ID	Location	Land Use	Date	Group ID
E	436m N	Railway Sidings	1948	1546722
F	443m E	Refuse Heap	1978	1539194
F	443m E	Colliery	1978	1501483
E	445m N	Railway Sidings	1951	1460900
E	445m N	Railway Station	1930	1476170
F	453m E	Unspecified Mine	1965	1455552
1	456m E	Refuse Heap	1990	1508697
G	457m N	Unspecified Disused Mill	1951	1509856
G	457m N	Unspecified Disused Mill	1966	1509856
2	464m E	Colliery	1990	1537452
3	464m E	Refuse Heap	1965	1549199
E	467m N	Unspecified Mine	1965	1455558
E	471m N	Unspecified Commercial/Industrial	1951	1555668
E	478m N	Railway Sidings	1930	1478008
E	478m N	Unspecified Station	1966	1457523
4	480m W	Unspecified Pump	1854	1456537
5	484m E	Railway Sidings	1990	1534258
E	484m N	Railway Station	1904	1517141
E	484m N	Railway Station	1891	1517141
E	485m N	Railway Station	1938	1494109
E	489m N	Railway Station	1948	1514342
E	490m N	Unspecified Commercial/Industrial	1938	1540271
E	490m N	Railway Station	1951	1514342
E	491m N	Railway Station	1854	1517141
E	491m N	Railway Station	1854	1517141
E	491m N	Unspecified Commercial/Industrial	1930	1481387
G	498m NW	Unspecified Disused Mill	1948	1509856
G	498m NW	Unspecified Mill	1904	1516672

ID	Location	Land Use	Date	Group ID
G	498m NW	Unspecified Mill	1891	1516672
G	498m NW	Unspecified Mill	1854	1501097

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**5**

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 19**

ID	Location	Land Use	Date	Group ID
A	251m SE	Tanks	1906	232690
A	256m SE	Tanks	1906	232688
A	265m SE	Tanks	1906	232689
A	273m SE	Gasometer	1893	229685
A	283m E	Tanks	1906	232687

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**1**

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 19**

ID	Location	Land Use	Date	Group ID
A	273m SE	Gasometer	1893	131542

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Historical landfill (BGS)

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	1

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.

Features are displayed on the Waste and landfill map on **page 24**

ID	Location	Address	BGS Number	Risk	Waste Type
3	268m NW	Haigh Quarry, Jebb Lane, Haigh, nr Wakefield	1478	No risk to aquifer	N/A

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	**0**

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	**3**

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

Features are displayed on the Waste and landfill map on **page 24**

ID	Location	Details		
1	39m S	Site Address: Land adjacent to A637 Swithen Hill, Haigh Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: Barnsley Metropolitan Borough Council Licence Holder: - First Recorded 01/05/1997 Last Recorded: 31/05/1997
A	170m NW	Site Address: Haigh Quarry, Jebb Lane, Darton, Barnsley Licence Holder Address: Meadowhall Works, PO Box 54, Sheffield	Waste Licence: Yes Site Reference: 20B2 (16), 4400/B2, WD20 B2 Waste Type: Inert, Industrial, Commercial, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 28/02/1979 Licence Surrender: 21/06/1989	Operator: Rigby Metal Components Limited Licence Holder: Mr Rogers, Lee Steel Strip Limited First Recorded 31/12/1970 Last Recorded: 21/06/1989

ID	Location	Details		
A	192m NW	Site Address: Haigh quarry, Jebb Lane, Haigh, Near Wakefield, South Yorkshire Licence Holder Address: -	Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: Lavite Limited Licence Holder: - First Recorded 31/12/1970 Last Recorded: -

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	**4**

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.

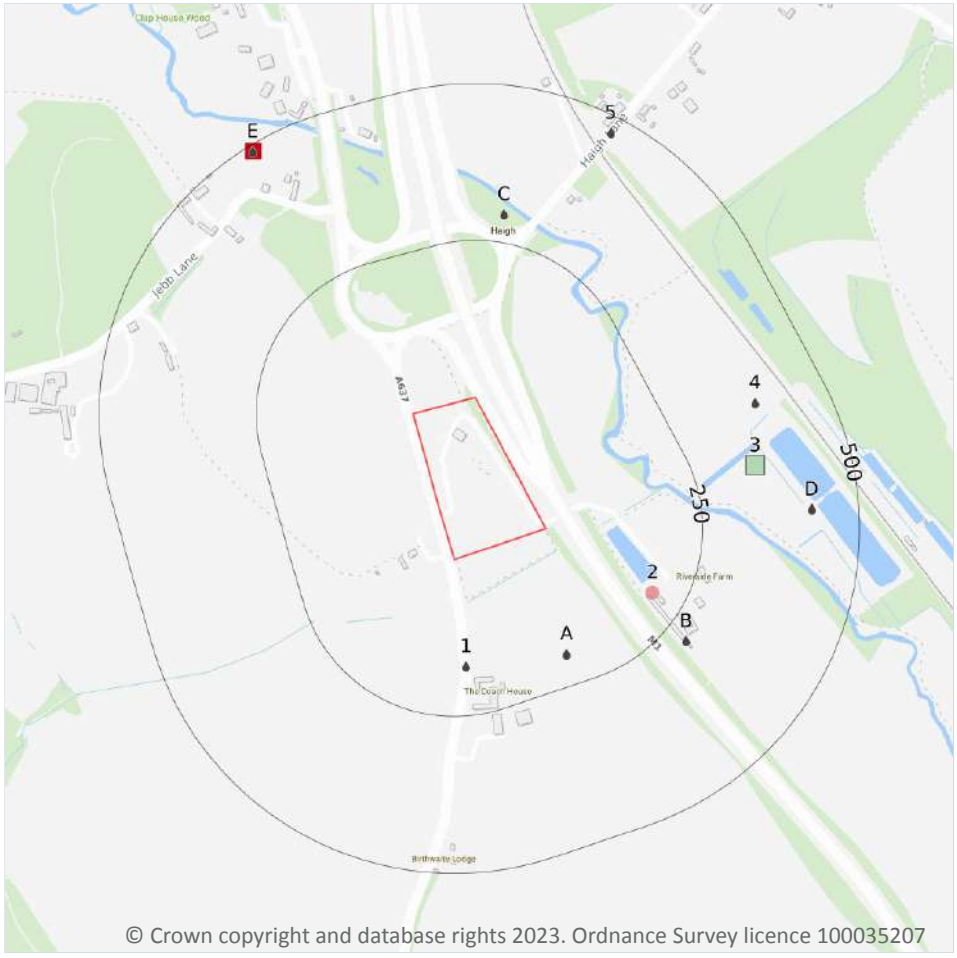
Features are displayed on the Waste and landfill map on **page 24**

ID	Location	Site	Reference	Category	Sub-Category	Description
2	220m N	Swithen Farm Huddersfield Road BARNSLEY South Yorkshire S75 4DG	EPR/VF0800UE/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
B	310m S	Swithen Farm Huddersfield Road BARNSLEY South Yorkshire S75 4DG	EPR/VF0900UW/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
B	323m S	-	WEX301153	Storing waste exemption	On a Farm	Storage of sludge

ID	Location	Site	Reference	Category	Sub-Category	Description
4	338m N	Bretton Mill Farm Huddersfield Road BARNSLEY South Yorkshire S75 4BX	EPR/VF0209LC /A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed Discharges to controlled waters

List 1 Dangerous Substances

List 2 Dangerous Substances

4.1 Recent industrial land uses

Records within 250m	1

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 28**

ID	Location	Company	Address	Activity	Category
2	198m SE	Mast	South Yorkshire, S75	Telecommunications Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	20

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	
1	171m S	SWITHEN HILL FARM, SWITHEN HILL, HAIGH, BARNSLEY, SOUTH YORKSHIRE, S75 4DG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WRA7584 Permit Version: 1 Receiving Water: TRIB OF DEARNE	Status: REVOKED - UNSPECIFIED Issue date: 11/05/2000 Effective Date: 11/05/2000 Revocation Date: 30/08/2005
A	199m SE	THE OLD POST OFFICE, PUBLIC HOUSE, HAIGH, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: C4772 Permit Version: 1 Receiving Water: TRIBUTARY OF RIVER DEARNE	Status: TRANSFERRED FROM COPA 1974 Issue date: 04/09/1987 Effective Date: 04/09/1987 Revocation Date: 07/07/1993
A	199m SE	THE OLD POST OFFICE, PUBLIC HOUSE, HAIGH, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: C4772 Permit Version: 2 Receiving Water: TRIBUTARY OF RIVER DEARNE	Status: REVISED CONSENT, BY NOTICE (SECTION 37(1)) Issue date: 08/07/1993 Effective Date: 08/07/1993 Revocation Date: -
B	286m SE	FOXHOLES ANIMAL HOTEL, RIVERSIDE FARM, HAIGH, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WRA7653 Permit Version: 1 Receiving Water: LAND	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 29/11/2000 Effective Date: 29/11/2000 Revocation Date: 25/07/2012

ID	Location	Address	Details	
B	286m SE	FOXHOLES ANIMAL HOTEL, RIVERSIDE FARM, HAIGH, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WRA7653 Permit Version: 2 Receiving Water: LAND	Status: VARIED UNDER EPR 2010 Issue date: 26/07/2012 Effective Date: 26/07/2012 Revocation Date: -
C	294m N	ALLIED RECREATION LTD,PROPOSED HOTE, L,HUDDERSFIELD RD,M1 JUNCTION 38, CONSENTNO WRA7216	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WRA7216 Permit Version: 1 Receiving Water: RIVER DEARNE	Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 12/06/1996 Effective Date: 12/06/1996 Revocation Date: 22/03/2004
C	294m N	ALLIED RECREATION LTD,PROPOSED HOTE, L,HUDDERSFIELD RD,M1 JUNCTION 38, CONSENTNO WRA7216	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WRA7216 Permit Version: 2 Receiving Water: RIVER DEARNE	Status: REVOKED - UNSPECIFIED Issue date: 23/03/2004 Effective Date: 23/03/2004 Revocation Date: 08/03/2008
C	294m N	ALLIED RECREATION LTD,PROPOSED HOTE, L,HUDDERSFIELD RD,M1 JUNCTION 38, CONSENTNO WRA7216	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: WRA7216 Permit Version: 1 Receiving Water: RIVER DEARNE	Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 12/06/1996 Effective Date: 12/06/1996 Revocation Date: 22/03/2004
C	294m N	ALLIED RECREATION LTD,PROPOSED HOTE, L,HUDDERSFIELD RD,M1 JUNCTION 38, CONSENTNO WRA7216	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: WRA7216 Permit Version: 2 Receiving Water: RIVER DEARNE	Status: REVOKED - UNSPECIFIED Issue date: 23/03/2004 Effective Date: 23/03/2004 Revocation Date: 08/03/2008
4	388m E	WOOLLEY COLLIERY, DARTON, BARNSLEY, SOUTH YORKSHIRE, UK	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: 3747 Permit Version: 3 Receiving Water: RIVER DEARNE	Status: REVOKED UNDER EPR 2010 Issue date: 16/08/1995 Effective Date: 16/08/1995 Revocation Date: 06/01/2011
D	424m E	WOOLLEY COLLIERY, DARTON, BARNSLEY, SOUTH YORKSHIRE, UK	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: C4758 Permit Version: 2 Receiving Water: RIVER DEARNE	Status: REVISED CONSENT, BY NOTICE (SECTION 37(1)) Issue date: 01/11/1994 Effective Date: 01/11/1994 Revocation Date: 30/04/1995
D	424m E	WOOLLEY COLLIERY, DARTON, BARNSLEY, SOUTH YORKSHIRE, UK	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: C4758 Permit Version: 4 Receiving Water: RIVER DEARNE	Status: REVISED CONSENT, BY NOTICE (SECTION 37(1)) Issue date: 01/11/1994 Effective Date: 01/05/1996 Revocation Date: 31/10/2004

ID	Location	Address	Details	
D	424m E	WOOLLEY COLLIERY, DARTON, BARNSLEY, SOUTH YORKSHIRE, UK	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: C4758 Permit Version: 3 Receiving Water: RIVER DEARNE	Status: REVISED CONSENT, BY NOTICE (SECTION 37(1)) Issue date: 01/11/1994 Effective Date: 01/05/1995 Revocation Date: 30/04/1996
D	424m E	WOOLLEY COLLIERY, DARTON, BARNSLEY, SOUTH YORKSHIRE, UK	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: C4758 Permit Version: 1 Receiving Water: RIVER DEARNE	Status: TRANSFERRED FROM COPA 1974 Issue date: 02/09/1987 Effective Date: 02/09/1987 Revocation Date: 31/10/1994
D	424m E	WOOLLEY COLLIERY, DARTON, BARNSLEY, SOUTH YORKSHIRE, UK	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: C4758 Permit Version: 5 Receiving Water: RIVER DEARNE	Status: REVISED CONSENT, BY NOTICE (SECTION 37(1)) Issue date: 01/11/1994 Effective Date: 01/11/2004 Revocation Date: -
5	473m N	HAIGH LANE STW, HAIGH LANE, HAIGH, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: C4955 Permit Version: 1 Receiving Water: TRIB OF RIVER DEARNE	Status: TRANSFERRED FROM COPA 1974 Issue date: 27/01/1988 Effective Date: 27/01/1988 Revocation Date: -
E	489m NW	JEBB LANE QUARRY, DARTON, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: 3066 Permit Version: 1 Receiving Water: -	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 16/10/1974 Effective Date: 16/10/1974 Revocation Date: 04/09/1983
E	489m NW	JEBB LANE QUARRY, DARTON, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: 3066 Permit Version: 2 Receiving Water: -	Status: REVOKED - UNSPECIFIED Issue date: 05/09/1983 Effective Date: 05/09/1983 Revocation Date: 07/12/1993
E	489m NW	JEBB LANE QUARRY, DARTON, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: 3066 Permit Version: 1 Receiving Water: -	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 16/10/1974 Effective Date: 16/10/1974 Revocation Date: 04/09/1983
E	489m NW	JEBB LANE QUARRY, DARTON, BARNSLEY, SOUTH YORKSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: 3066 Permit Version: 2 Receiving Water: -	Status: REVOKED - UNSPECIFIED Issue date: 05/09/1983 Effective Date: 05/09/1983 Revocation Date: 07/12/1993

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 28**

ID	Location	Name	Status	Receiving Water	Authorised Substances
E	490m NW	Rigby Metals -haigh Quarry Tip	Active	-	-

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

4.17 List 2 Dangerous Substances

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 28**

ID	Location	Name	Status	Receiving Water	Authorised Substances
3	348m E	Woolley Minewater Treatment Plant	Active	River Dearne	Iron

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

4.18 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.

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

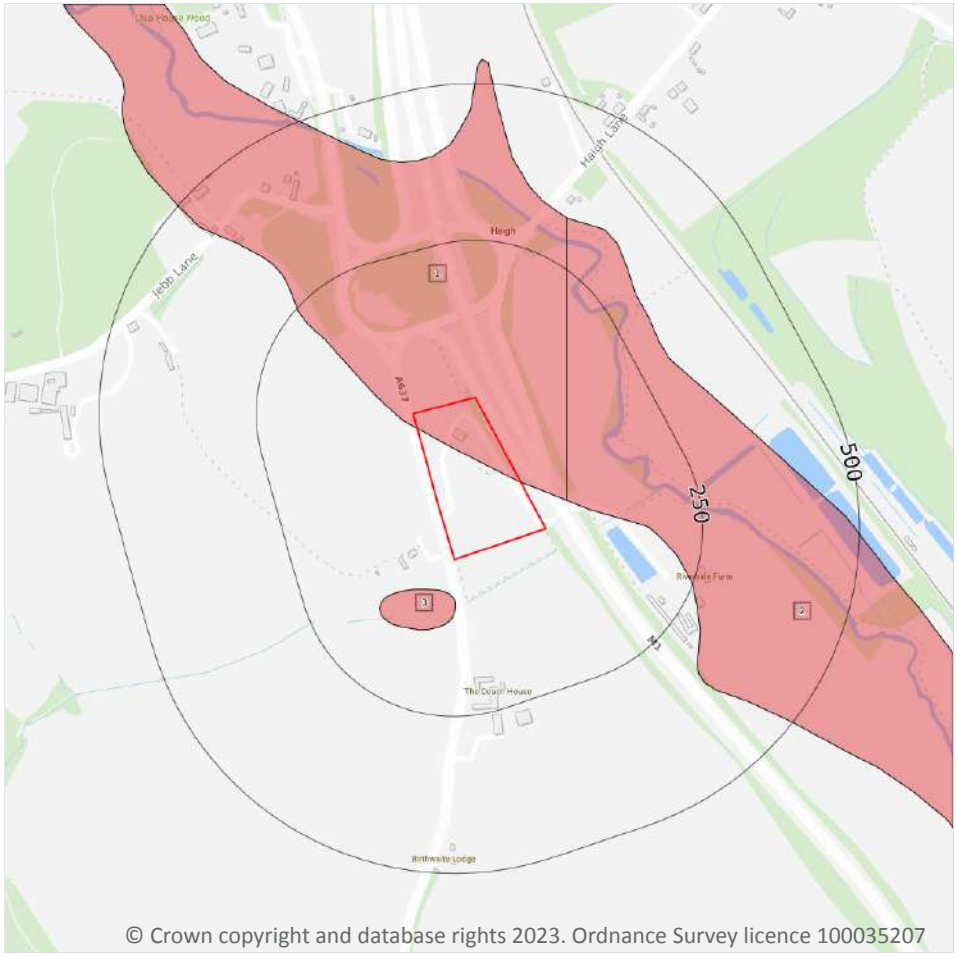
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	3

Aquifer status of groundwater held within superficial geology.

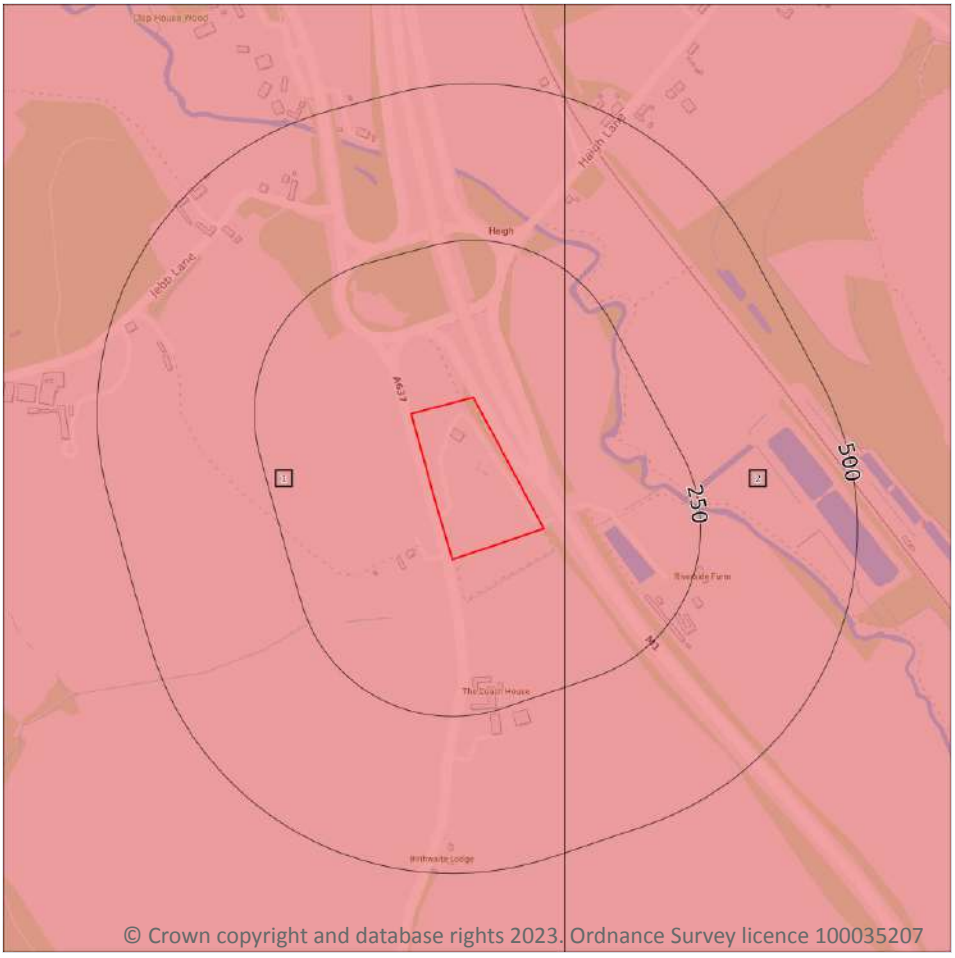
Features are displayed on the Hydrogeology map on **page 36**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	51m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ID	Location	Designation	Description
3	54m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

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

5.2 Bedrock aquifer

Records within 500m **2**

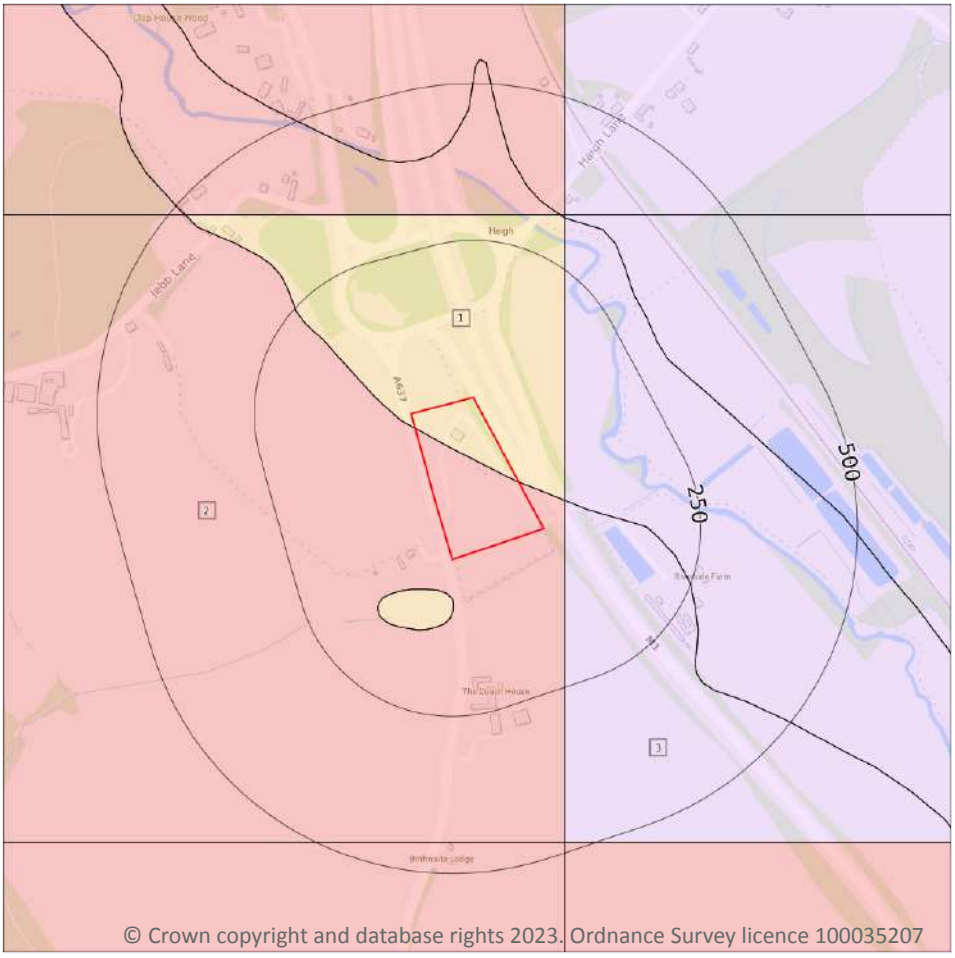
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 38**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	33m SE	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	3

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 40**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year**	**Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
2	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
3	33m SE	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**

