
LAND AT PINFOLD FARM, RIBCHESTER

Phase 1 - Preliminary Risk Assessment



Prepared for:

Mr Alan Davies

Report Ref: BEK-24080-1

July 2024

Project Quality Assurance Information Sheet

Site	Land at Pinfold Farm, Ribchester
Report Title	Phase 1 - Preliminary Risk Assessment
Report Status	Final
Report No	BEK-24080-1
Date	July 2024
Prepared For	MR ALAN DAVIES Pinfold Farm Bungalow Preston Road Ribchester PR3 3YD
Prepared By	BEK ENVIRO No 2 Landwick Court Metcalf Drive Altham Business Park Lancashire BB5 5GY
Author	██████████ BSc (Hons)
Checked	██████████ BSc (Hons) MSc MEnvSc CEnv
Authorised	██████████ BSc (Hons) MSc MEnvSc CEnv
Contact	██████████ www.bekenviro.co.uk Office: 01254 377622 ██████████



BEK Geo-Environmental Consulting

No.2 Landwick Court, Metcalf Drive, Altham Business Park,
Lancashire BB5 5GY

mbuckley@bekenviro.co.uk

bekenviro.co.uk

01254 377622

LAND AT PINFOLD FARM, RIBCHESTER

Phase 1 - Preliminary Risk Assessment

PROJECT NO: 24080

REPORT REF: BEK-24080-1

DATE: July 2024

REVISION STATUS / HISTORY

Rev	Date	Issue / Comment	Prepared	Checked

GENERAL REPORT LIMITATIONS

BEK Enviro Limited (BEK) has prepared this report for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and BEK. No other warranty, expressed or implied, is made as to the professional advice included in this report.

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

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

Unless explicitly agreed otherwise, in writing, this report has been prepared under BEK's limited standard Terms and Conditions as included within our proposal to the Client. The report needs to be considered in the light of the BEK proposal and associated limitations of scope. The report needs to be read in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the report.



TABLE OF CONTENTS

1.	INTRODUCTION
1.1	Appointment
1.2	Proposed Development
1.3	Objective & Scope of Work
1.4	Limitations
2.	SITE DESCRIPTION
2.1	Site Location
2.2	Site Layout & Description
2.3	Surrounding Land Use
3.	SITE HISTORY
4.	ENVIRONMENTAL SETTING
4.1	Geology
4.2	Mining & Ground Stability
4.3	Hydrogeology
4.4	Hydrology
4.5	Contaminated Land & Landfill Activities
4.6	Sensitive Land Uses
4.7	Radon
4.8	Unexploded Ordnance
5.	POTENTIAL POLLUTANT LINKAGES
5.1	General
5.2	Potential Sources of Contamination
6.	CONCLUSIONS & RECOMMENDATIONS

APPENDICES	
Appendix A	Historical OS Maps
Appendix B	Enviro+GeoInsight Report
Appendix C	Asbestos Testing
Appendix D	Site Photographs
Appendix E	Drawings

DRAWINGS	
BEK Drawing 24080-1	Site Location
BEK Drawing 24080-2	Site Layout
Holden Lancashire Limited drawing ref: 018, entitled 'Change of use Agricultural Building to Domestic Dwelling'	

1. INTRODUCTION

1.1 Appointment

1.1.1 BEK Enviro (BEK) has been commissioned by Mr Alan Davies to prepare a Phase 1 Preliminary Risk Assessment (PRA) for area of land located at Pinfold Farm, Ribchester (hereafter referred to as ‘the site’). The PRA will assess the potential risks associated with contamination and ground gas considering the conversion of an existing agricultural building to a residential dwelling.

1.1.2 The site location and layout are presented on BEK Drawing No 24080-1 and BEK Drawing No 24080-2, respectively. Copies of these drawings are presented in Appendix E.

1.2 Proposed Development

1.2.1 This report has been prepared to support a permitted development scheme for the conversion of an existing agricultural building to a residential dwelling (Class Q). The proposed dwelling includes a modest curtilage with space around the exterior of the proposed dwelling.

1.2.2 The red-line boundary for the development also includes a hardstanding access road which BEK understands is to remain as existing as part of the development works.

1.2.3 The proposed development is illustrated on Holden Lancashire Limited drawing entitled ‘Change of use