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

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

5.5 Groundwater vulnerability- local information

Records on site	**0**

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

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

Abstractions and Source Protection Zones

Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	3

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 42**

ID	Location	Details	
-	1038m E	Status: Historical Licence No: NE/027/0008/006 Details: Pollution Remediation Direct Source: GROUNDWATERS Point: UNDERGROUND STRATA AT FORMER WOOLEY COLLIERY Data Type: Point Name: THE COAL AUTHORITY Easting: 430949 Northing: 411161	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 13/07/2009 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 13/07/2009 Version End Date: -
-	1038m E	Status: Active Licence No: NE/027/0008/006/R01 Details: Pollution Remediation Direct Source: GROUNDWATERS Point: UNDERGROUND STRATA AT FORMER WOOLEY COLLIERY Data Type: Point Name: THE COAL AUTHORITY Easting: 430949 Northing: 411161	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/WR/021579 Original Start Date: 20/04/2017 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 20/04/2017 Version End Date: -
-	1319m S	Status: Historical Licence No: 2/27/08/049 Details: General Farming & Domestic Direct Source: GROUNDWATERS Point: SPRING - COAL MEASURES - DARTON Data Type: Point Name: A I CROSSLEY & SON Easting: 429400 Northing: 410200	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	**0**

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

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

5.8 Potable abstractions

Records within 2000m	0

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

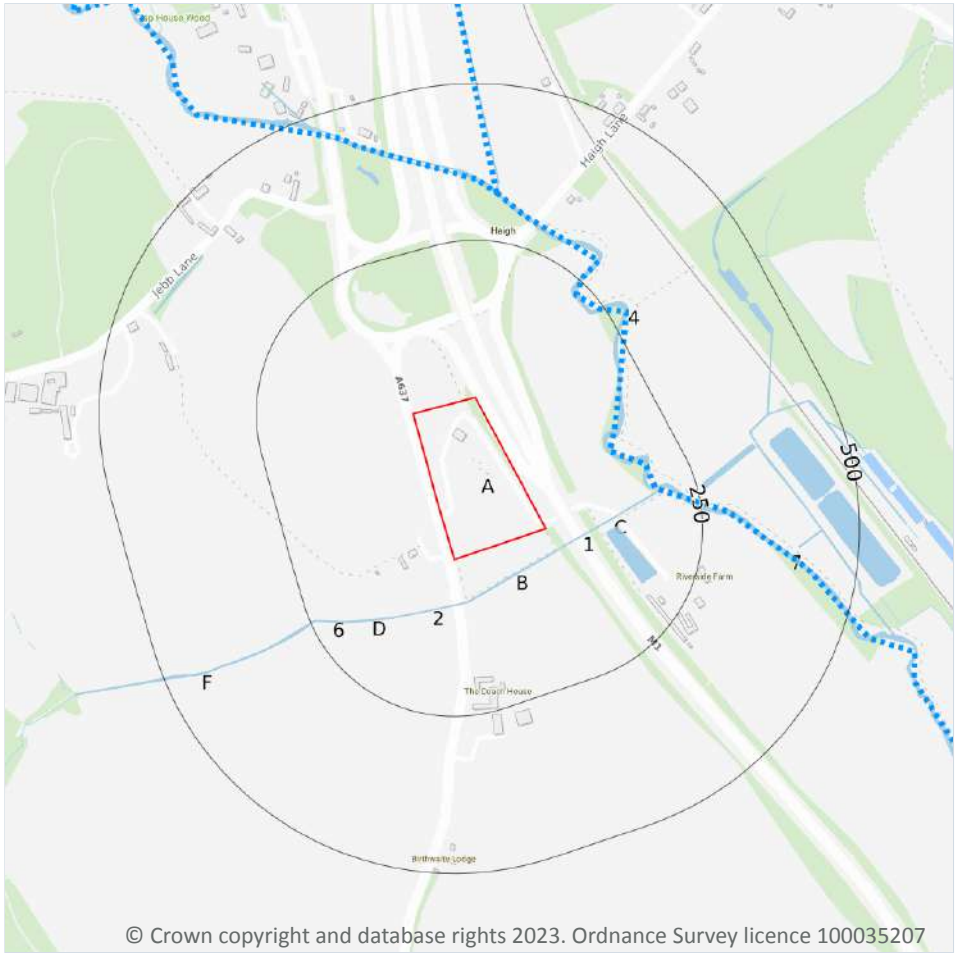
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**11**

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

Features are displayed on the Hydrology map on **page 45**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	38m SE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
B	38m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
2	71m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	88m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	125m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	129m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	134m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	147m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Dearne
6	197m SW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
7	201m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Dearne
F	243m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**7**

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

Features are displayed on the Hydrology map on **page 45**

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
A	**On site**	**River**	**Dearne from Bentley Brook to Cawthorne Dyke**	**GB104027063260**	**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
5	149m E	River	Dearne from Bentley Brook to Cawthorne Dyke	GB104027063260	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	1

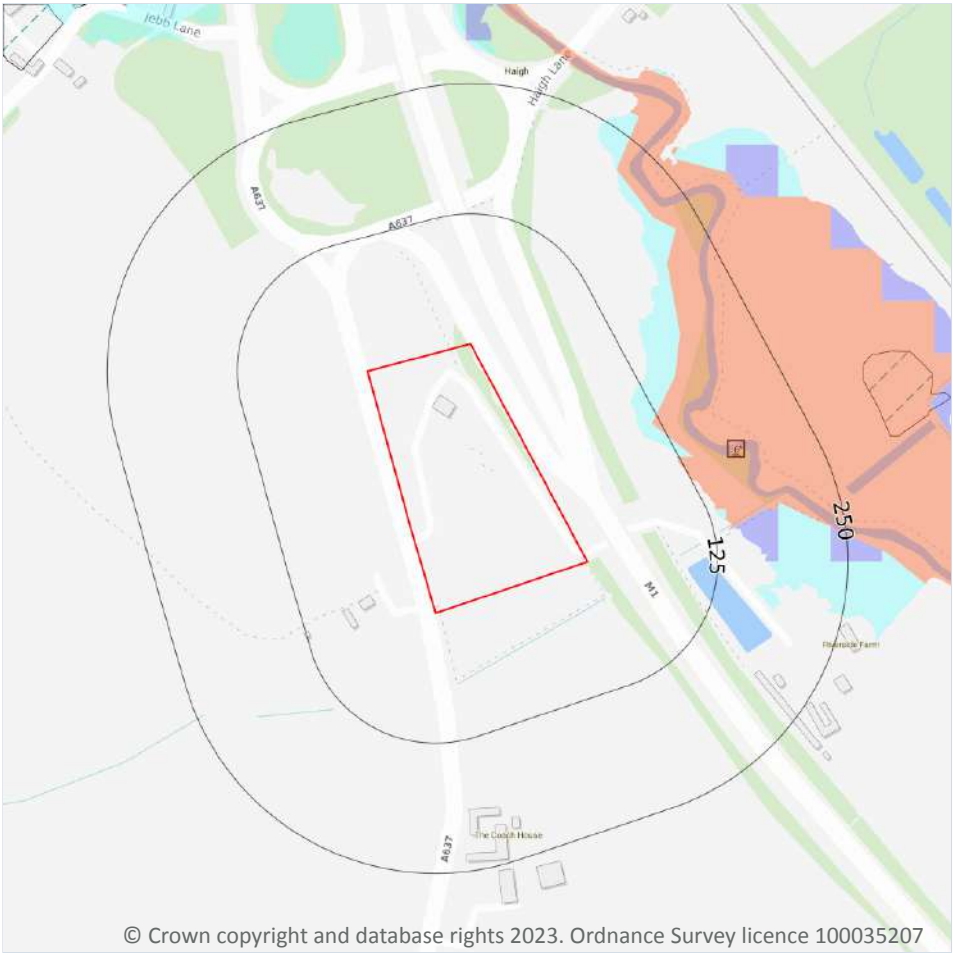
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 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	1

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.

Features are displayed on the River and coastal flooding map on **page 49**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
6	171m E	June 2007 Flood Event (Ridings Area)	2007-06-25 2007-06-26	Unknown	Unknown	Fluvial

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.

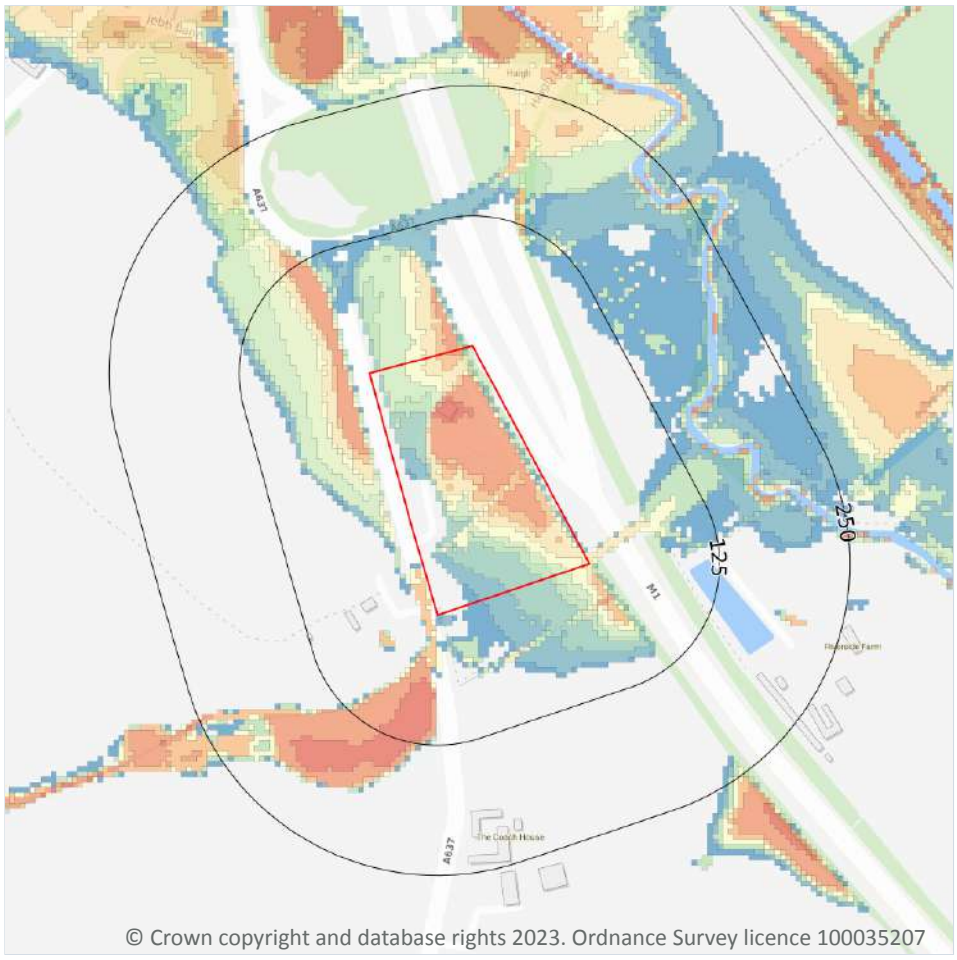
7.7 Flood Zone 3

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 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 1.0m**

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

Features are displayed on the Surface water flooding map on **page 52**

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

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

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding

9.1 Groundwater flooding

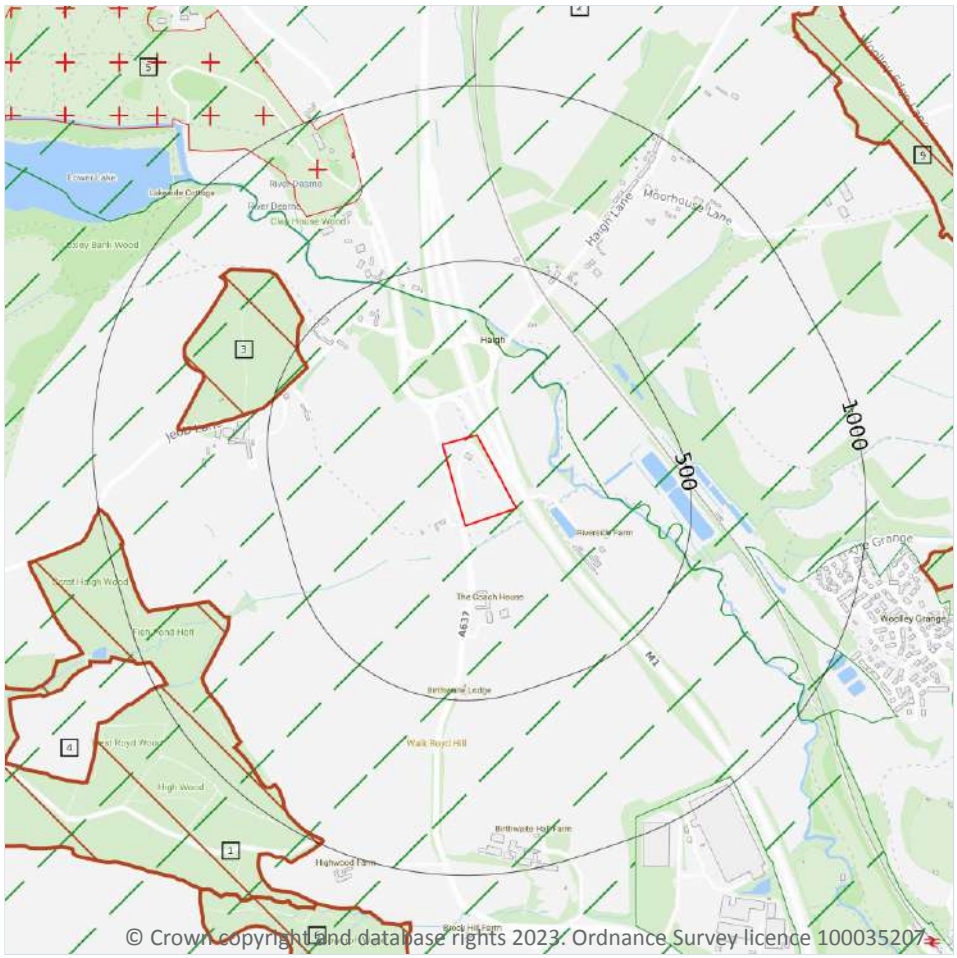
Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

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

Features are displayed on the Groundwater flooding map on **page 54**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Designated Ancient Woodland

Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 55**

ID	Location	Name	Data source
5	736m NW	Bretton 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	8

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 55**

ID	Location	Name	Woodland Type
3	445m NW	Haigh Greave Wood	Ancient Replanted Woodland
4	725m SW	High Wood	Ancient Replanted Woodland
6	1136m S	High Wood	Ancient & Semi-Natural Woodland
7	1168m E	Windhill Wood	Ancient & Semi-Natural Woodland
9	1382m NE	Jobson Wood	Ancient & Semi-Natural Woodland
-	1582m E	Unknown	Ancient & Semi-Natural Woodland
-	1701m E	Unknown	Ancient & Semi-Natural Woodland
-	1976m S	Margery Wood/cawthorne Park	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	3

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

Features are displayed on the Environmental designations map on **page 55**

ID	Location	Name	Local Authority name
1	**On site**	**South and West Yorkshire**	**Barnsley**
2	227m NE	South and West Yorkshire	Wakefield
8	1348m E	South and West Yorkshire	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

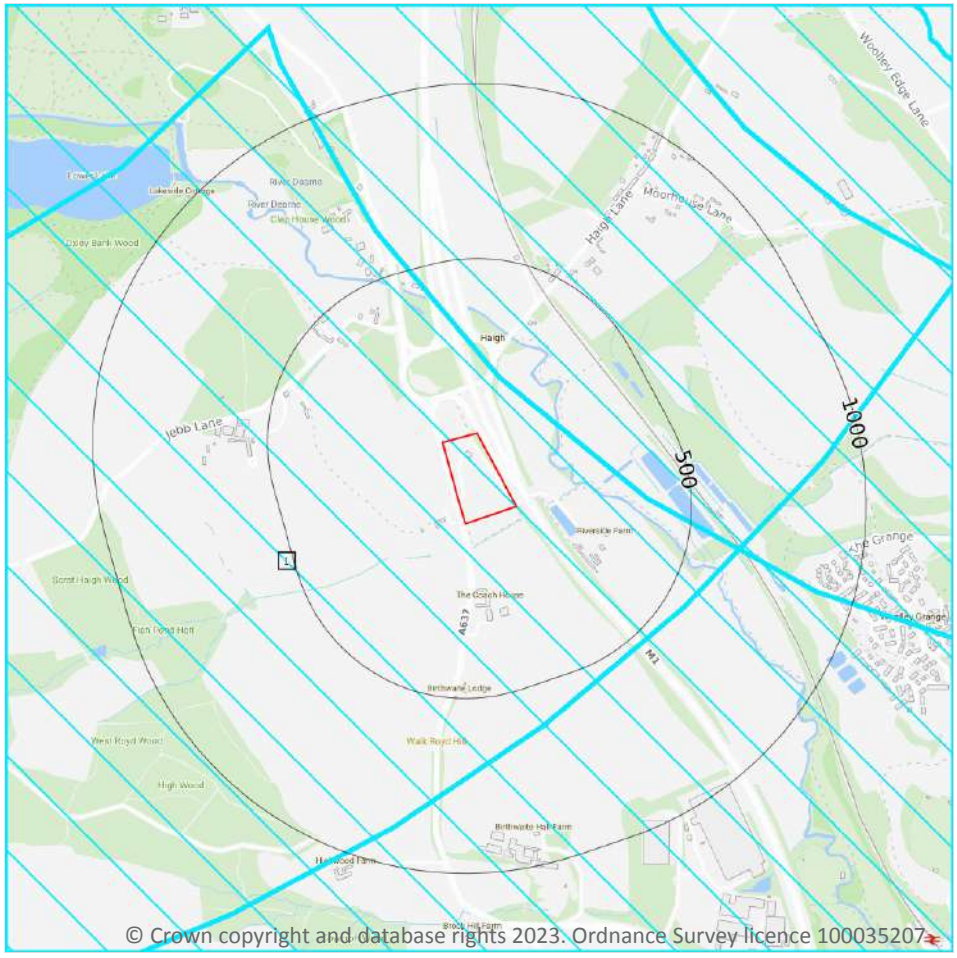
Records within 2000m	**2**

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**
1562m NE	Owler Beck from Source to River Calder NVZ	Surface Water	268	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 61**

ID	Location	Type of developments requiring consultation
1	**On site**	**Infrastructure - Airports, helipads and other aviation proposals.** **Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t).** **Combustion - General combustion processes >50mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.** **Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**0**

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

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

11 Visual and cultural designations

Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	1

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

Features are displayed on the Visual and cultural designations map on **page 63**

ID	Location	Name	Grade	Reference Number	Listed date
1	236m S	Swithen House, Darton, Barnsley, S75	II	1286446	23/11/1987

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.

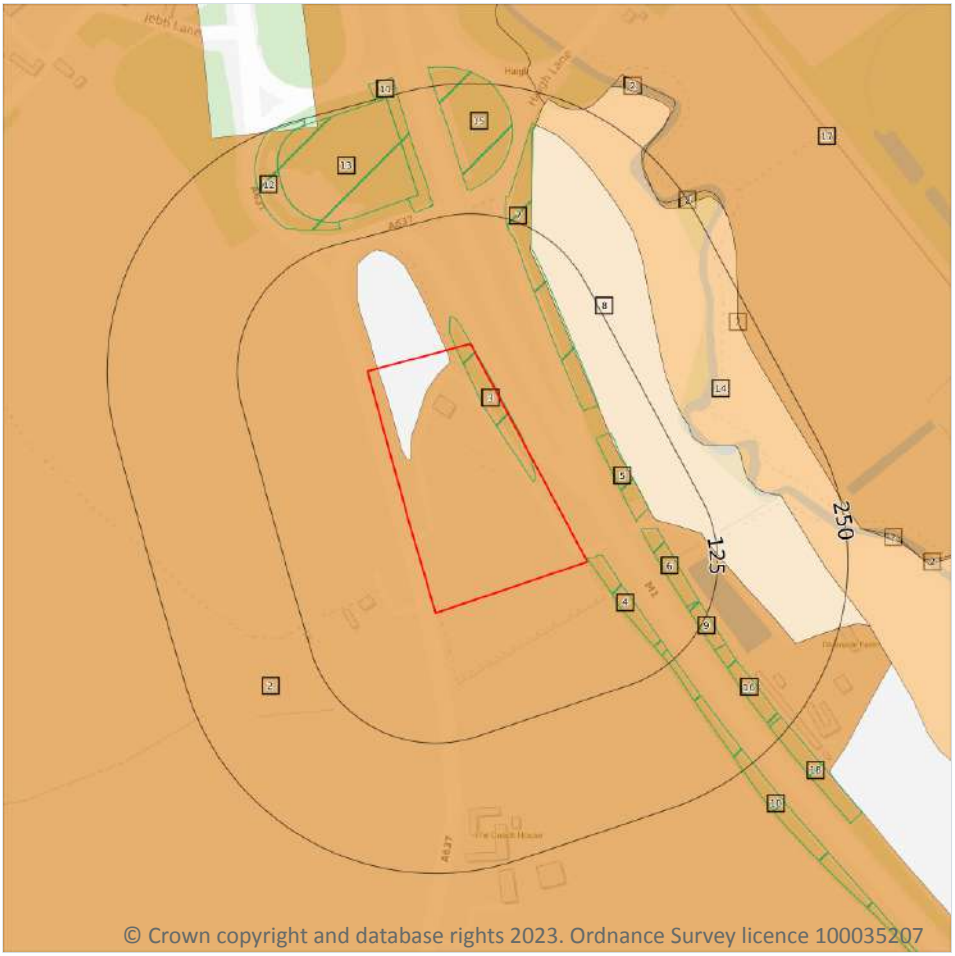
11.7 Registered Parks and Gardens

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	4

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 66**

ID	Location	Classification	Description
2	**On site**	**Grade 3**	**Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.**

ID	Location	Classification	Description
8	75m E	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
14	146m E	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
17	227m NE	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

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	13

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.

Features are displayed on the Agricultural designations map on **page 66**

ID	Location	Description	Reference	Application date
3	**On site**	**Selective Fell/Thin (Unconditional)**	**018/366/15-16**	**-**
4	1m SE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
5	60m E	Selective Fell/Thin (Unconditional)	018/366/15-16	-
6	60m E	Selective Fell/Thin (Unconditional)	018/366/15-16	-
7	65m NE	Selective Fell/Thin (Unconditional)	018/366/15-16	-

ID	Location	Description	Reference	Application date
9	105m SE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
10	114m SE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
11	136m N	Selective Fell/Thin (Unconditional)	018/366/15-16	-
12	139m NW	Selective Fell/Thin (Unconditional)	018/366/15-16	-
13	146m NW	Selective Fell/Thin (Unconditional)	018/366/15-16	-
15	148m N	Selective Fell/Thin (Unconditional)	018/366/15-16	-
16	149m SE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
18	235m SE	Selective Fell/Thin (Unconditional)	018/366/15-16	-

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	2

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 69**

ID	Location	Main Habitat	Other habitats
1	145m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	157m 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	0

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

This data is sourced from Natural England.

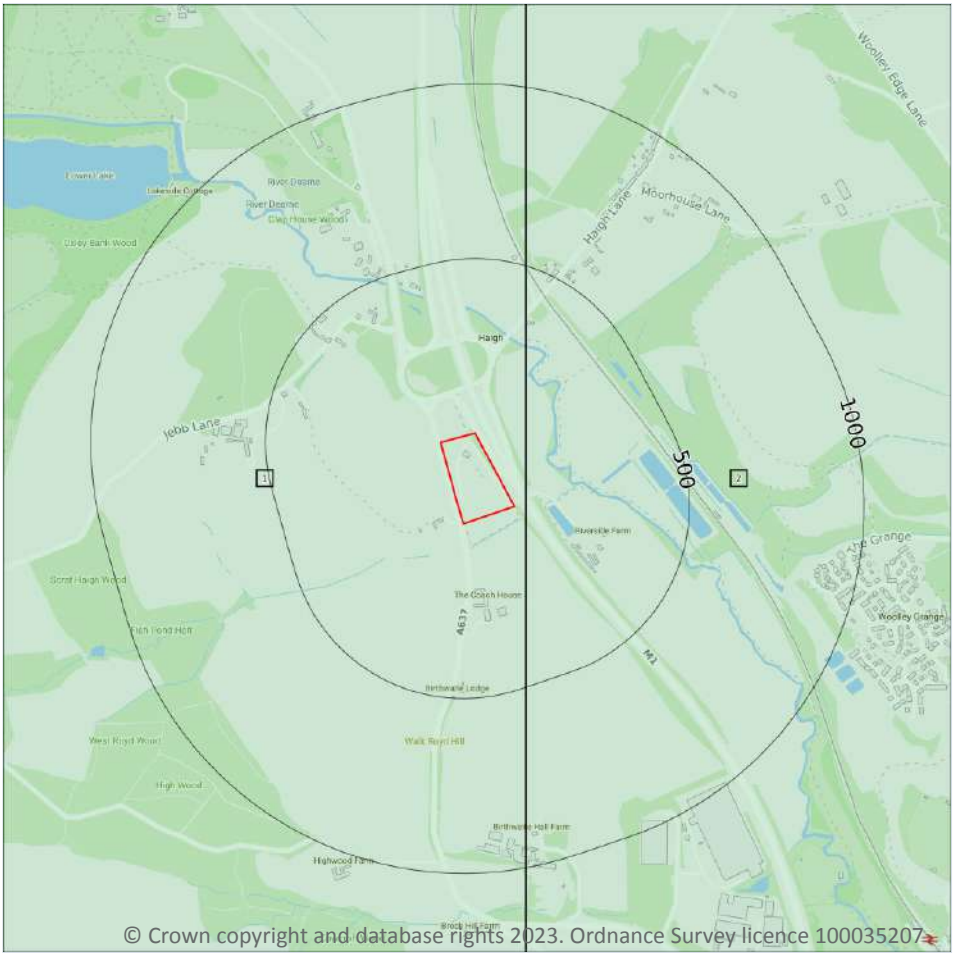
13.4 Limestone Pavement Orders

Records within 250m	0

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



14.1 10k Availability

Records within 500m **2**

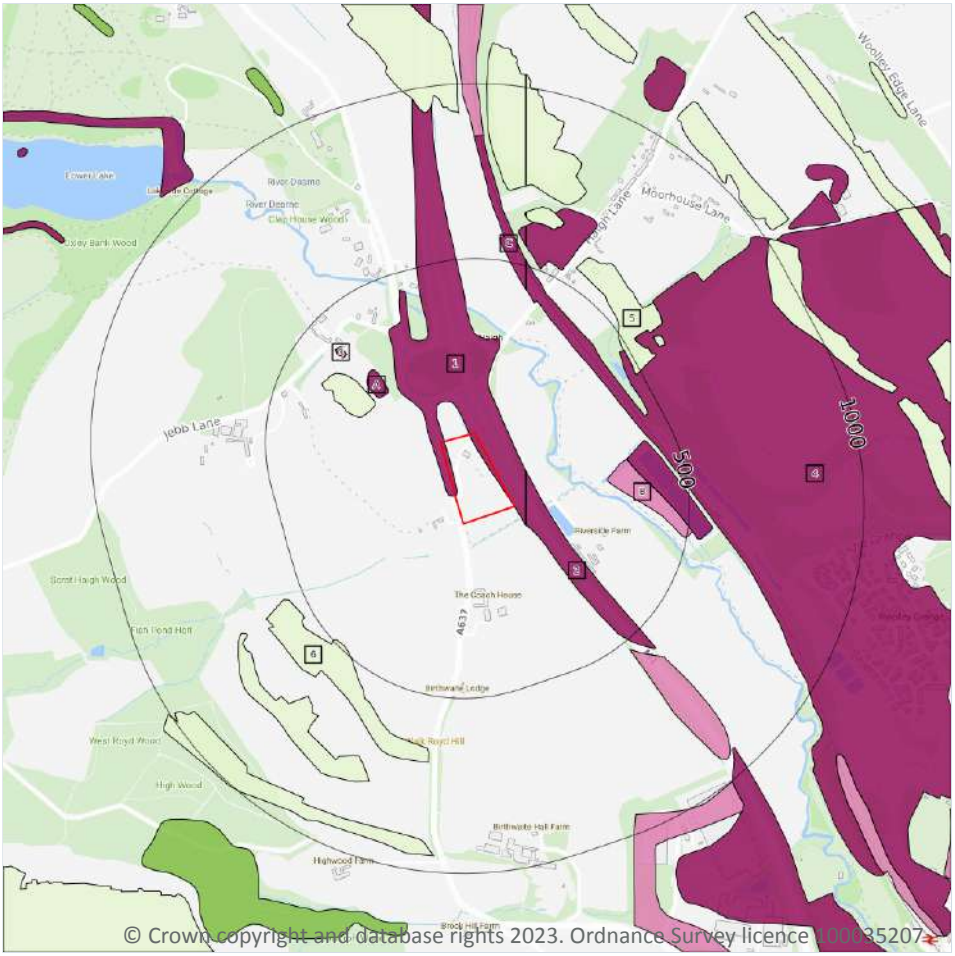
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 71**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SE21SE**
2	33m SE	Full	Full	Full	No coverage	SE31SW

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	11

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.

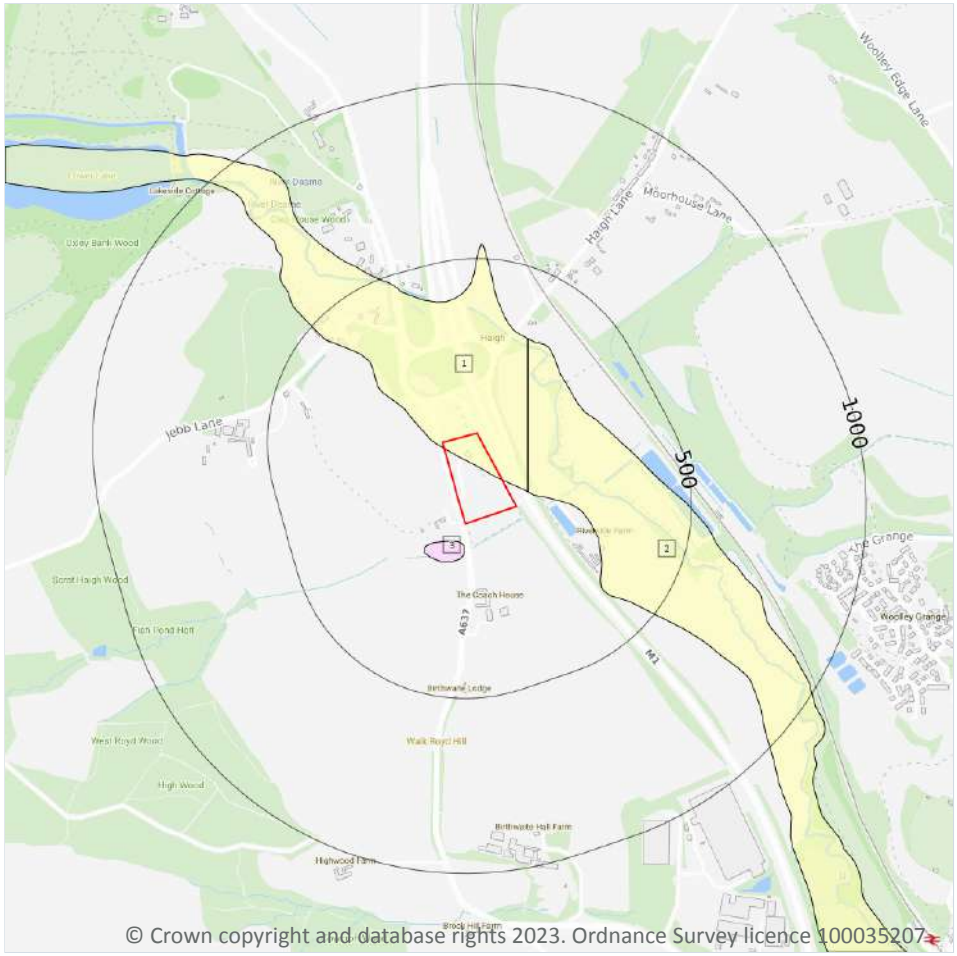
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 72**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**Made Ground (Undivided)**	**Artificial Deposit**
2	33m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	207m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	215m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit

ID	Location	LEX Code	Description	Rock description
B	275m E	WGR-VOID	Worked Ground (Undivided)	Void
B	350m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	367m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	373m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
C	436m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
5	484m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
6	488m SW	WMGR-ARTDP	Infilled Ground	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 **3**

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 74**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZ**	**Alluvium - Clay And Silt**	**Clay And Silt**
2	49m E	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
3	55m S	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

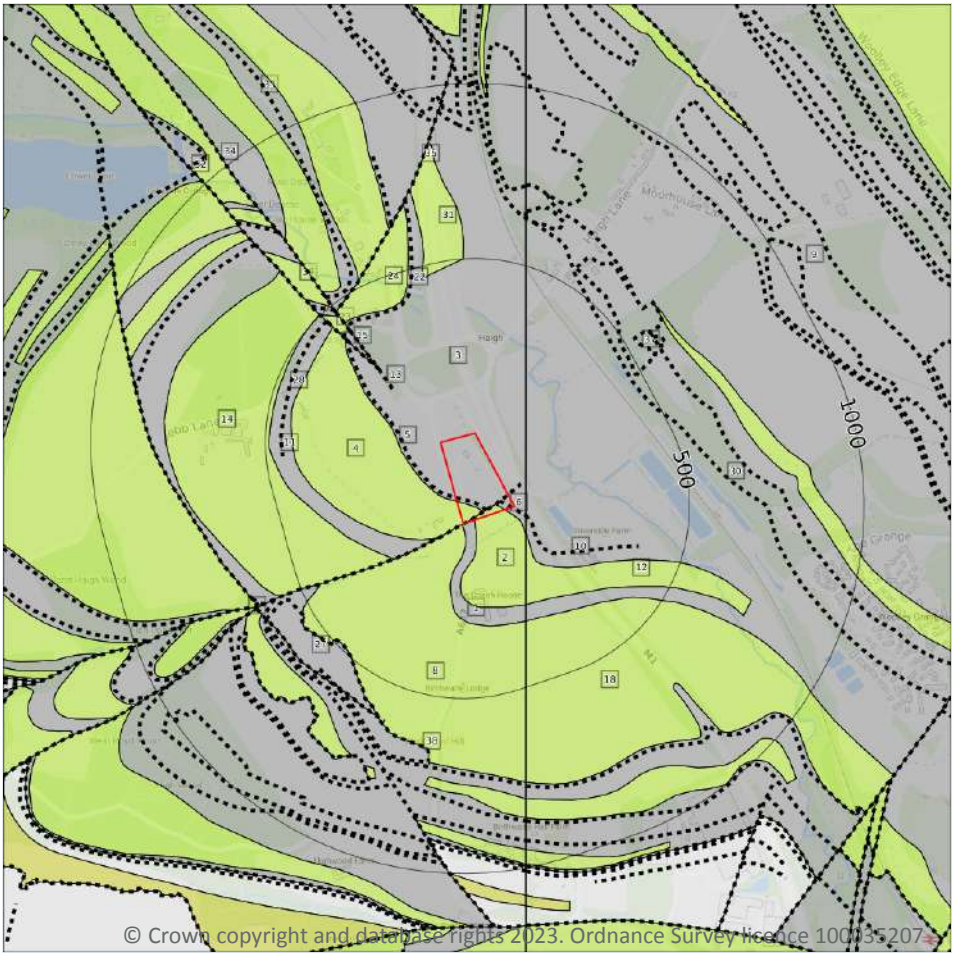
14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m **18**

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 76**

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
2	On site	HRR-SDST	Horbury Rock - Sandstone	Duckmantian Sub-age
3	On site	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age

ID	Location	LEX Code	Description	Rock age
4	**On site**	**HRR-SDST**	**Horbury Rock - Sandstone**	**Duckmantian Sub-age**
8	4m S	HMR-SDST	Haigh Moor Rock - Sandstone	Duckmantian Sub-age
9	33m SE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
11	82m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
12	84m SE	HRR-SDST	Horbury Rock - Sandstone	Duckmantian Sub-age
14	222m SW	HMR-SDST	Haigh Moor Rock - Sandstone	Duckmantian Sub-age
15	274m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
18	322m S	HMR-SDST	Haigh Moor Rock - Sandstone	Duckmantian Sub-age
23	409m NW	HRR-SDST	Horbury Rock - Sandstone	Duckmantian Sub-age
24	410m NW	HRR-SDST	Horbury Rock - Sandstone	Duckmantian Sub-age
27	442m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
29	463m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
31	466m N	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
33	478m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
39	495m NW	HMR-SDST	Haigh Moor Rock - Sandstone	Duckmantian Sub-age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	**21**

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.

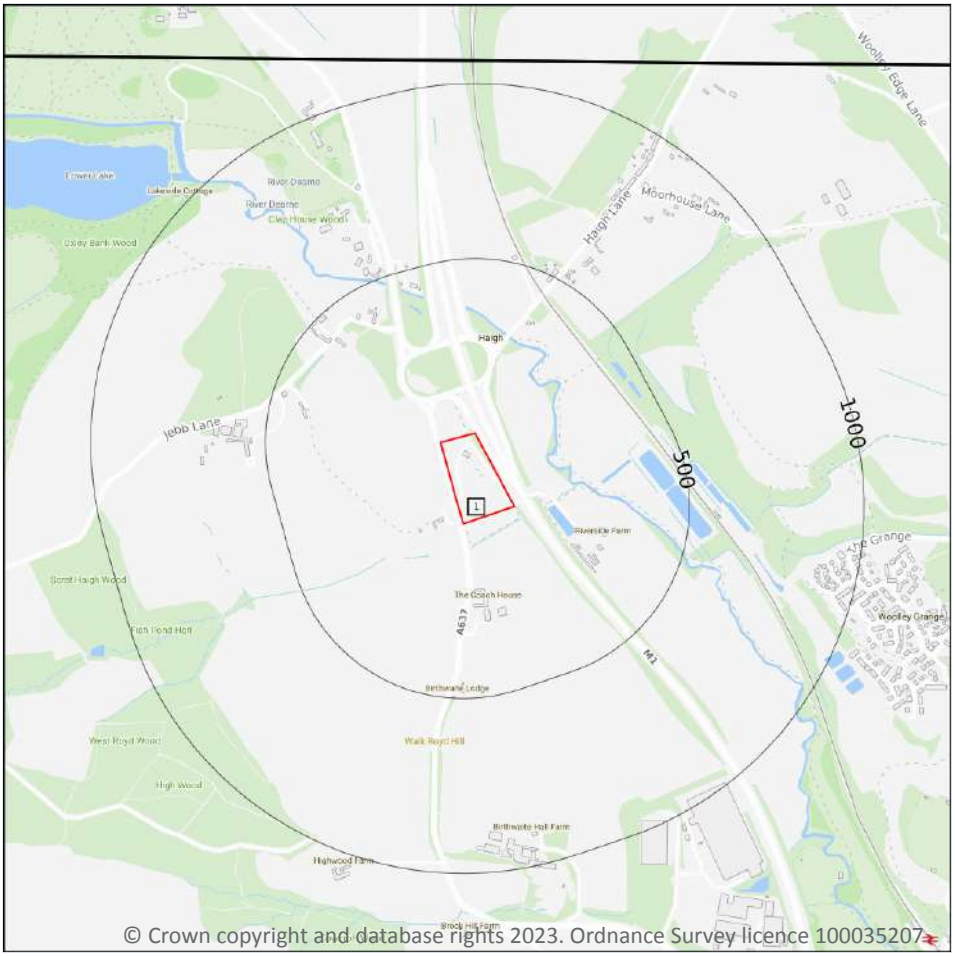
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 76**

ID	Location	Category	Description
5	**On site**	**ROCK**	**Coal seam, inferred**

ID	Location	Category	Description
6	**On site**	**ROCK**	**Coal seam, inferred**
7	**On site**	**FAULT**	**Normal fault, inferred**
10	41m SE	ROCK	Coal seam, inferred
13	195m NW	FAULT	Normal fault, inferred
16	274m NW	FAULT	Normal fault, inferred
17	274m NW	FAULT	Normal fault, inferred
19	393m NW	FAULT	Normal fault, inferred
20	399m NW	ROCK	Coal seam, inferred
21	403m NW	FAULT	Normal fault, inferred
22	404m NW	ROCK	Coal seam, inferred
25	413m NW	FAULT	Normal fault, inferred
26	424m NW	FAULT	Normal fault, inferred
28	452m W	ROCK	Coal seam, inferred
30	465m NE	ROCK	Coal seam, inferred
32	467m NW	FAULT	Normal fault, inferred
34	478m NW	FAULT	Normal fault, inferred
35	478m NW	FAULT	Normal fault, inferred
36	484m NW	ROCK	Coal seam, inferred
37	484m NE	ROCK	Coal seam, observed
38	488m SW	ROCK	Coal seam, observed

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

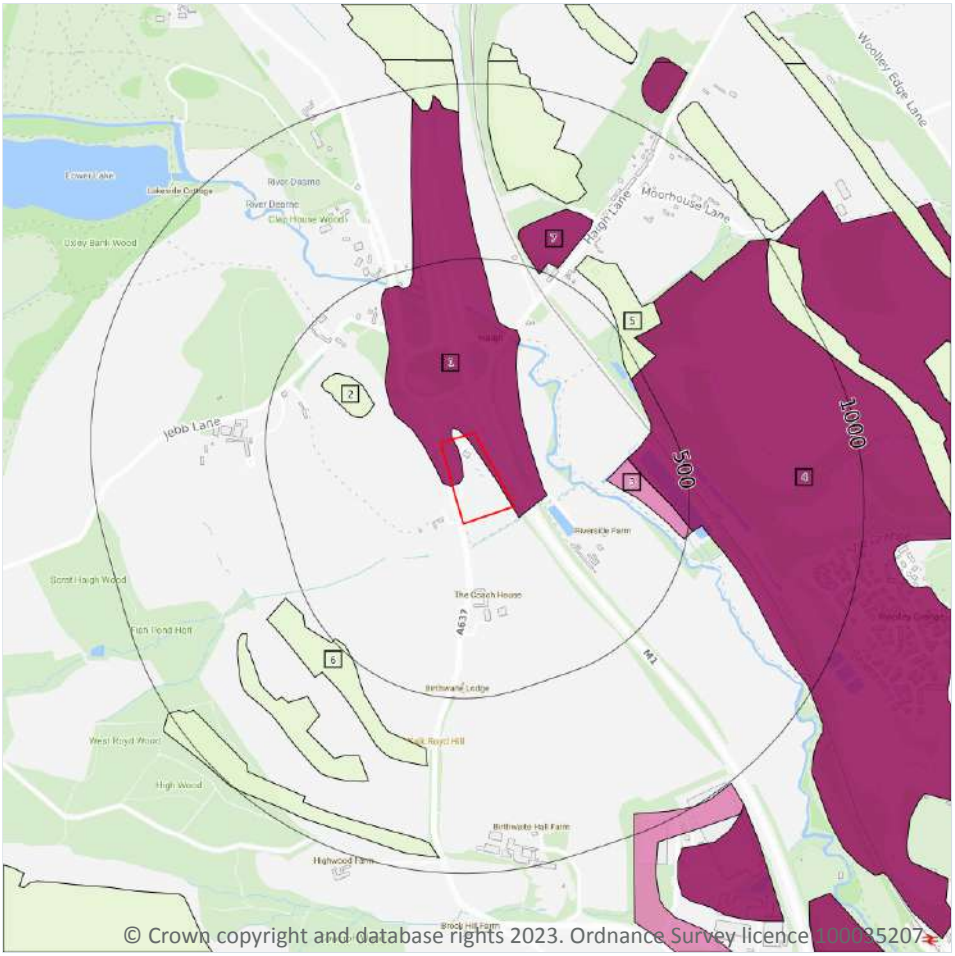
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 79**

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 **7**

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 80**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**MADE GROUND (UNDIVIDED)**	**ARTIFICIAL DEPOSIT**
2	219m NW	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	274m E	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
4	351m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

ID	Location	LEX Code	Description	Rock description
5	466m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
6	485m SW	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
7	490m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

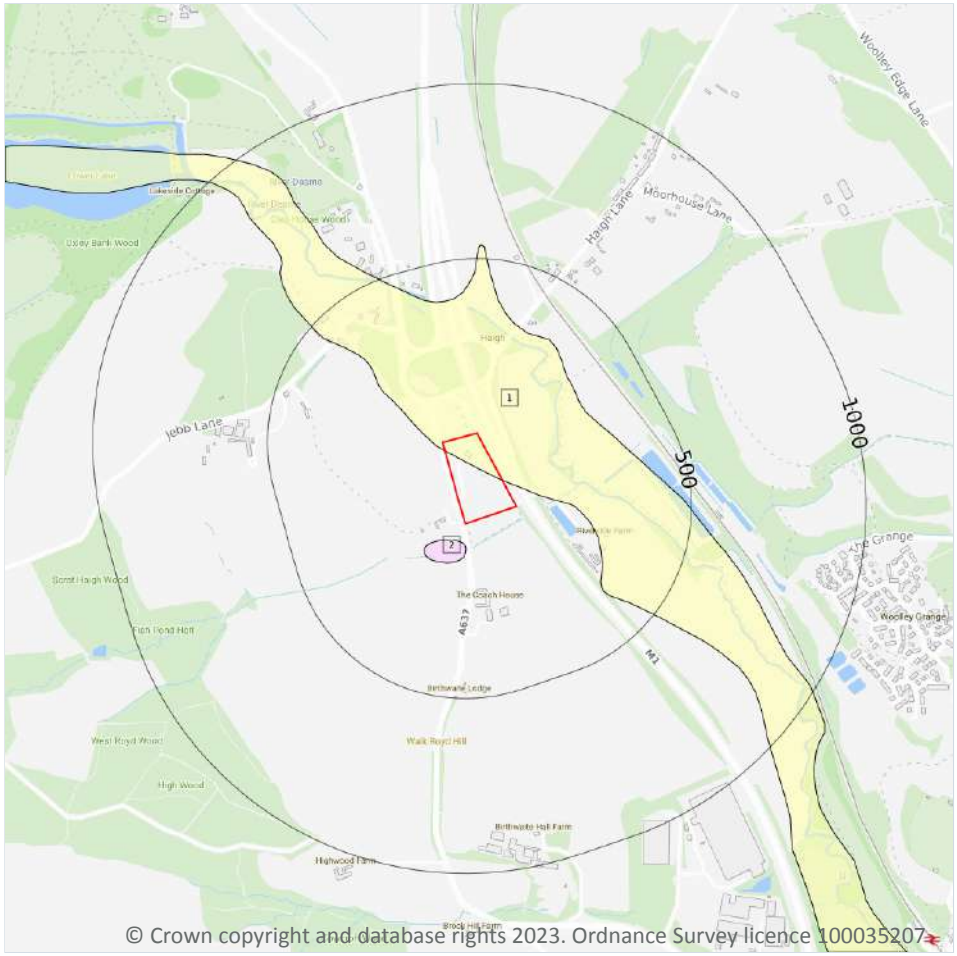
Records within 50m	**2**

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Very High**	**Low**
33m SE	Mixed	Very High	Low

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m **2**

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 82**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
2	54m S	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**High**	**Very Low**

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

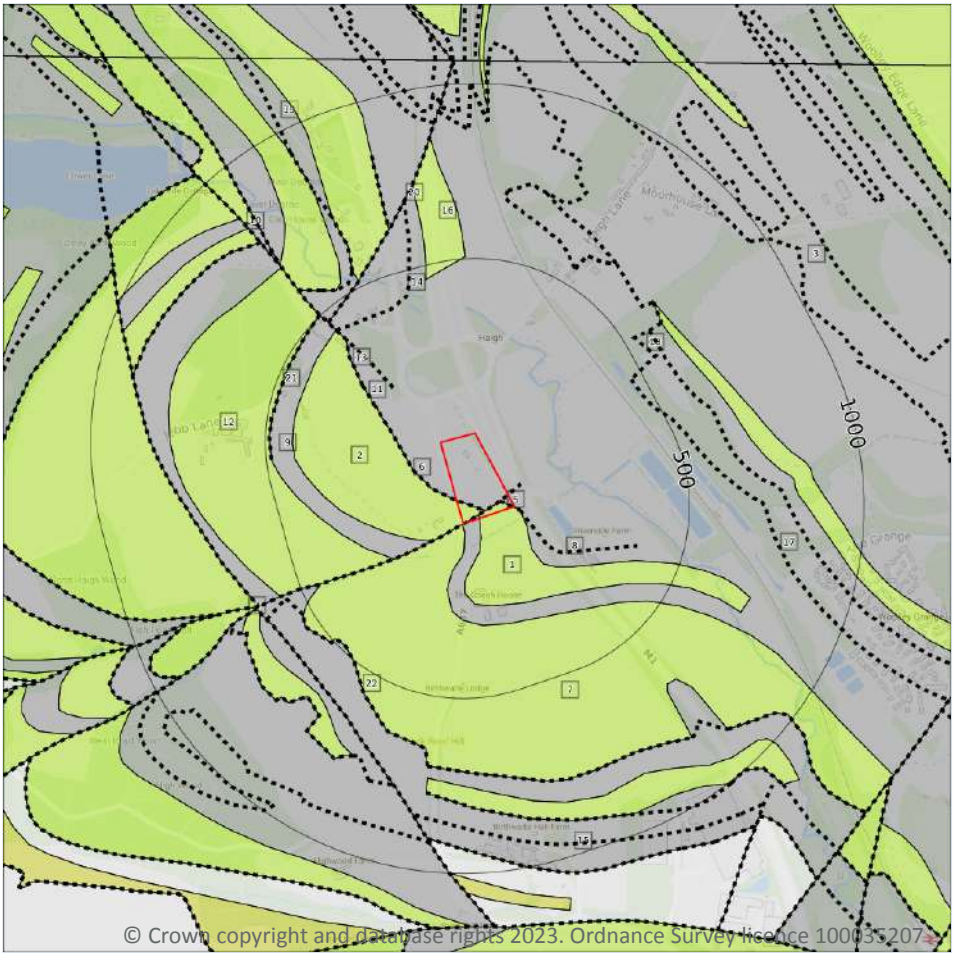
15.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m **9**

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 84**

ID	Location	LEX Code	Description	Rock age
1	On site	HRR-SDST	HORBURY ROCK - SANDSTONE	WESTPHALIAN
2	On site	HRR-SDST	HORBURY ROCK - SANDSTONE	WESTPHALIAN
3	On site	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

ID	Location	LEX Code	Description	Rock age
7	4m S	HMR-SDST	HAIGH MOOR ROCK - SANDSTONE	WESTPHALIAN
9	107m SW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
12	222m SW	HMR-SDST	HAIGH MOOR ROCK - SANDSTONE	WESTPHALIAN
15	442m SW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
16	461m N	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
19	469m NW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**5**

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**
On site	**Fracture**	**Moderate**	**Low**
On site	**Fracture**	**High**	**Moderate**
4m S	Fracture	High	Moderate
33m SE	Fracture	Moderate	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**13**

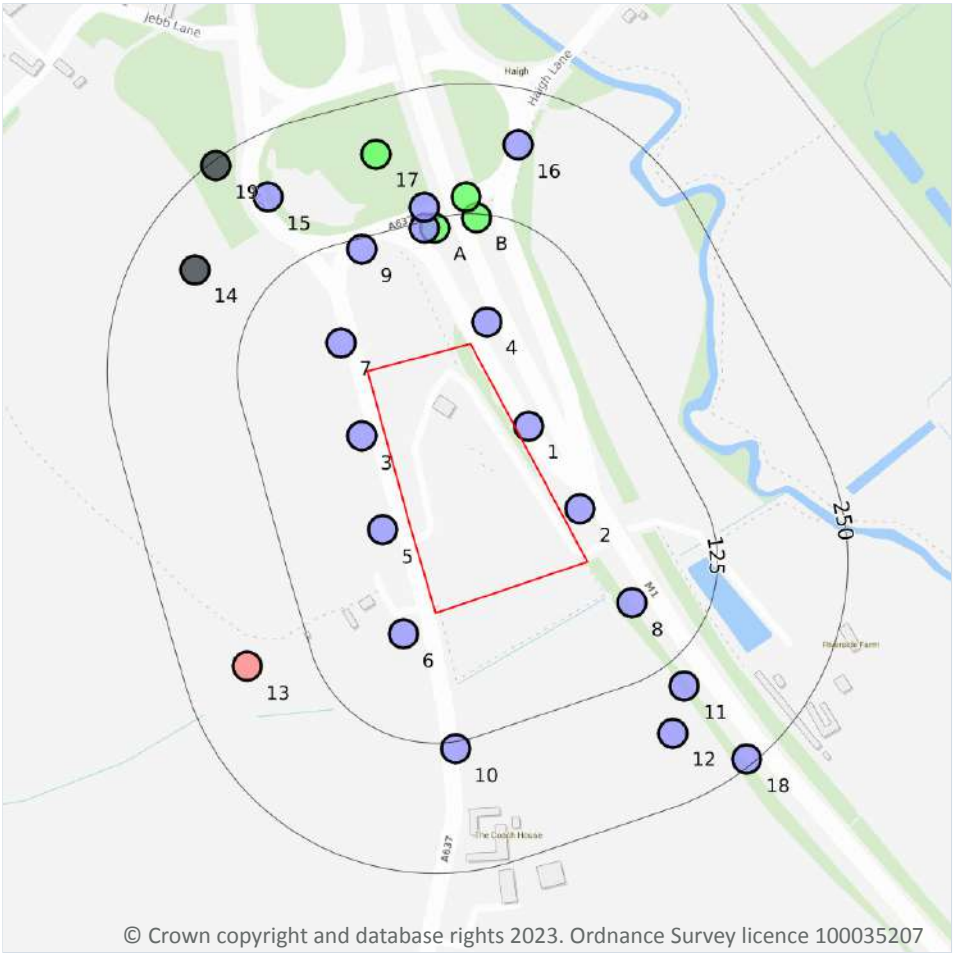
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 84**

ID	Location	Category	Description
4	**On site**	**FAULT**	**Fault, inferred**
5	**On site**	**ROCK**	**Coal seam, inferred**
6	**On site**	**ROCK**	**Coal seam, inferred**
8	19m SE	ROCK	Coal seam, inferred
10	197m NW	FAULT	Fault, inferred
11	219m NW	ROCK	Coal seam, inferred
13	276m NW	ROCK	Coal seam, inferred
14	406m NW	FAULT	Fault, inferred, displacement unknown
17	466m NE	ROCK	Coal seam, inferred
18	466m NE	ROCK	Coal seam, inferred
20	469m NW	FAULT	Fault, inferred
21	482m NW	ROCK	Coal seam, inferred
22	485m 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 **24**

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.

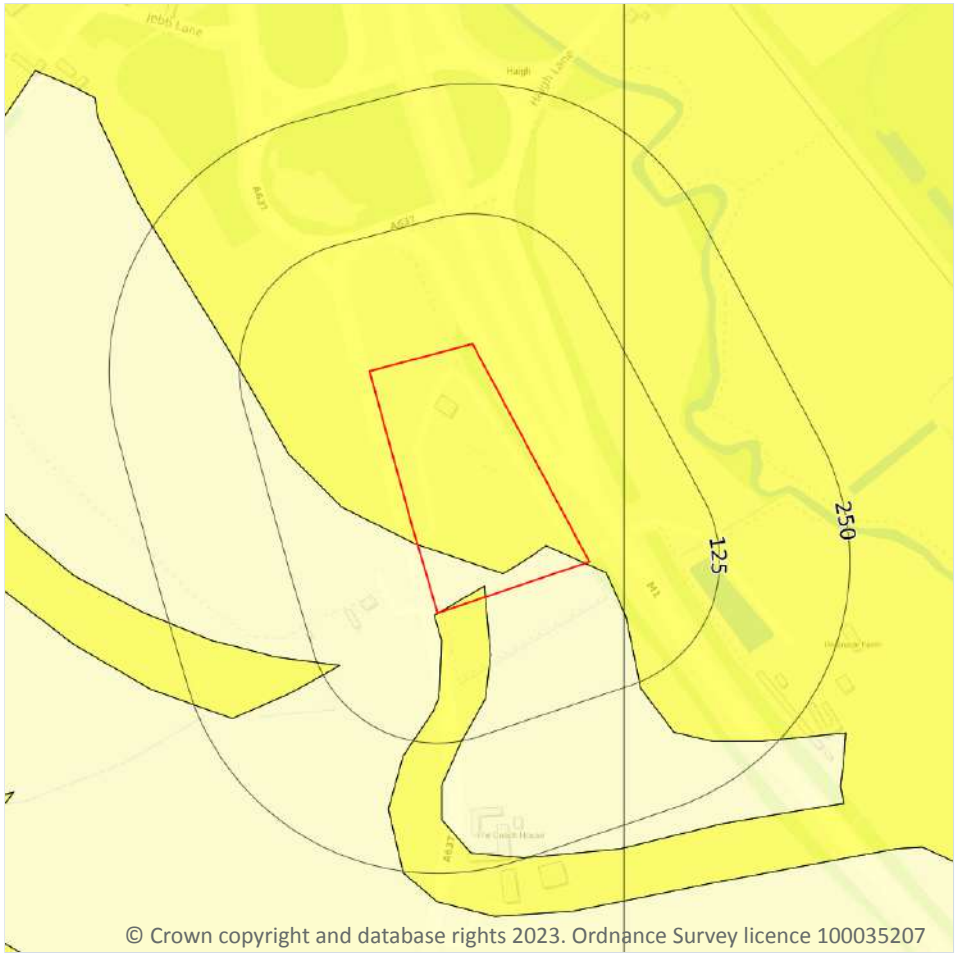
Features are displayed on the Boreholes map on **page 87**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	12m NE	429910 411630	M1 ASTON-LEEDS MOTORWAY R 292	7.0	N	57037
2	18m E	429960 411550	M1 ASTON-LEEDS MOTORWAY R 291	4.0	N	57036
3	22m NW	429750 411620	M1 ASTON-LEEDS MOTORWAY R 293F	3.0	N	57044

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	26m N	429870 411730	M1 ASTON-LEEDS MOTORWAY R 293	4.0	N	57038
5	27m SW	429770 411530	M1 ASTON-LEEDS MOTORWAY R 293G	2.0	N	57045
6	37m SW	429790 411430	M1 ASTON-LEEDS MOTORWAY R 293H	1.0	N	57046
7	38m NW	429730 411710	M1 ASTON-LEEDS MOTORWAY R 293E	3.0	N	57043
8	58m SE	430010 411460	ASTON- SHEFFIELD- LEEDS MOTORWAY BHR290	3.05	N	86124
9	115m NW	429750 411800	M1 ASTON-LEEDS MOTORWAY R 293B	3.0	N	57040
A	117m N	429820 411820	M1 MOTORWAY ASTON-SHEFFIELD P 12	13.0	N	57021
A	119m N	429810 411820	M1 MOTORWAY ASTON-SHEFFIELD B 212	10.0	N	57008
B	121m N	429860 411830	M1 MOTORWAY ASTON-SHEFFIELD B 214	15.0	N	57010
10	132m S	429840 411320	HAIGH INTERSECTION BH1	0.61	N	57005
A	138m N	429810 411840	M1 MOTORWAY ASTON-SHEFFIELD B 213	10.0	N	57009
B	141m N	429850 411850	M1 MOTORWAY ASTON-SHEFFIELD B 215	11.12	N	57011
11	152m SE	430060 411380	ASTON- SHEFFIELD- LEEDS MOTORWAY BHR289	2.59	N	86123
12	184m SE	430049 411335	M1 ASTON-LEEDS MOTORWAY R 287	4.0	N	86010
13	188m SW	429640 411399	PARK MILL COLLIERY HAIGH HALL FARM S.B.	145.67	N	56907
14	192m NW	429590 411780	HAIGH QUARRY, NO 3	-	Y	N/A
15	193m NW	429660 411850	M1 ASTON-LEEDS MOTORWAY R 293C	3.0	N	57041
16	197m N	429900 411900	M1 ASTON-LEEDS MOTORWAY R 293A	5.94	N	57039
17	200m N	429764 411891	SOUTH YORKSHIRE COA NMCS2 UPGRADE M32	14.0	N	18913533
18	244m SE	430120 411310	ASTON- SHEFFIELD- LEEDS MOTORWAY BHR288	3.05	N	86122
19	246m NW	429610 411880	HAIGH QUARRY, NO 2	-	Y	N/A

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	3

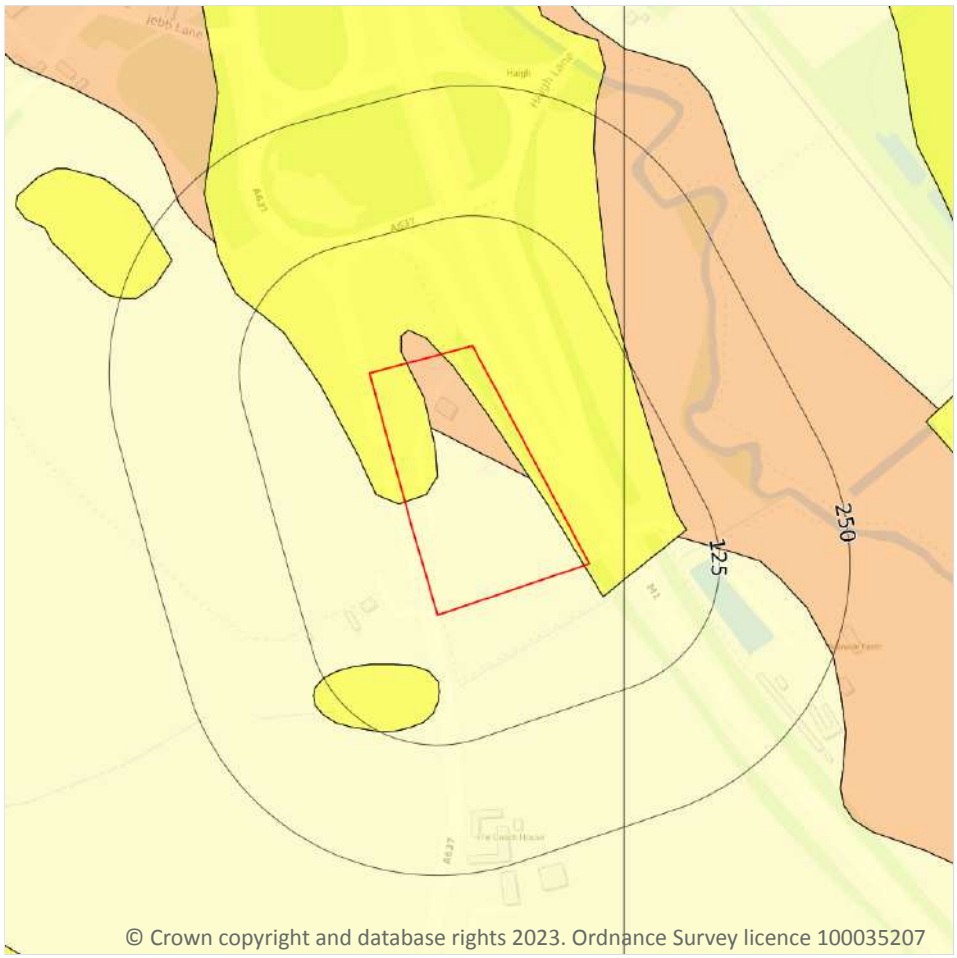
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 89**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Very low**	**Ground conditions predominantly low plasticity.**
33m SE	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	5

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

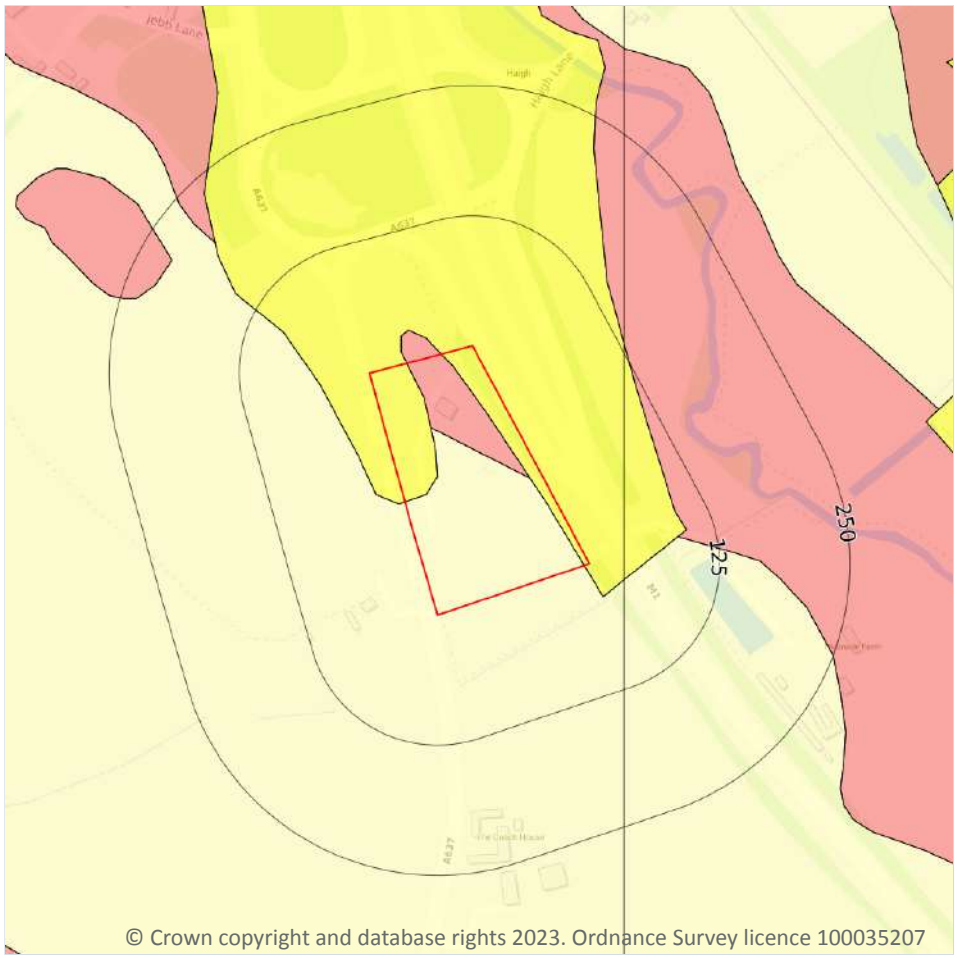
Features are displayed on the Natural ground subsidence - Running sands map on **page 91**

Location	Hazard rating	Details
On site	**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.**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**
33m SE	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
37m SE	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



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	5

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

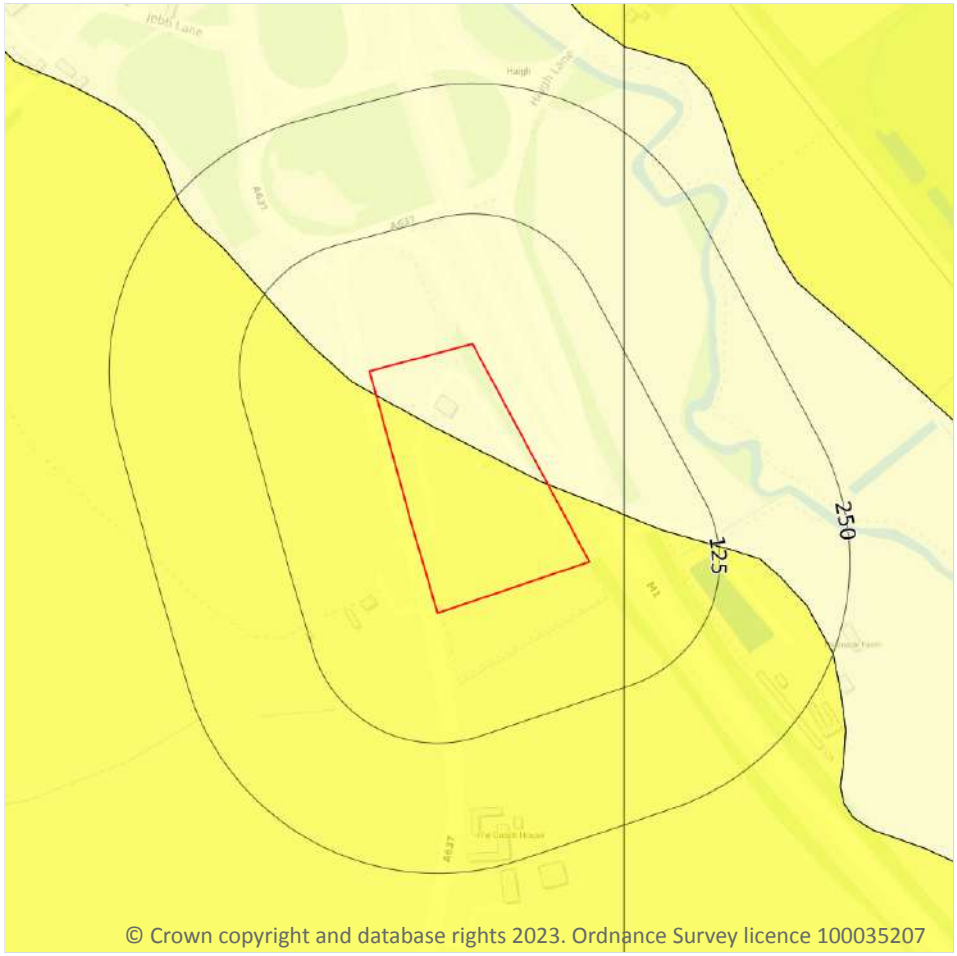
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 93**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Very low**	**Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.**

Location	Hazard rating	Details
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**
33m SE	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.
37m SE	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	3

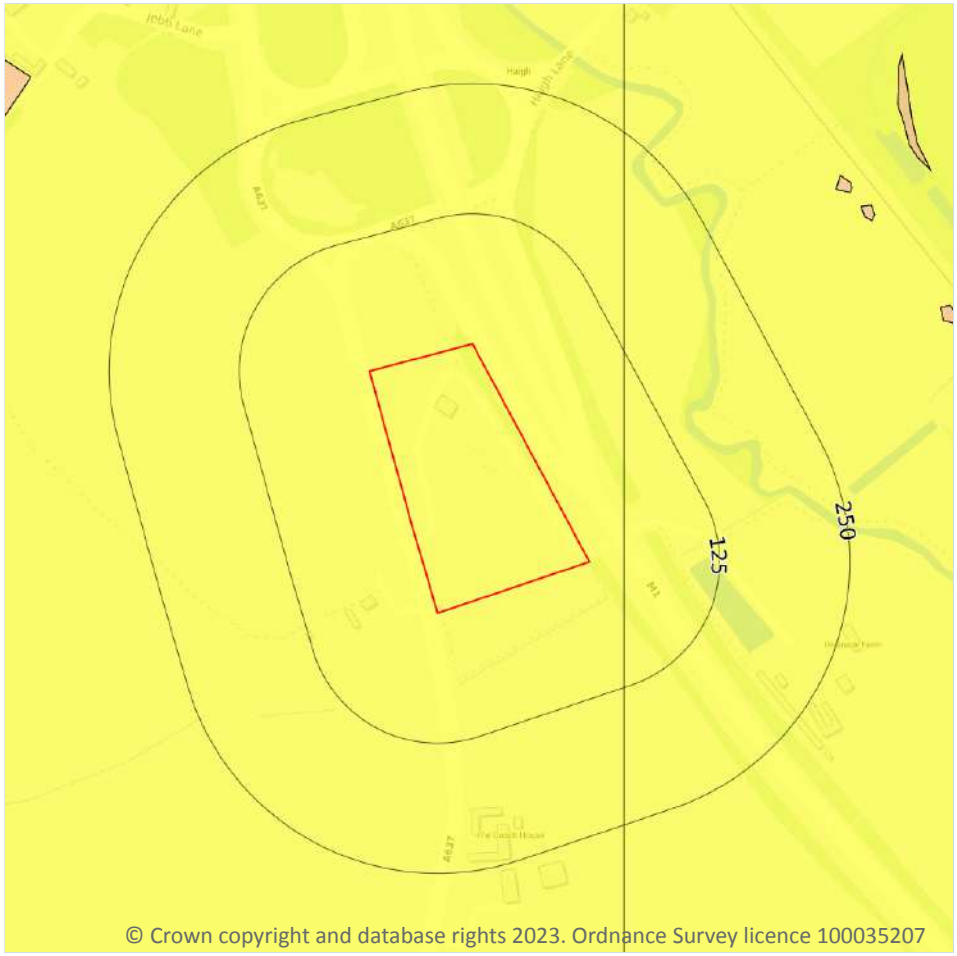
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 95**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**
33m SE	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	2

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

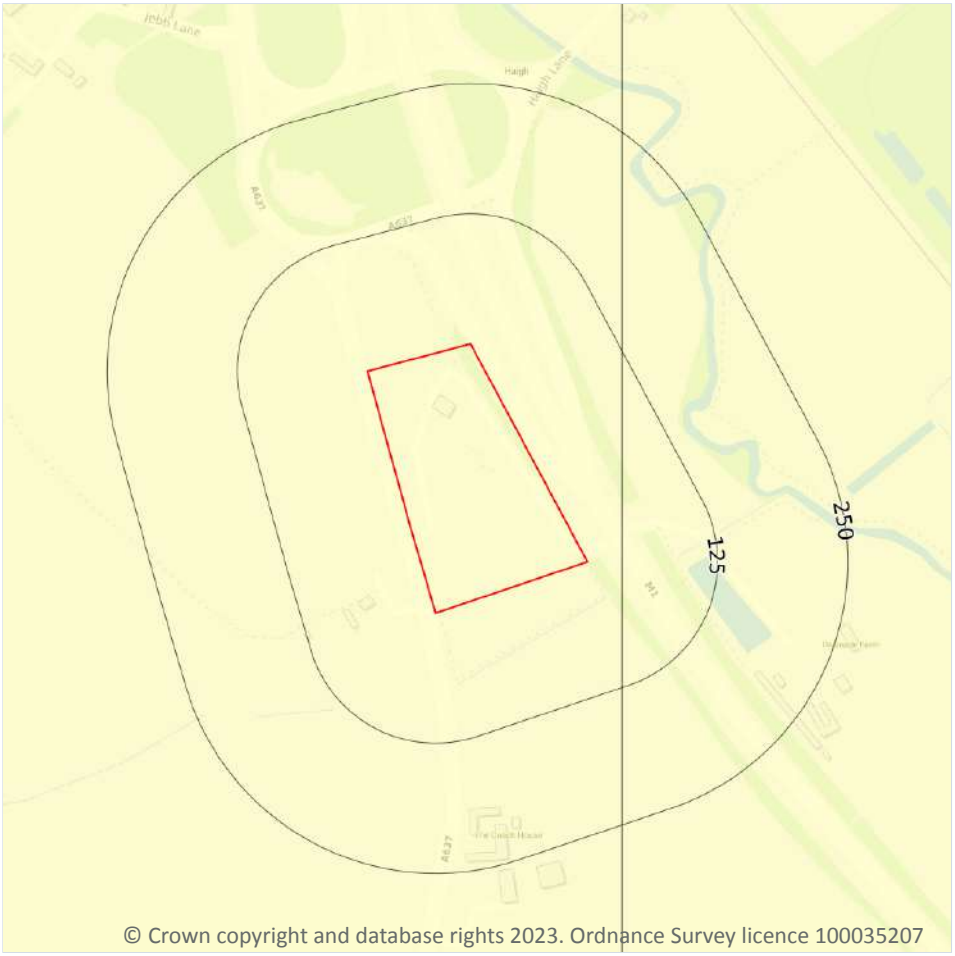
Features are displayed on the Natural ground subsidence - Landslides map on **page 97**

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
33m SE	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	2

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

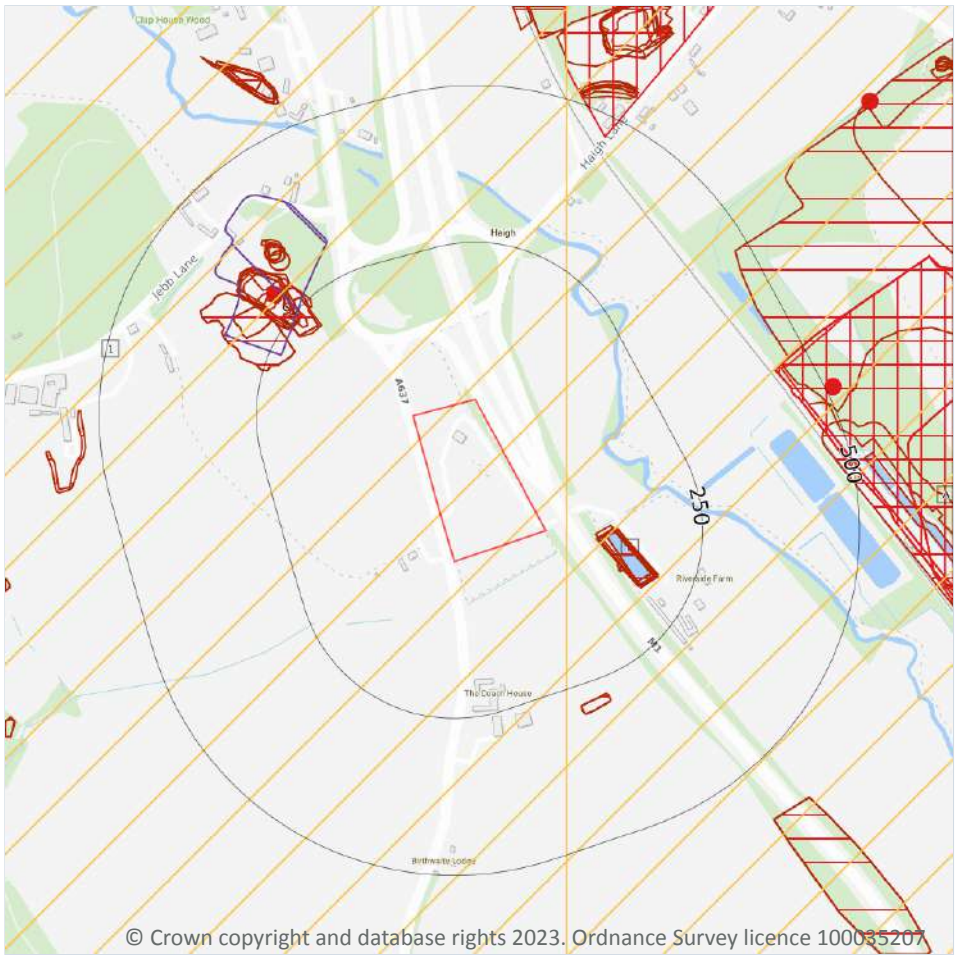
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 99**

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

Location	Hazard rating	Details
33m SE	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, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

Natural cavities (Area)

Natural cavities (Point)

BritPits

Surface ground workings

Underground workings

Historical Mineral Planning Areas

Mining Cavities

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 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.

18.2 BritPits

Records within 500m	1

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, ground workings and natural cavities map on **page 101**

ID	Location	Details	Description
C	292m NW	Name: Haigh Lane Quarry Address: Haigh, Darton, BARNSLEY, South Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	19

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, ground workings and natural cavities map on **page 101**

ID	Location	Land Use	Year of mapping	Mapping scale
B	79m SE	Disused Reservoir	1951	1:10560
B	82m SE	Reservoir	1930	1:10560
B	82m SE	Reservoir	1938	1:10560
B	84m SE	Reservoir	1948	1:10560
B	84m SE	Reservoir	1904	1:10560
B	84m SE	Reservoir	1891	1:10560
B	90m SE	Pond	1965	1:10560
B	98m E	Pond	1990	1:10000
B	98m E	Pond	1978	1:10000
C	205m NW	Pond	1966	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
C	209m NW	Pond	1981	1:10000
C	209m NW	Pond	1988	1:10000
C	215m NW	Refuse Heap	1981	1:10000
C	215m NW	Refuse Heap	1988	1:10000
C	236m NW	Unspecified Quarry	1930	1:10560
C	238m NW	Unspecified Disused Quarry	1966	1:10560
C	238m NW	Unspecified Quarry	1948	1:10560
C	238m NW	Unspecified Quarry	1938	1:10560
C	238m NW	Unspecified Quarry	1951	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	**10**

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, ground workings and natural cavities map on **page 101**

ID	Location	Land Use	Year of mapping	Mapping scale
2	443m E	Colliery	1978	1:10000
3	453m E	Unspecified Mine	1965	1:10560
6	467m N	Unspecified Mine	1965	1:10560
J	584m E	Colliery	1951	1:10560
-	742m E	Colliery	1904	1:10560
-	742m E	Colliery	1891	1:10560
O	773m NE	Unspecified Old Shaft	1904	1:10560
-	941m NE	Unspecified Old Shaft	1904	1:10560
-	949m NE	Unspecified Old Shaft	1948	1:10560
-	951m NE	Unspecified Old Shaft	1951	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	**1**

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 101**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
C	232m NW	Haigh Lane	Sandstone	Surface mineral working	Valid	19/2/47

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	**3**

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, ground workings and natural cavities map on **page 101**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Not available**	**Iron Ore (Bedded)**	**B**	**Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered**
A	33m SE	Not available	Iron Ore (Bedded)	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
-	840m SW	Sheffield Area	Vein Mineral/Iron ore	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 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.

18.8 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.

18.9 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.

18.10 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.

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

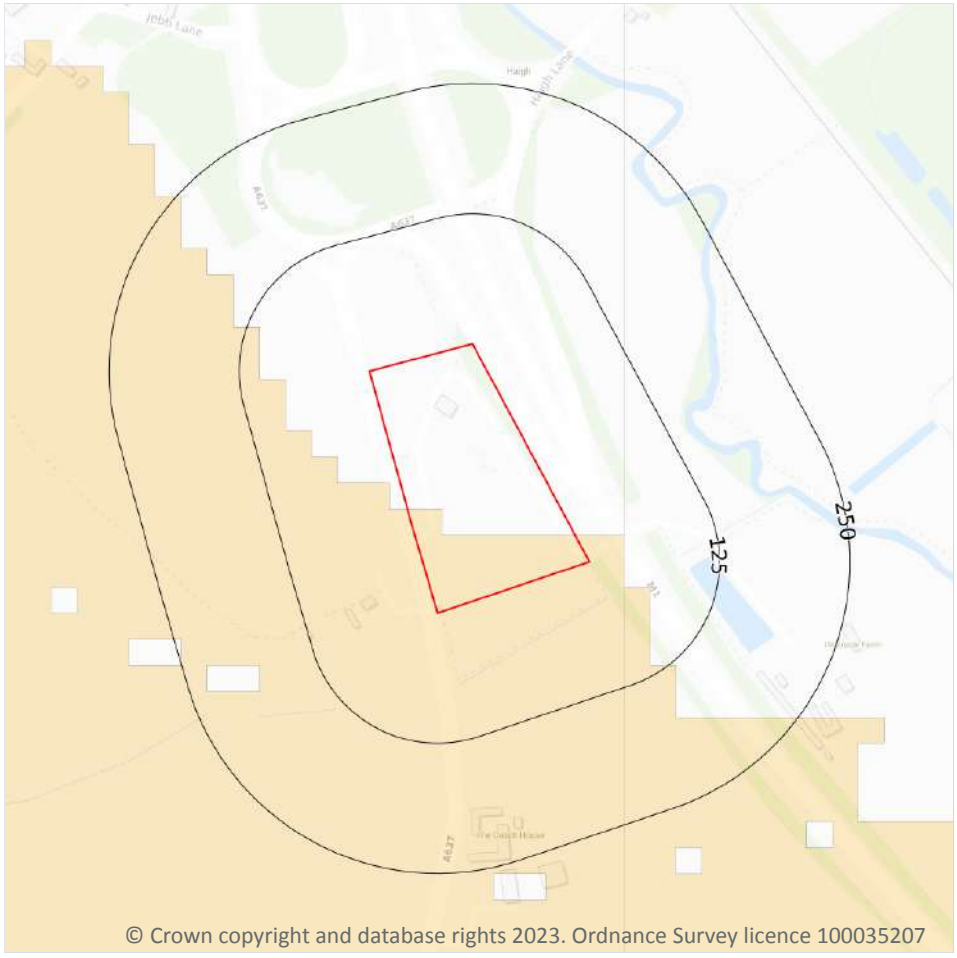
18.13 Clay mining

Records on site	0

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

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

19 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

19.1 Radon

Records on site	2

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 107**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 3% and 5%**	**Basic**

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

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

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m **6**

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
33m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
33m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m **0**

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

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects

21.1 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.

21.2 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.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 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.

21.5 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.

21.6 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.

21.7 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.

21.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

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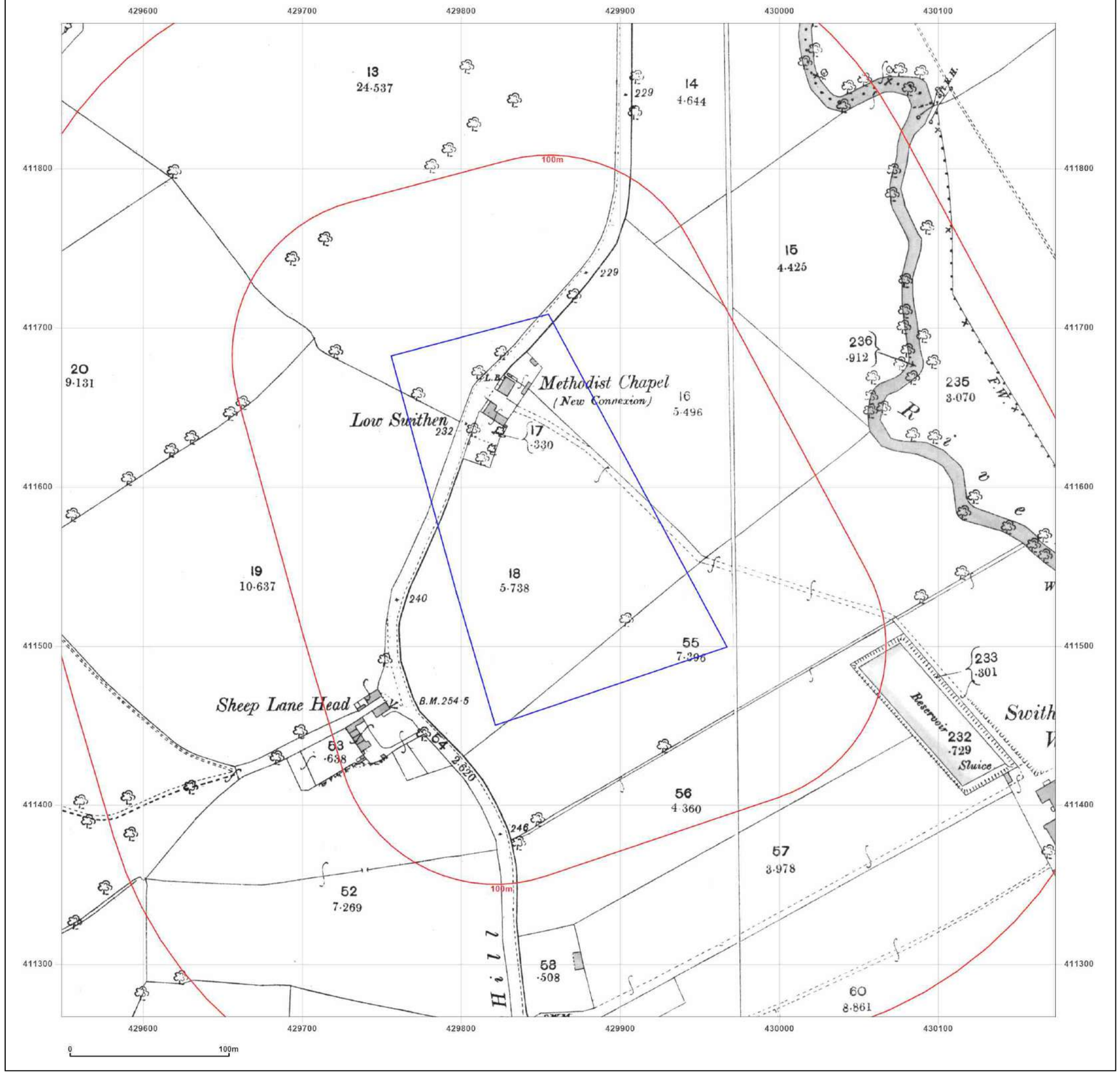

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Site Details:

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Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

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

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

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Revised 1893
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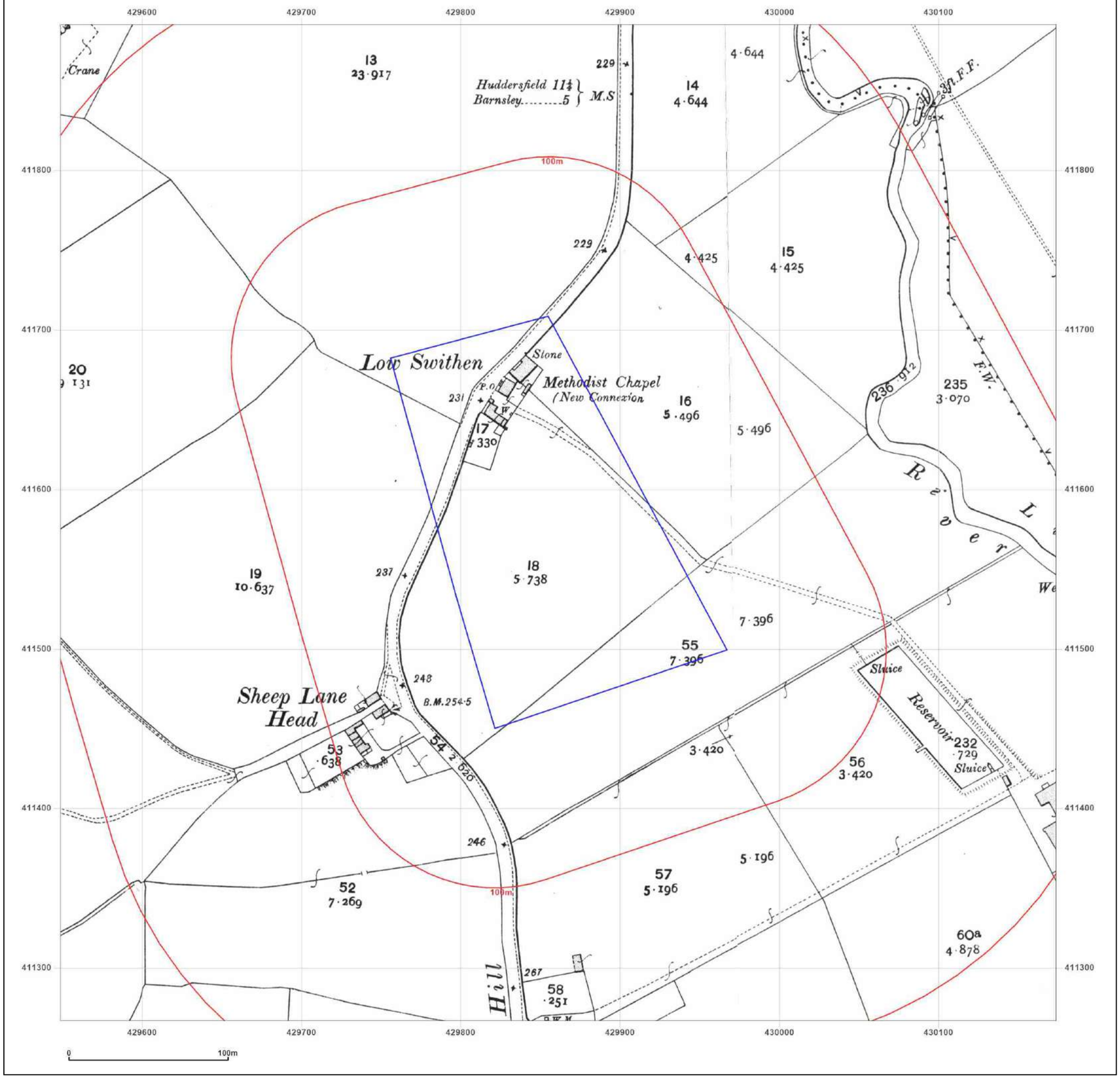

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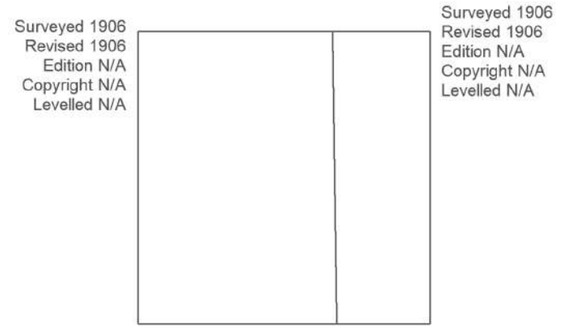

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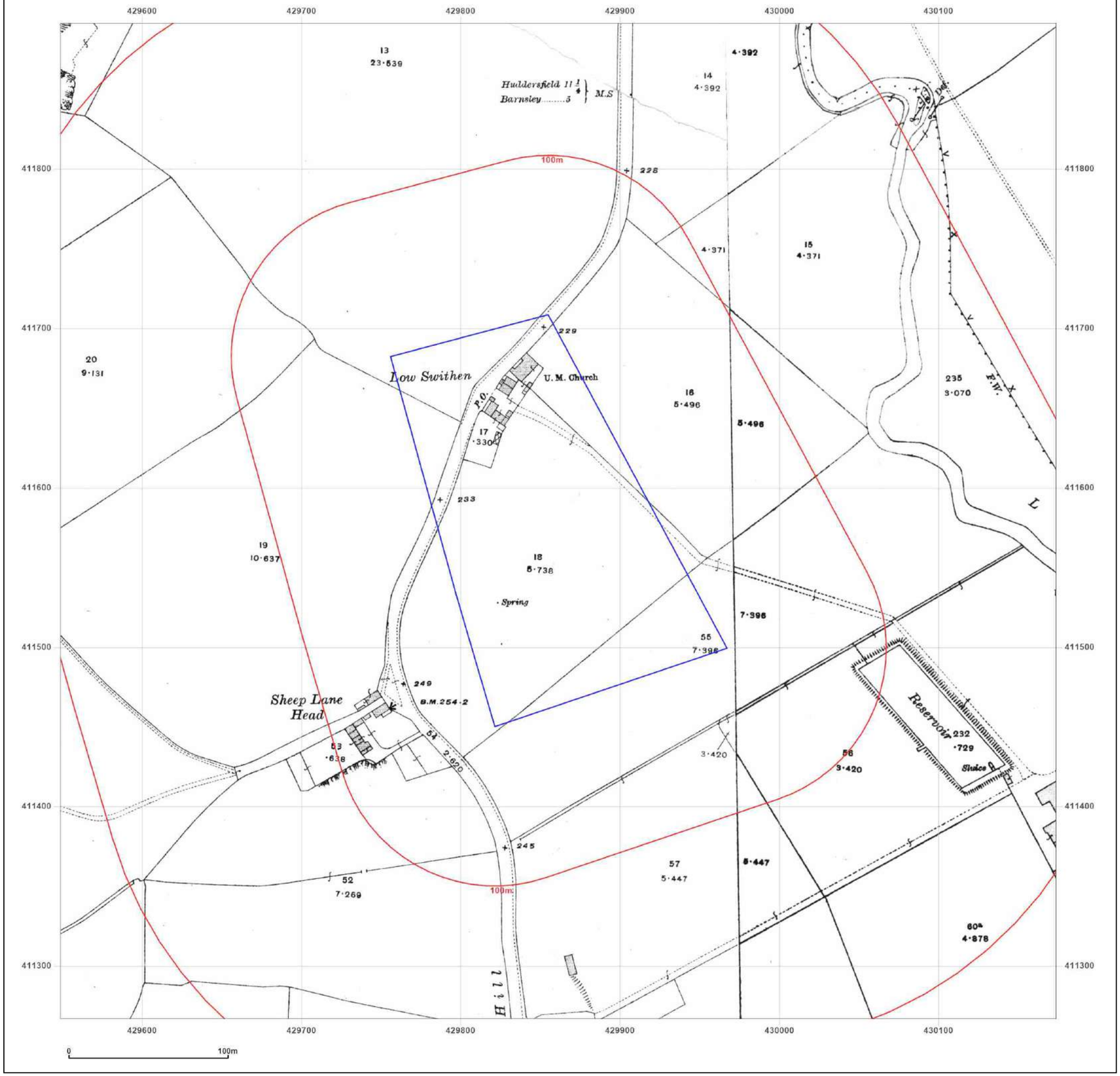

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Map Name: County Series

Map date: **1913**

Scale: 1:2,500

Printed at: 1:2,500

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Edition N/A
Copyright N/A
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Revised 1913
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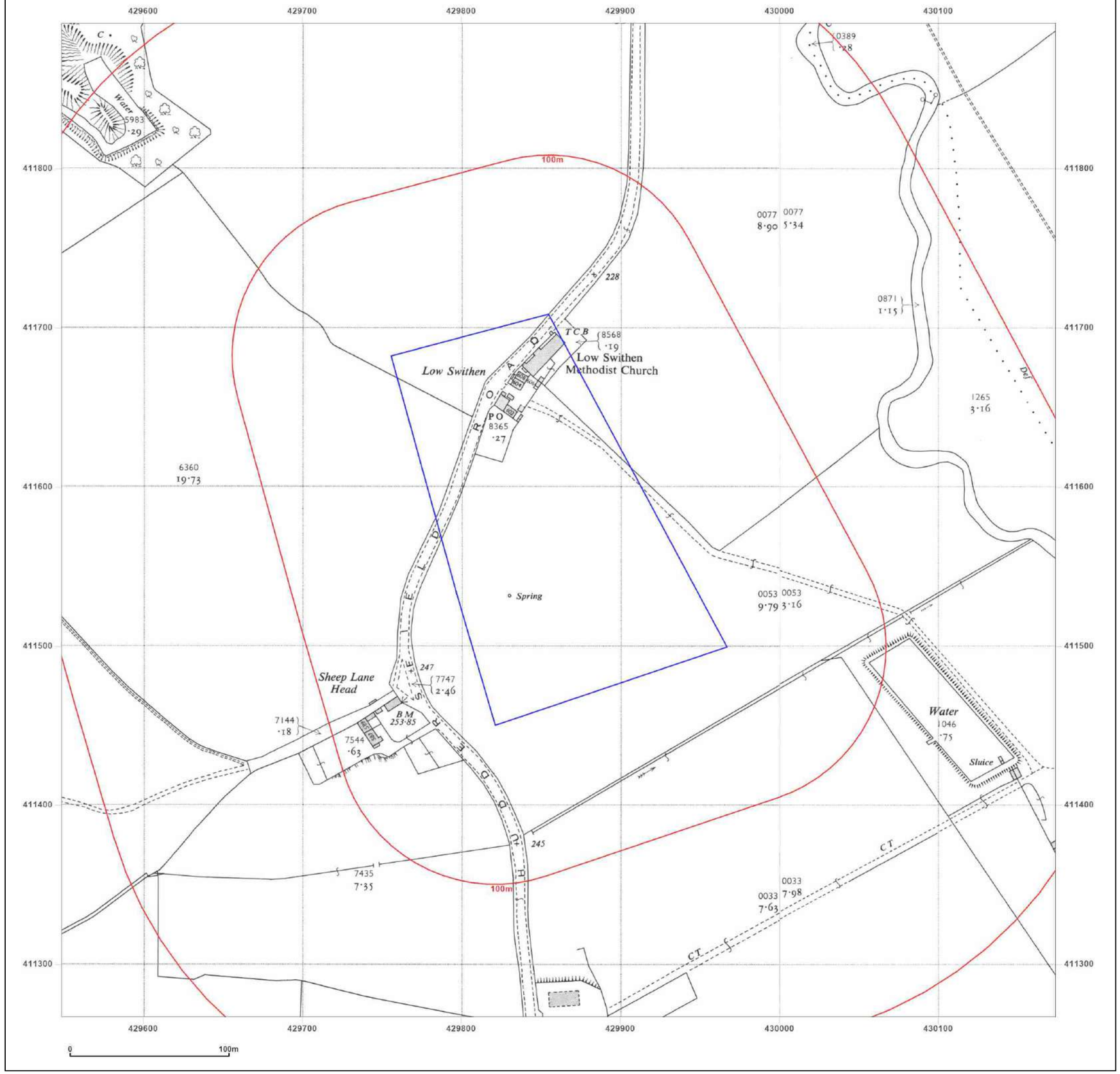

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Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **1960-1961**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1959	Surveyed 1960
Revised 1959	Revised 1960
Edition N/A	Edition N/A
Copyright 1960	Copyright 1961
Levelled 1930	Levelled 1958

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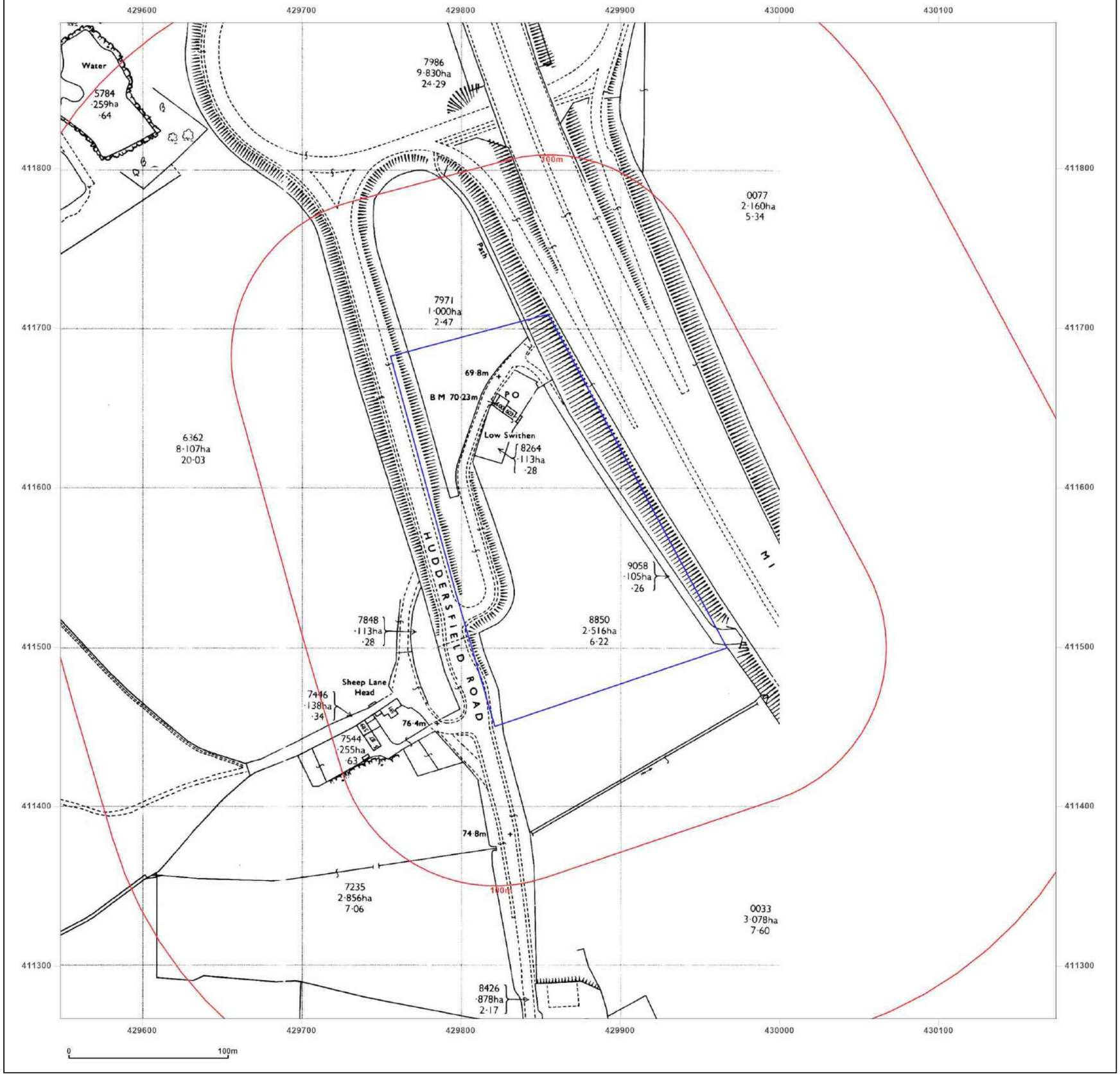

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Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **1972**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed N/A
Revised N/A
Edition N/A
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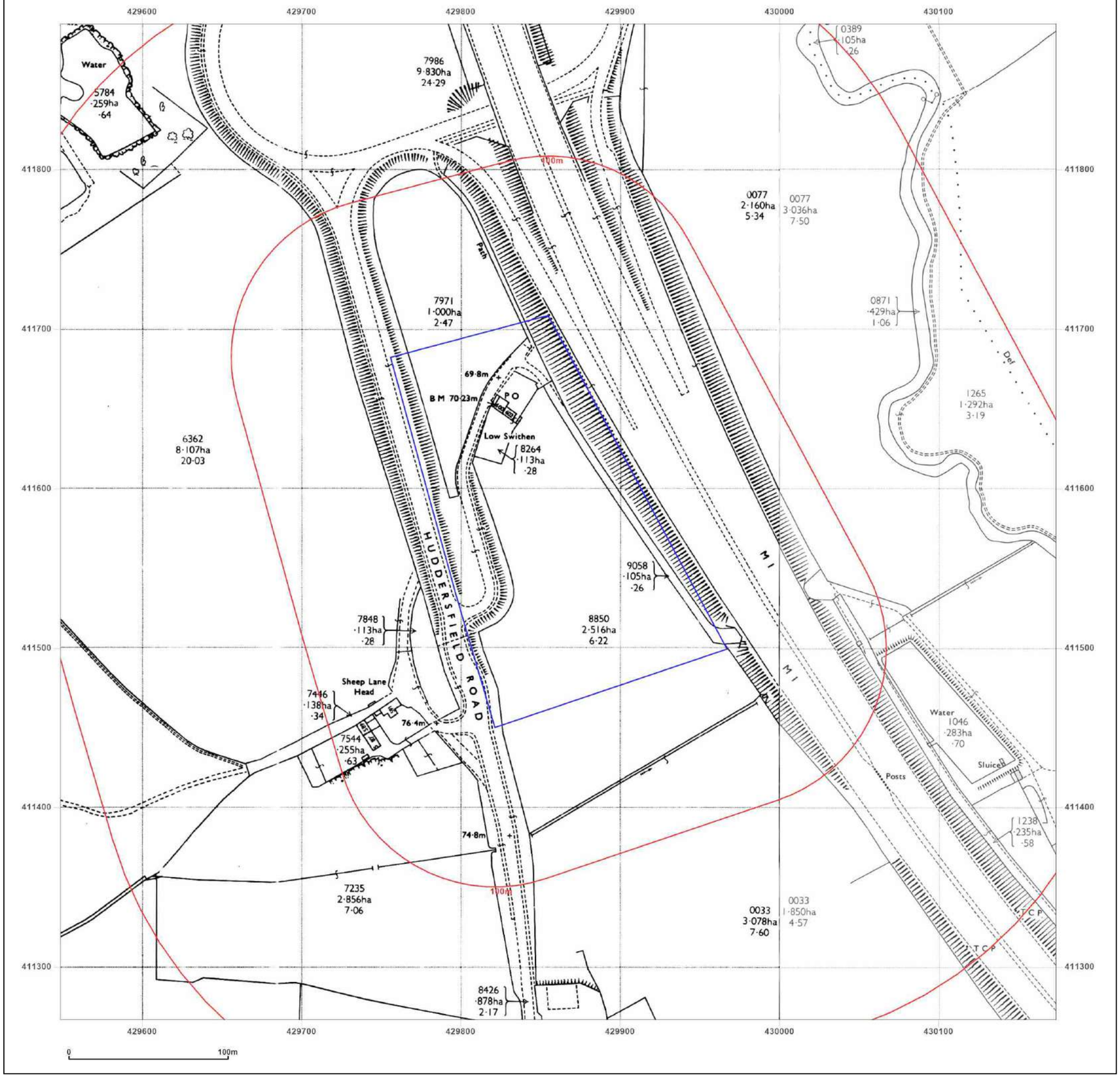

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Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **1972-1974**

Scale: 1:2,500

Printed at: 1:2,500

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

Surveyed 1973
Revised 1973
Edition N/A
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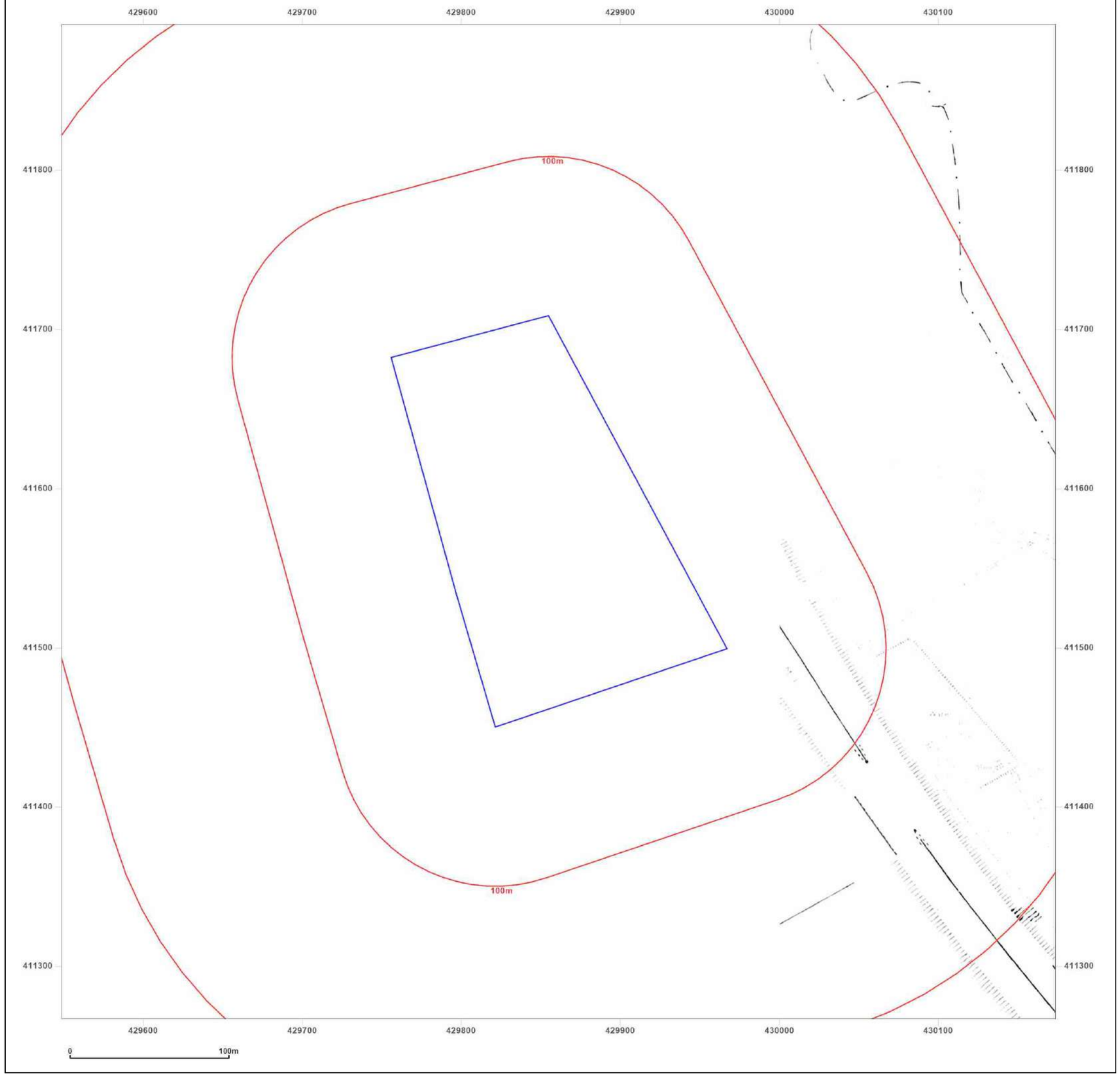

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Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: National Grid
Map date: **1984**
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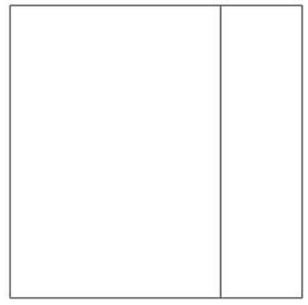

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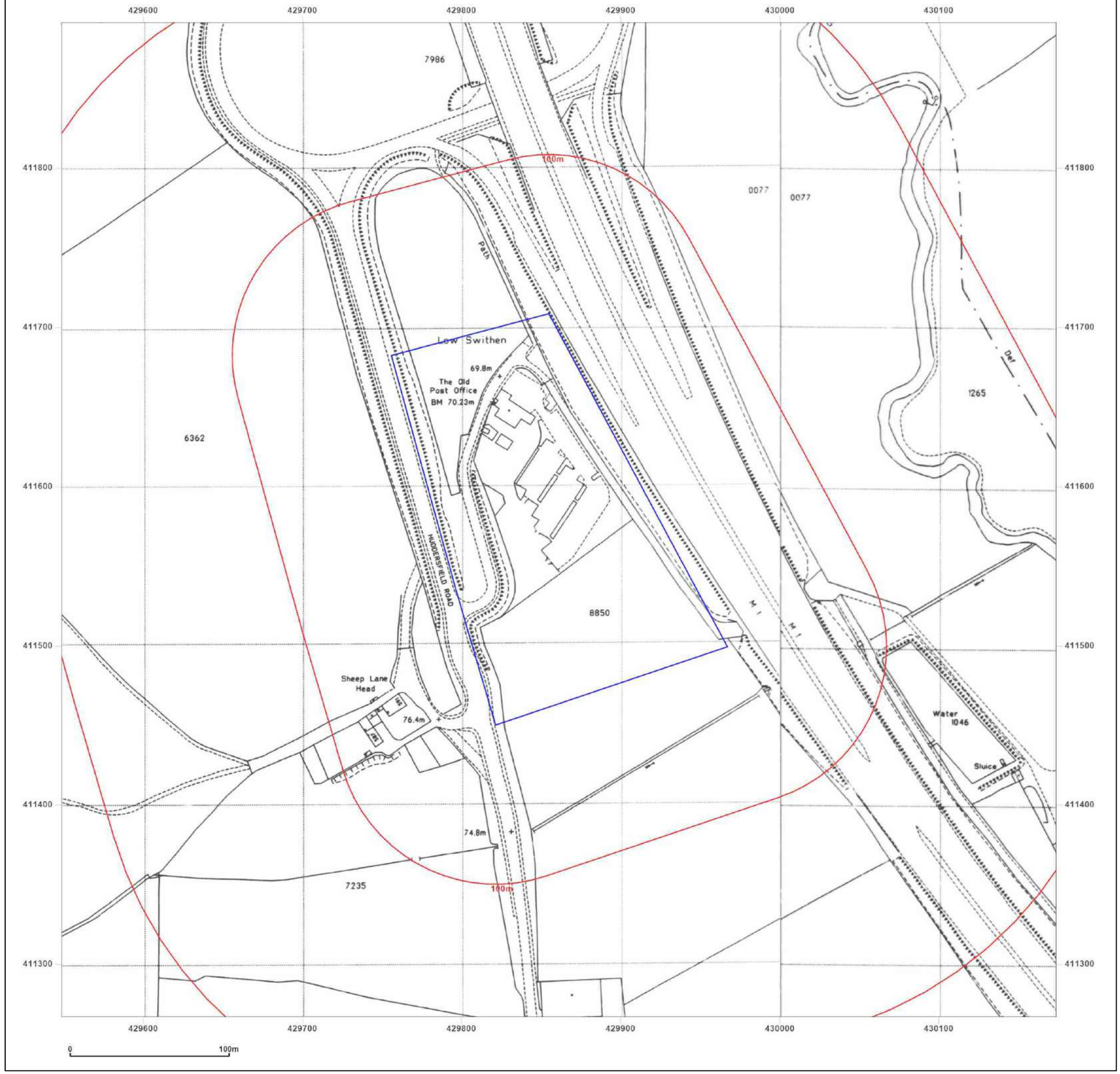

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Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **1993**

Scale: 1:2,500

Printed at: 1:2,500

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

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Revised N/A
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unspecified

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Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

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

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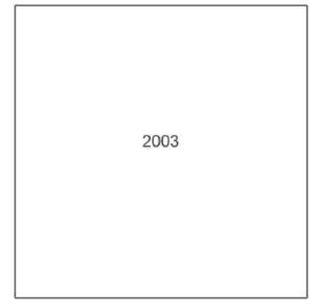

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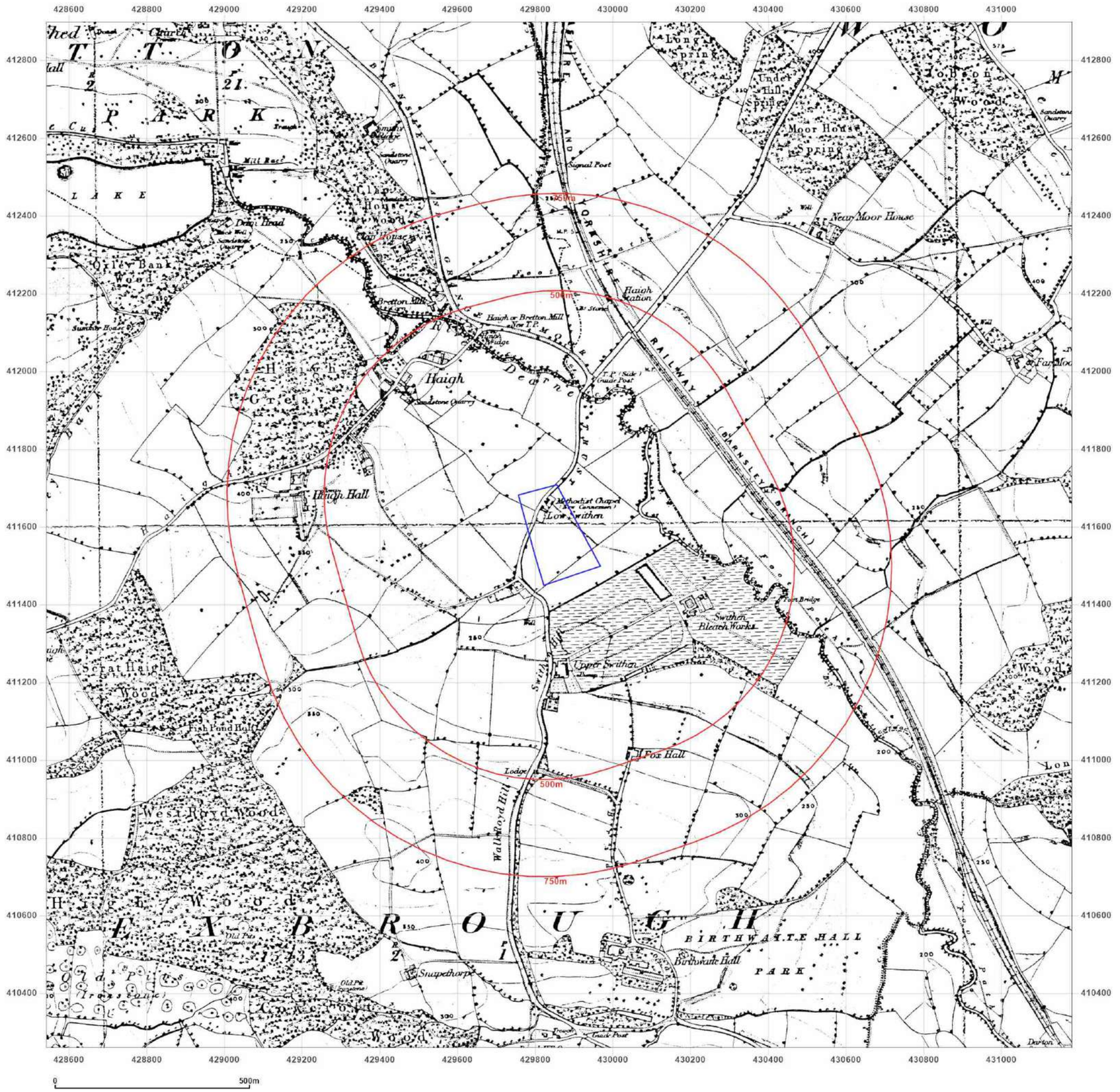

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Site Details:

unspecified

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Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: County Series

Map date: **1854**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1851
Revised N/A
Edition 1854
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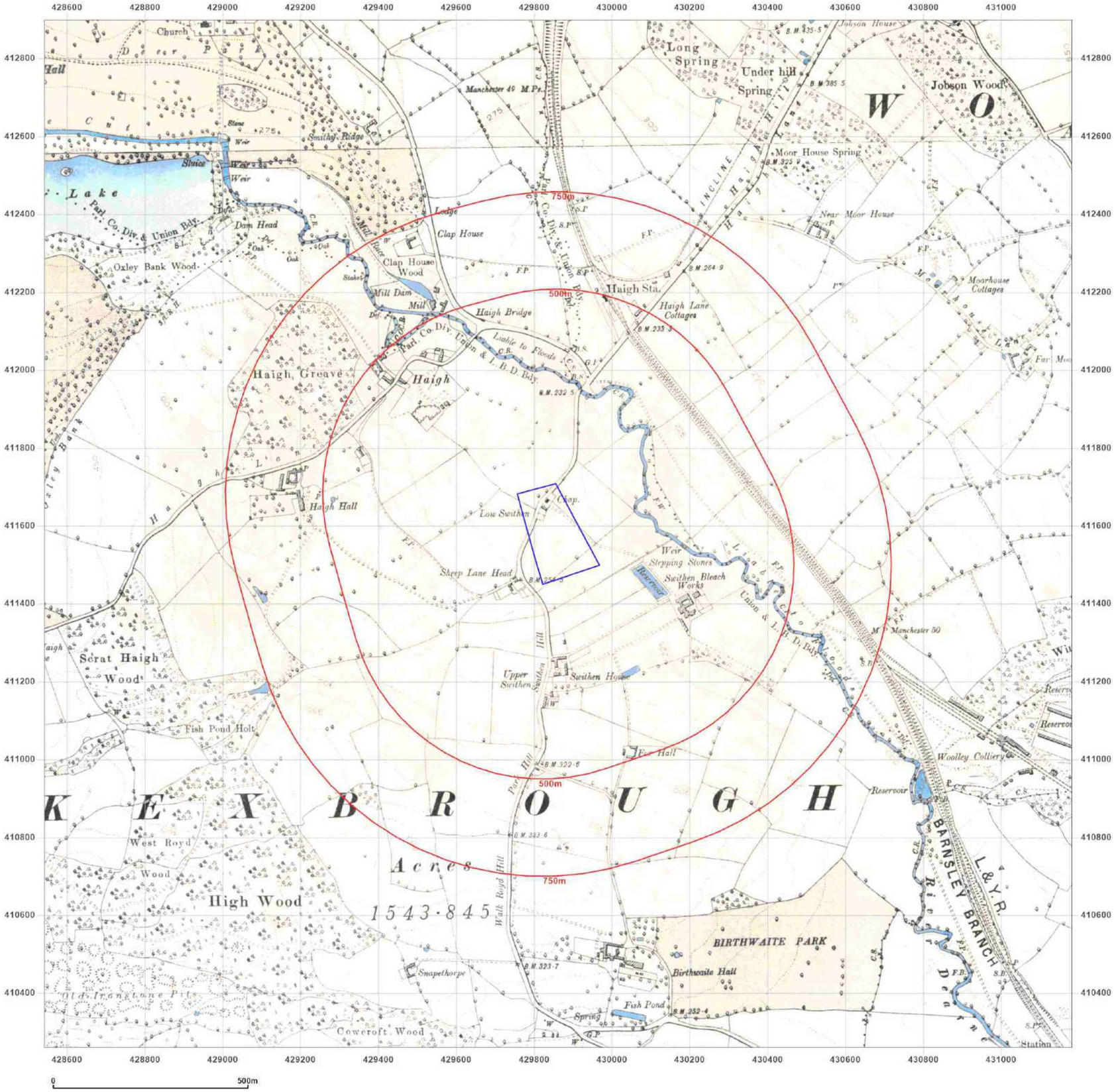

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Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: County Series

Map date: **1891**

Scale: 1:10,560

Printed at: 1:10,560

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

Surveyed 1891
Revised 1891
Edition N/A
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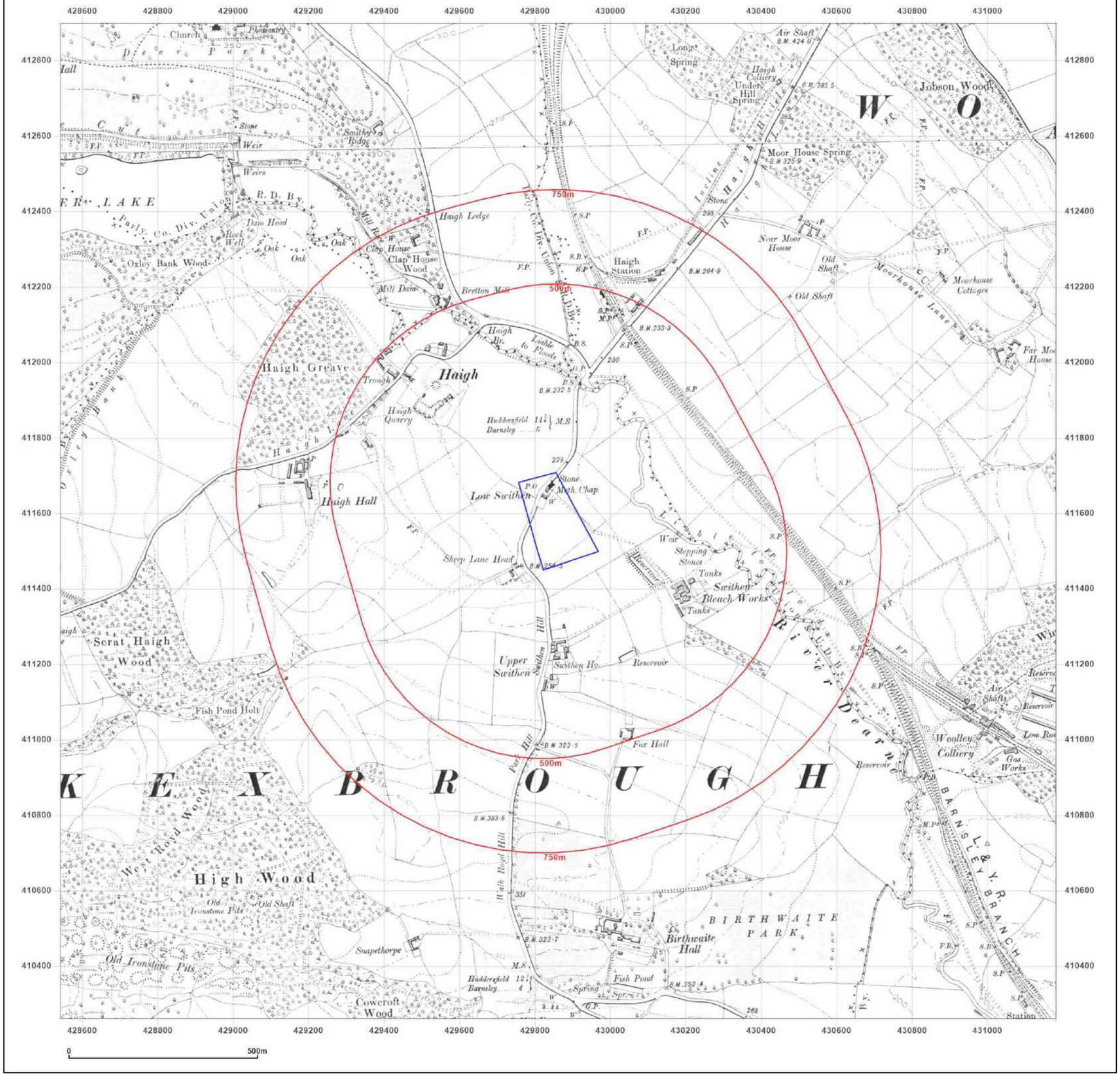

EMAPSITE™

Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: County Series

Map date: **1904**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1891
Revised 1904
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1891
Revised 1904
Edition N/A
Copyright N/A
Levelled N/A

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Production date: 17 April 2023

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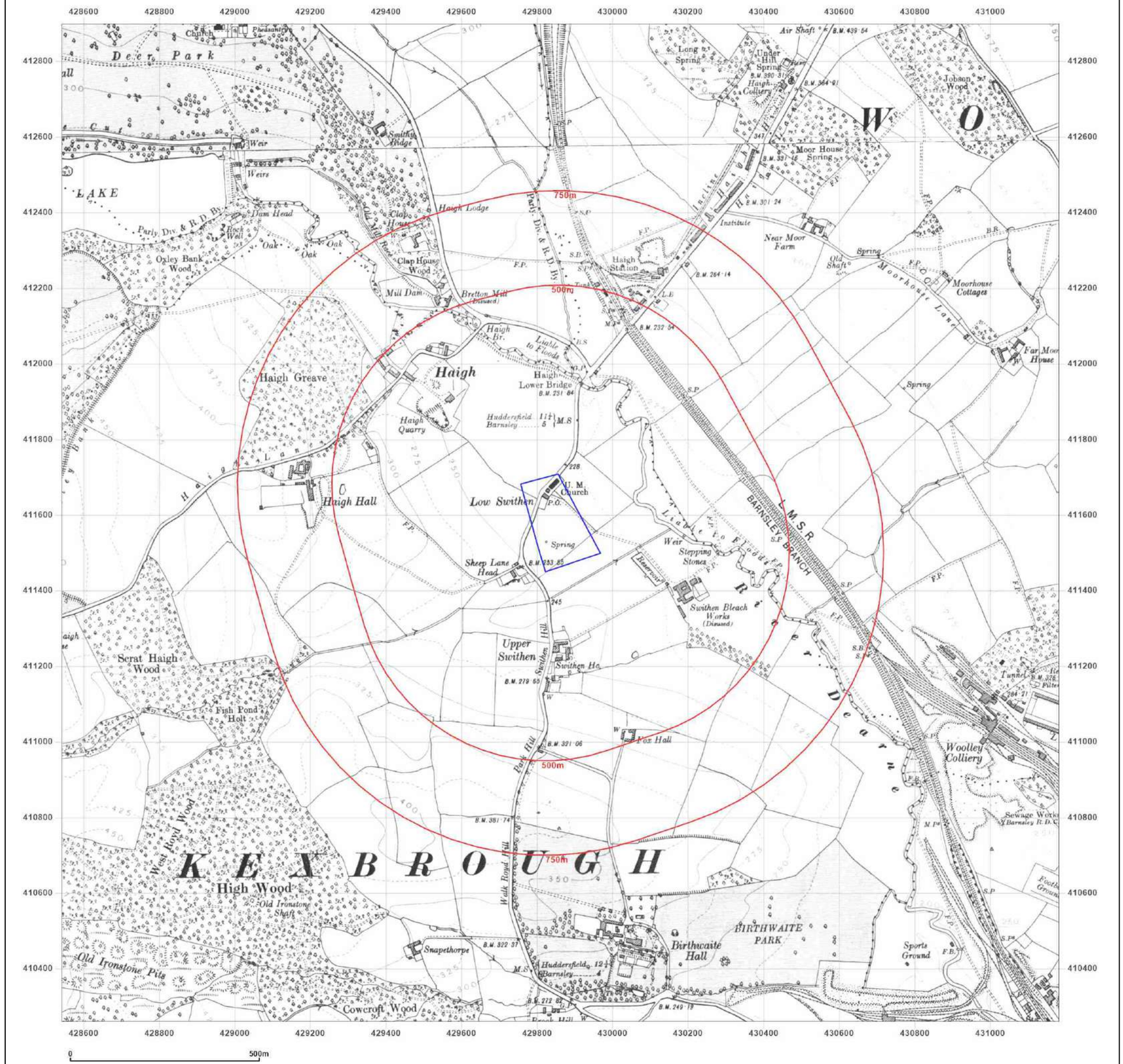

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Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: County Series

Map date: **1930**

Scale: 1:10,560

Printed at: 1:10,560

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

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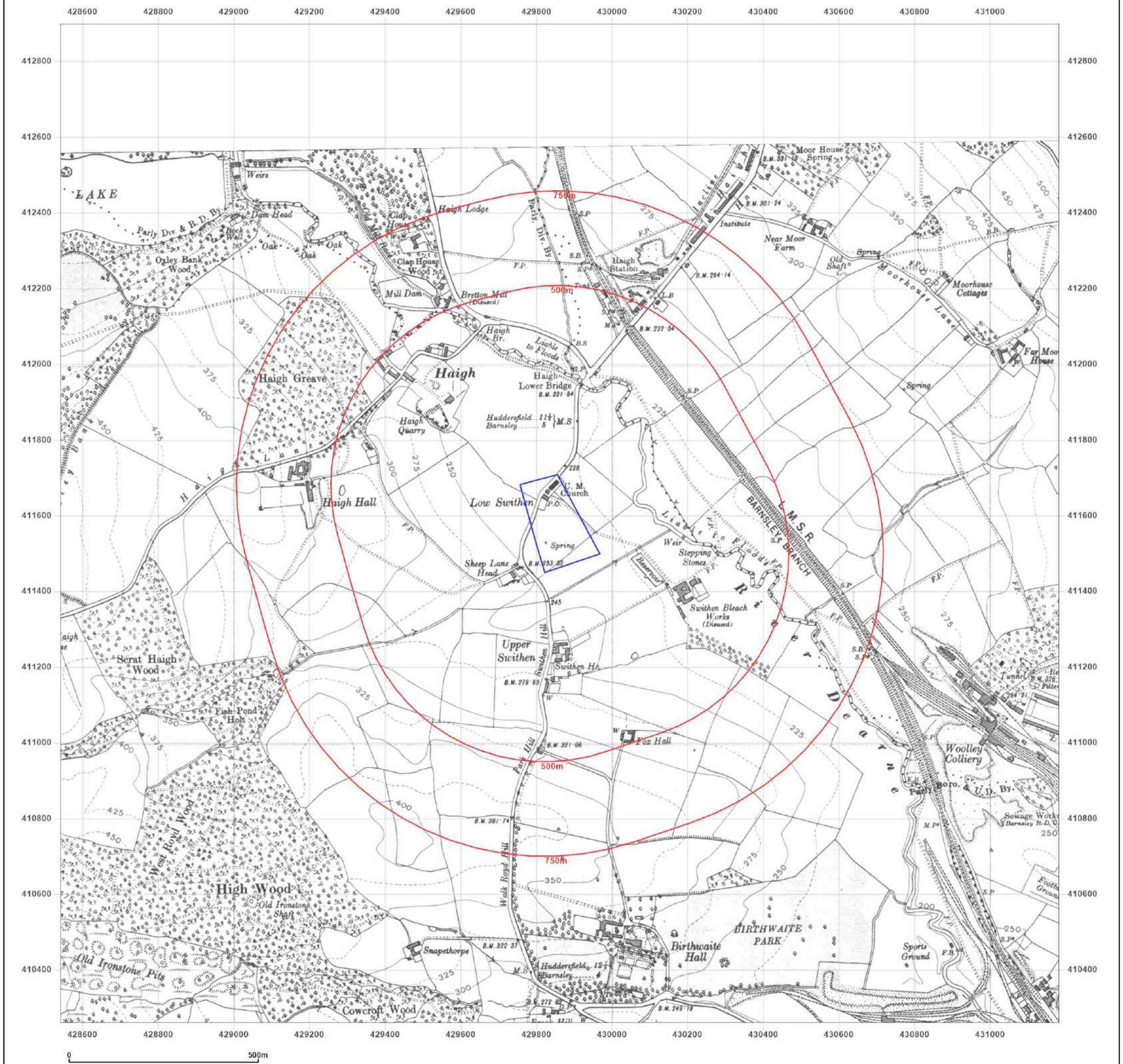

EMAPSITE™

Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

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

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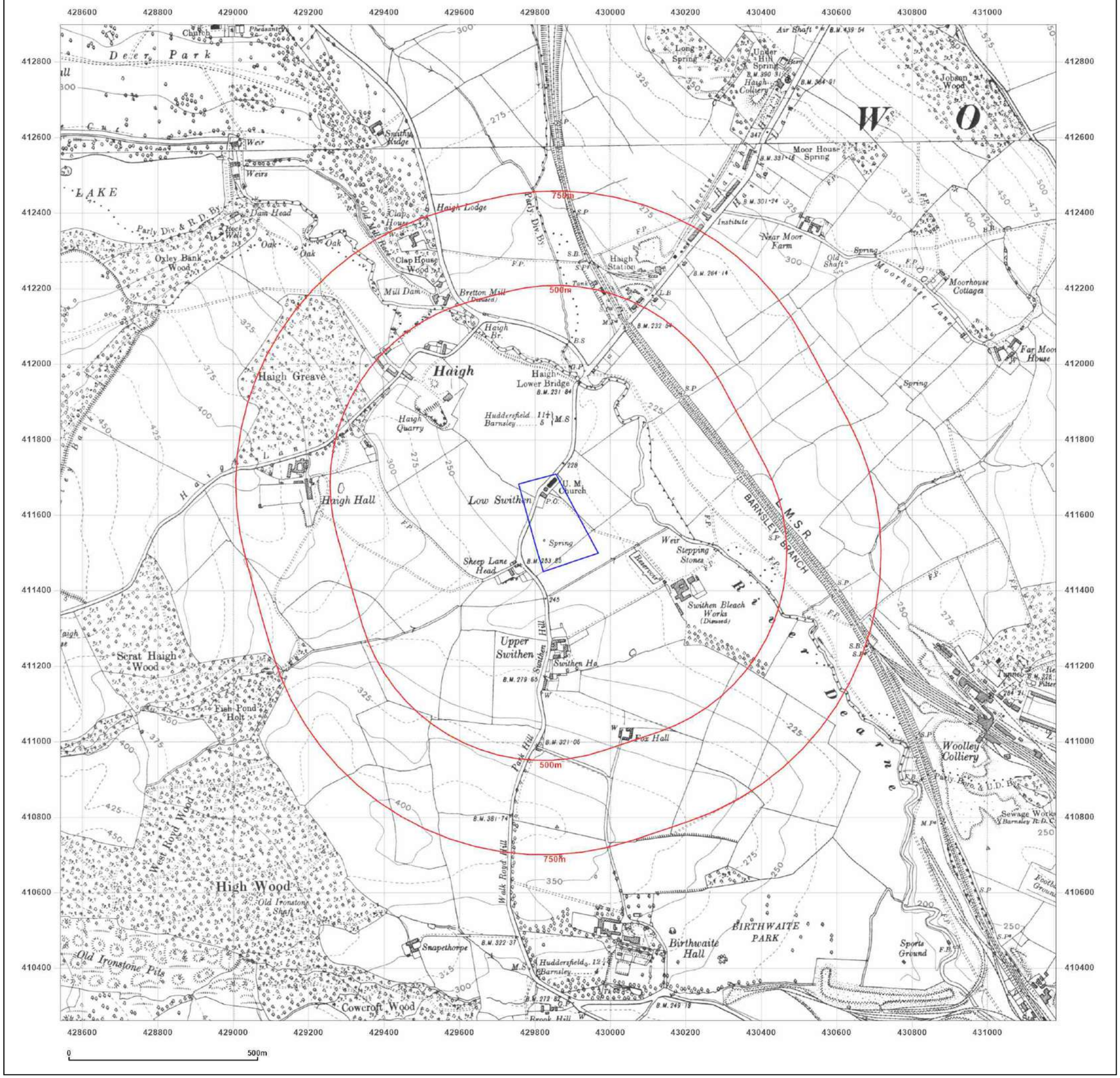

EMAPSITE™

Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: County Series

Map date: **1948**

Scale: 1:10,560

Printed at: 1:10,560

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

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

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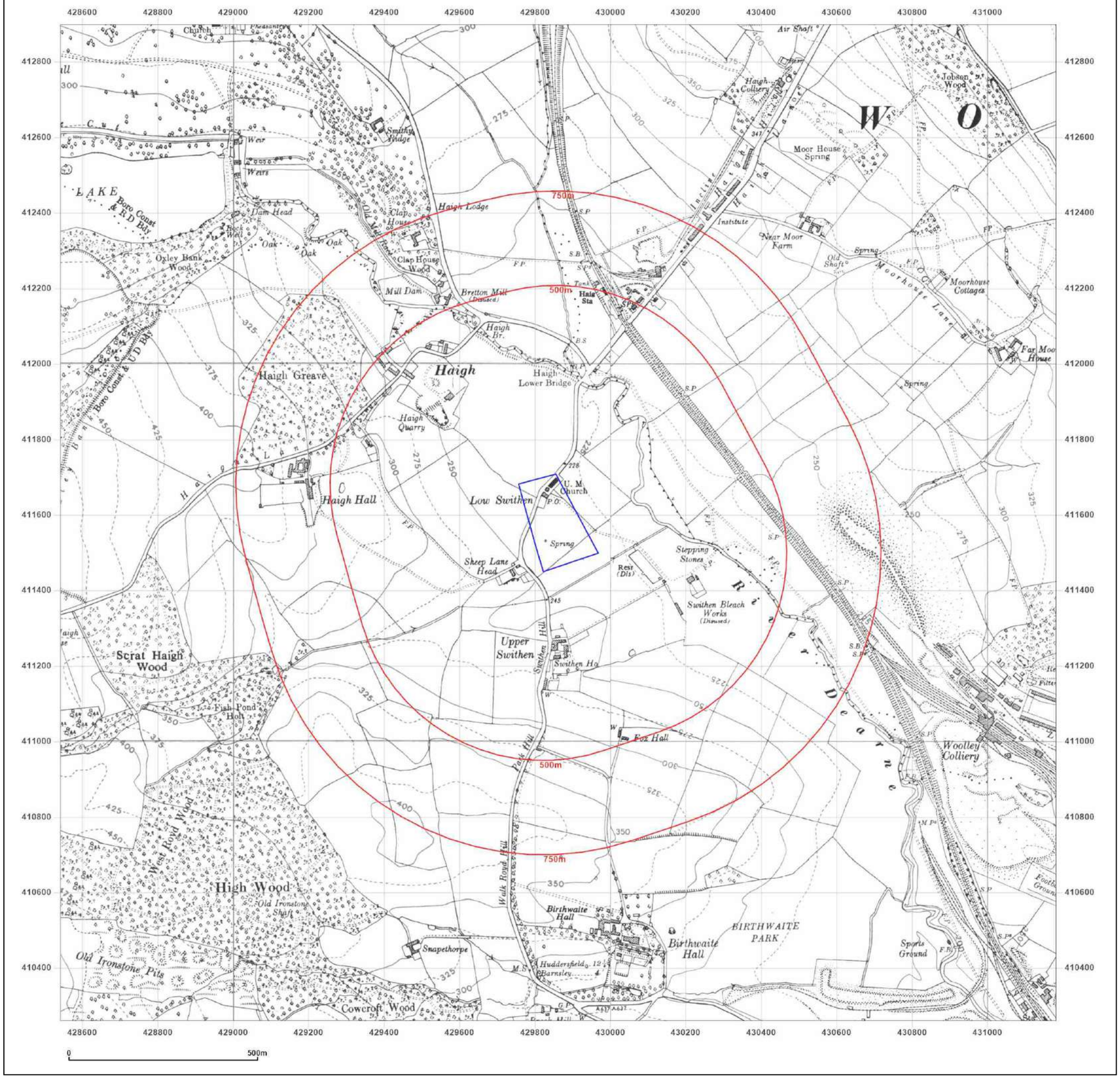

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Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

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

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

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

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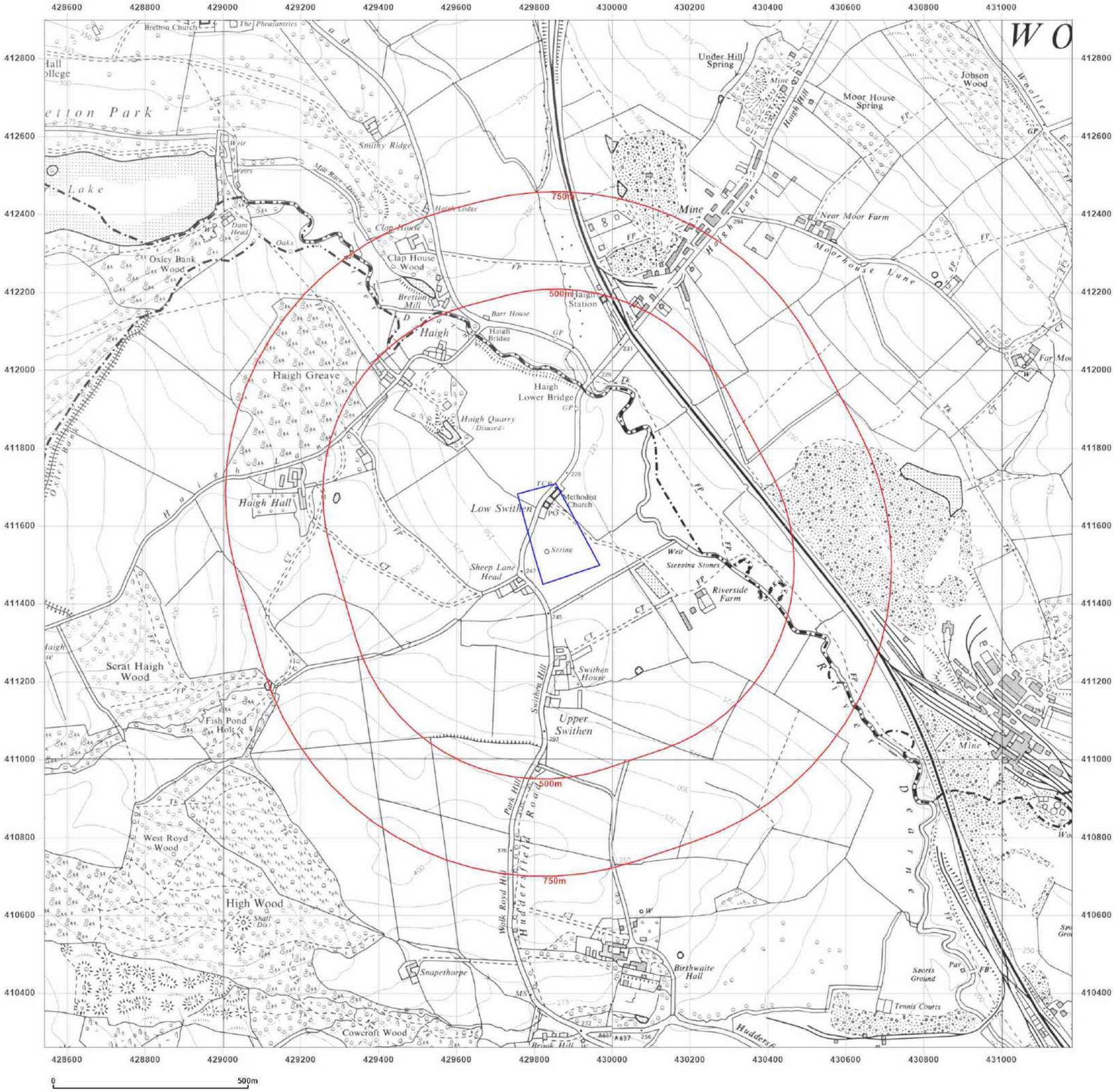

EMAPSITE™

Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: Provisional

Map date: **1965-1966**

Scale: 1:10,560

Printed at: 1:10,560

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

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

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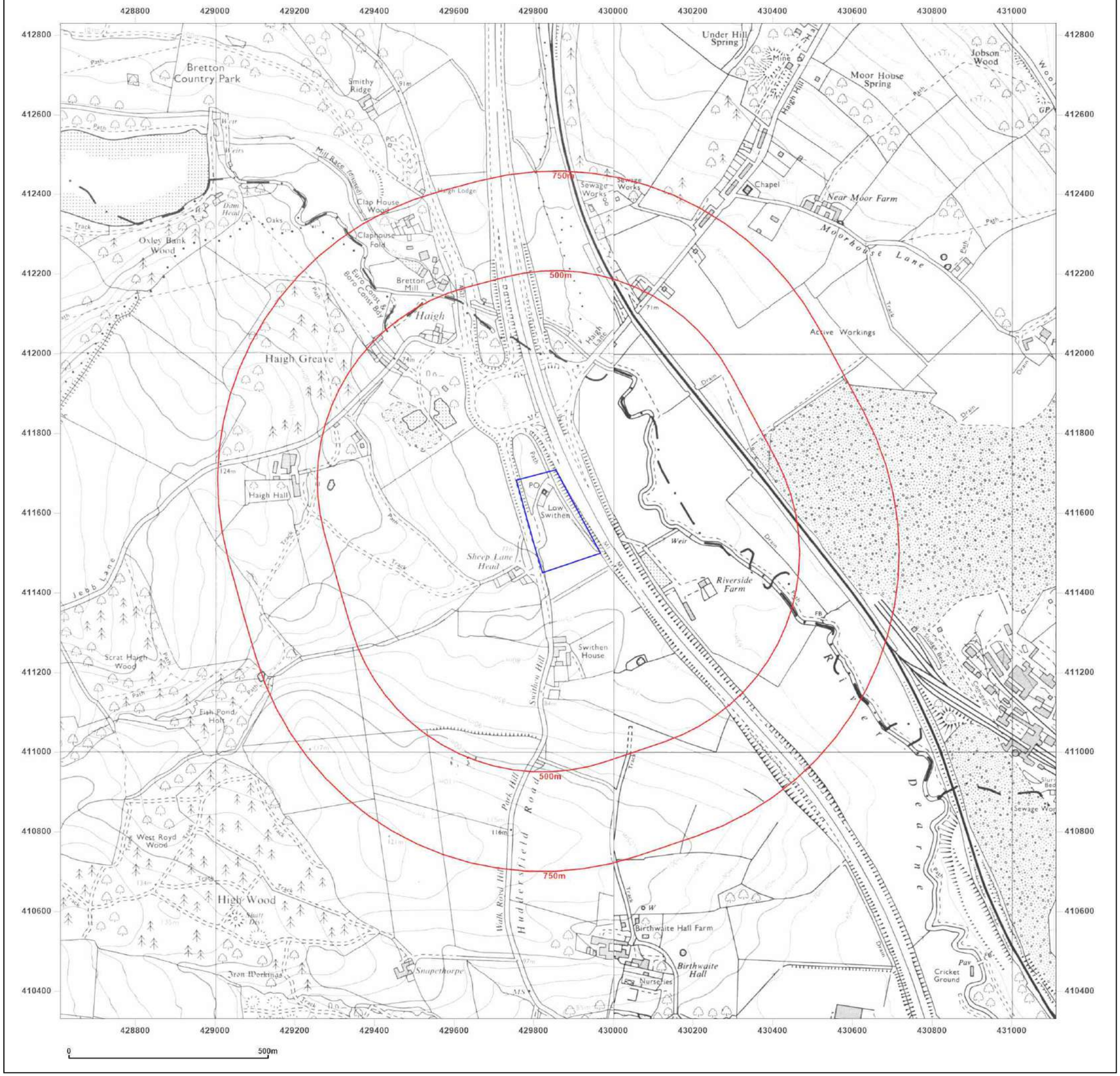

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Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **1978-1981**

Scale: 1:10,000

Printed at: 1:10,000

N
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Surveyed 1980
Revised 1981
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1977
Revised 1978
Edition N/A
Copyright N/A
Levelled N/A

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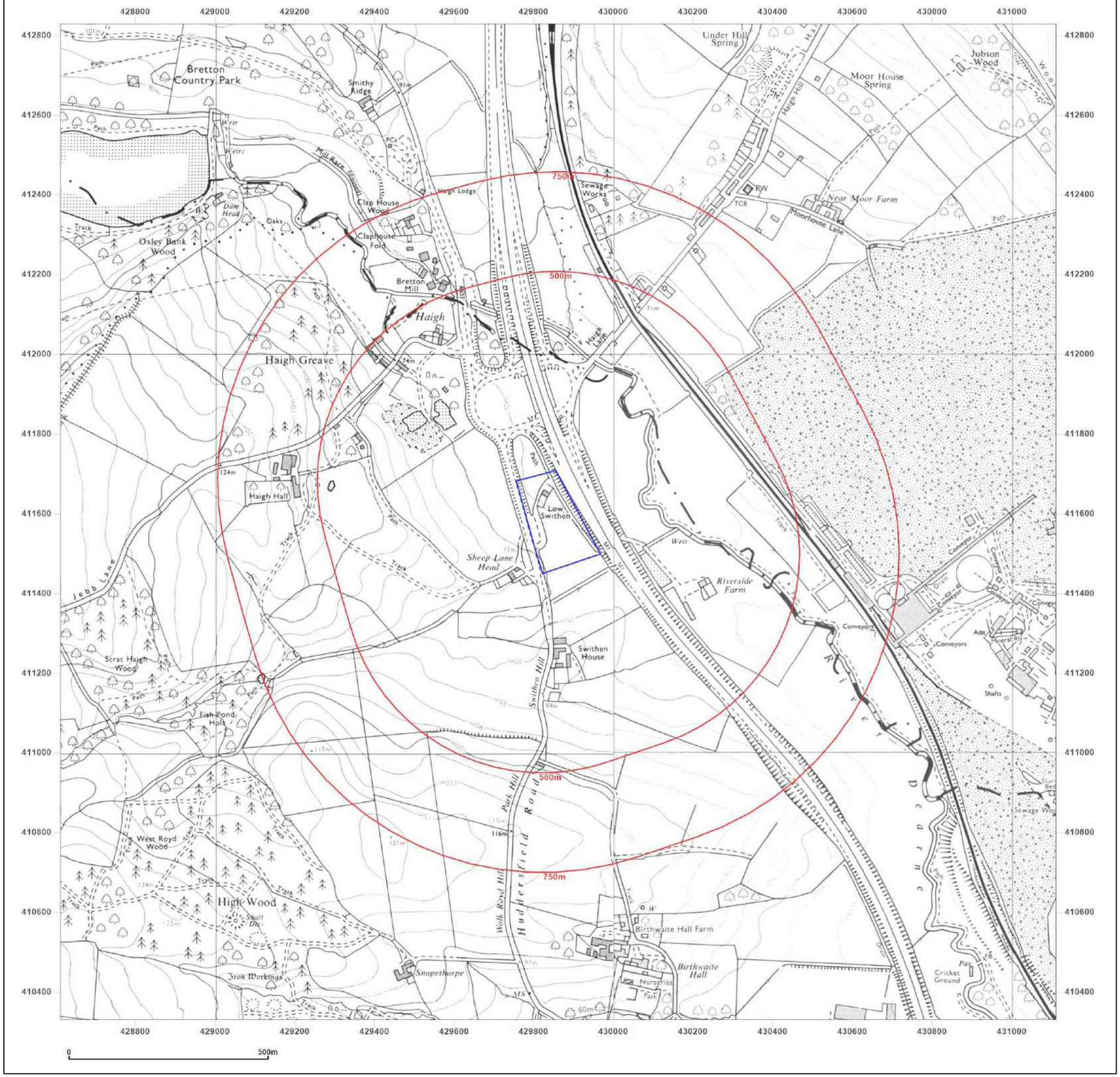

EMAPSITE™

Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **1988-1990**

Scale: 1:10,000

Printed at: 1:10,000

N
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Surveyed 1980
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1983
Revised 1990
Edition N/A
Copyright N/A
Levelled N/A

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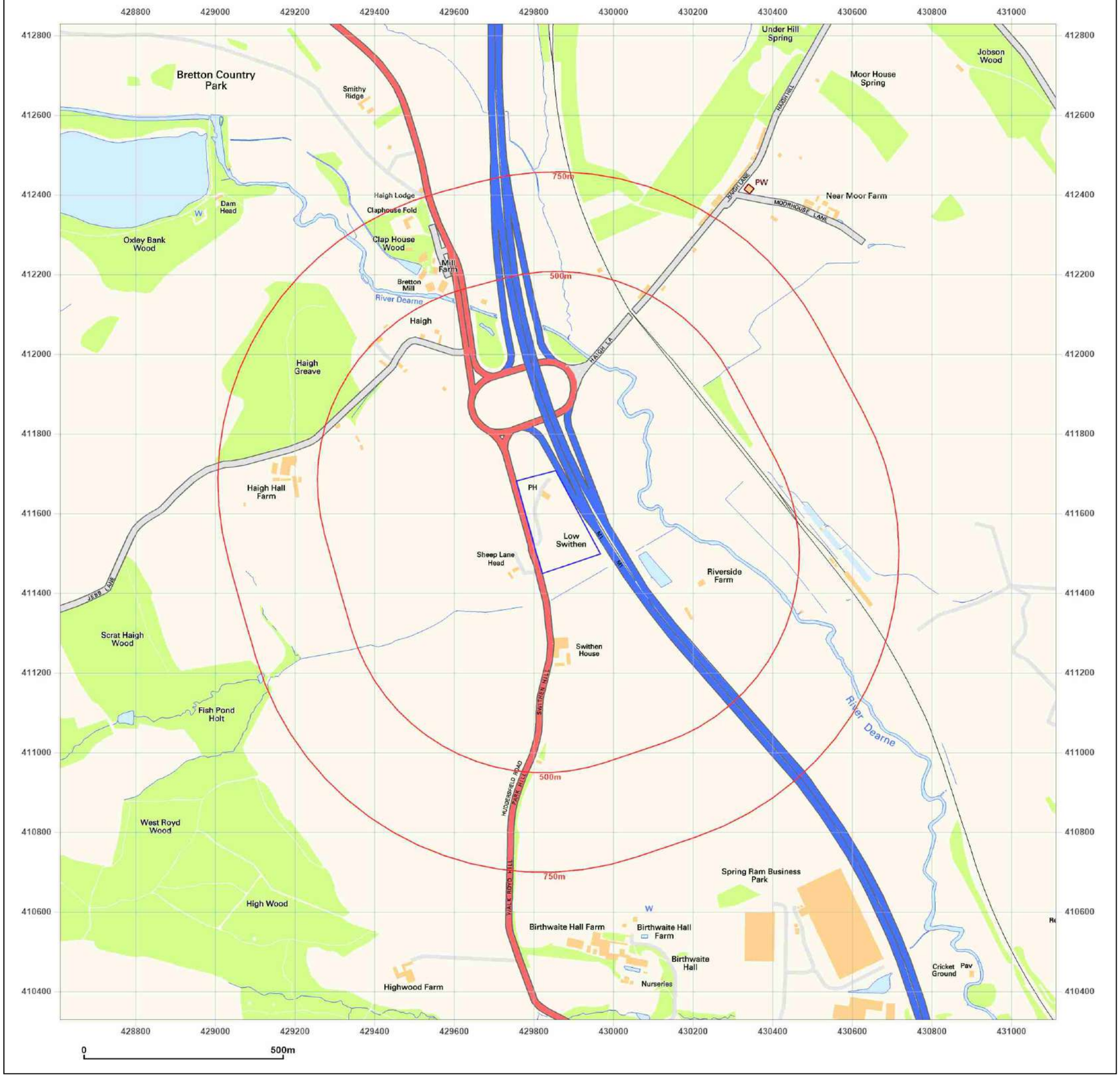

EMAPSITE™

Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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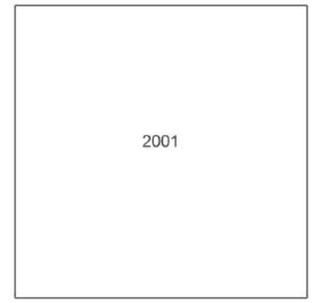

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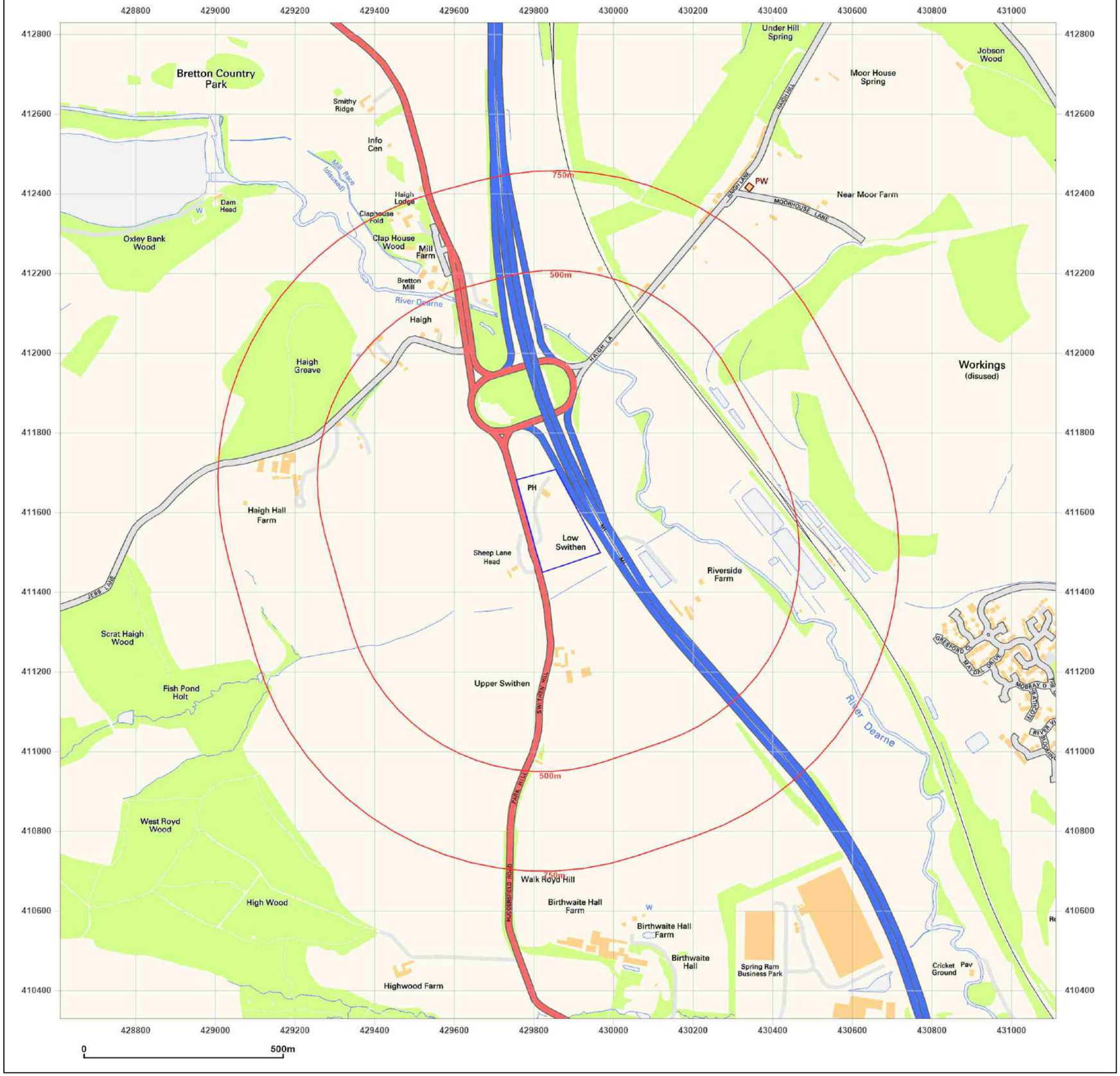

EMAPSITE™

Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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2010

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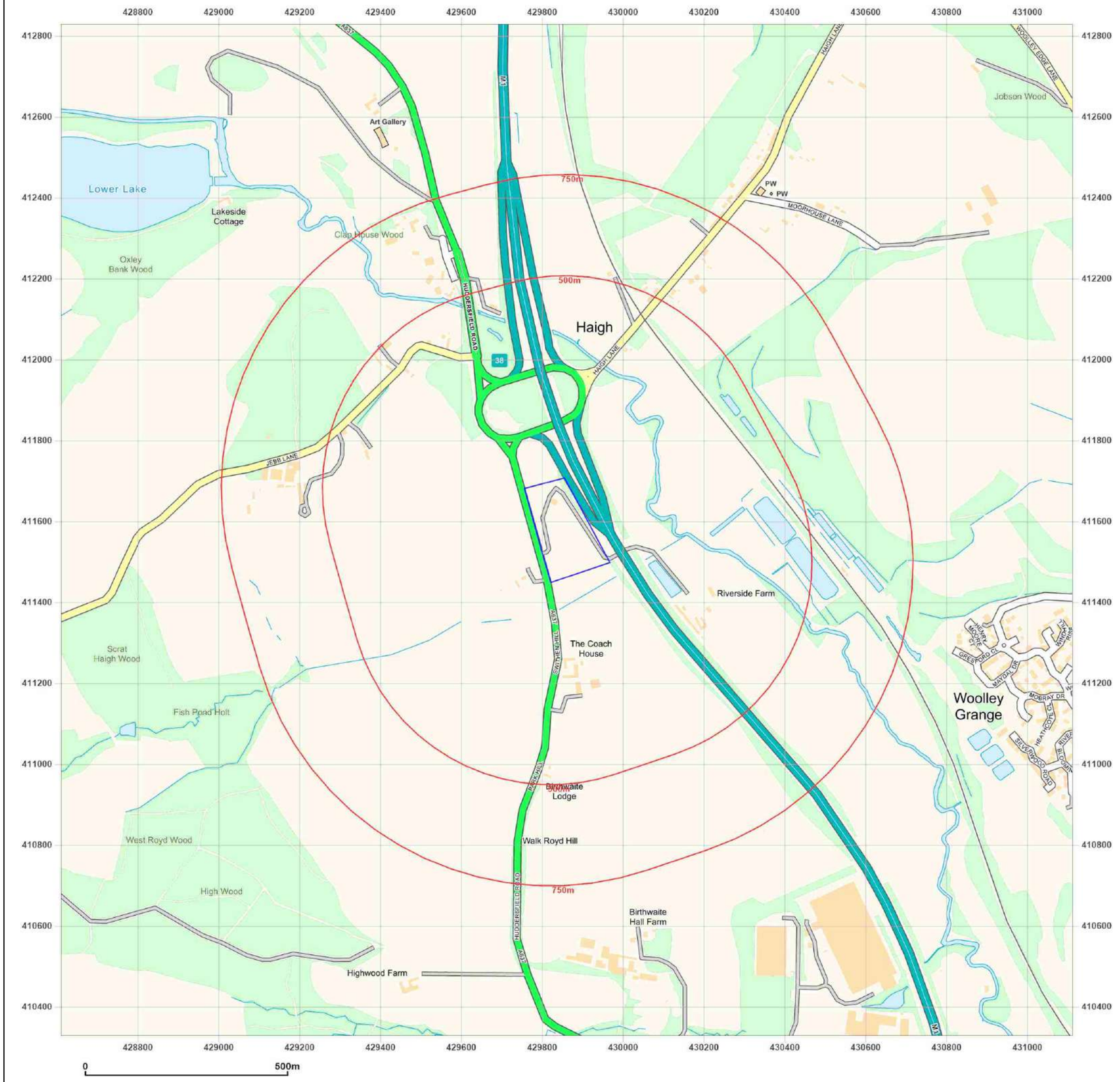

EMAPSITE™

Site Details:

unspecified

Client Ref: EMS_859987_1063443
Report Ref: EMS-859987_1102281
Grid Ref: 429861, 411579

Map Name: National Grid

Map date: **2023**

Scale: 1:10,000

Printed at: 1:10,000

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2023

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Production date: 17 April 2023

Map legend available at:
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The Coal Authority

CON29M
coal mining report

587 HUDDERSFIELD ROAD, HAIGH, BARNSLEY, S75 4DE

Known or potential coal mining risks

Past underground coal mining	Page 4
Future underground coal mining	Page 4
Withdrawal of support	Page 6

Further action

No further reports from the Coal Authority are required. Further information on any next steps can be found in our Professional opinion.

For more information on our reports please visit www.groundstability.com

Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. It is unlikely that these features will impact on the stability of the enquiry boundary.

Enquiry boundary

Key

Approximate position of enquiry boundary shown

We can confirm that the location is **on the coalfield**

Map data

This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.

Accessibility

If you would like this information in an alternative format, please contact our communications team on 0345 762 6848 or email communications@coal.gov.uk.

Professional opinion

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 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.

If you are looking to develop, or undertake works, within a coal mining development high risk area your Local Authority planning department may require a Coal Mining Risk Assessment to be undertaken by a qualified mining geologist or engineer. Should you require any additional information then please contact the Coal Authority on 0345 762 6848 or email cmra@coal.gov.uk.

Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

1 Past underground coal mining

The property is in a surface area that could be affected by underground mining in 3 seams of coal at 190m to 290m depth, and last worked in 1978.

Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

2 Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3 Future underground coal mining

The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

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

4 Mine entries

There are no recorded coal mine entries known to the Coal Authority within, or within 20 metres, of the boundary of the property.

5 Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6 Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7 Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8 Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9 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.

10 Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11 Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

12 Withdrawal of support

The property is in an area where a notice to withdraw support was given in 1989.

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.

13 Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14 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.

Statutory cover

Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you believe your land or property is suffering from coal mining subsidence damage and you need more information on what to do next, please use the following link to our website which sets out what your rights are and what you need to consider before making a claim.
www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form

Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call 0800 288 4242. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary

Key terms

adit - horizontal or sloped entrance to a mine

coal mining subsidence - ground movement caused by the removal of coal by underground mining

Coal Mining Subsidence Act 1991 - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

coal mining subsidence damage - damage to land, buildings or structures caused by the removal of coal by underground mining

coal seams - bed of coal of varying thickness

future opencast coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

future underground coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

mine entries - collective name for shafts and adits

mine gas - reports of alleged mine gas emissions received by the Coal Authority within 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

payments to owners of former copyhold land - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

shaft - vertical entry into a mine

site investigation - investigations of coal mining risks carried out with the Coal Authority's permission

stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

subsidence claim - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

withdrawal of support - a historic notice informing landowners that the coal beneath their property was going to be worked

working facilities orders - a court order which gave permission, restricted or prevented coal mine workings

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Stocksbridge
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Ducie Street
Manchester
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Tel: 0161 413 6444

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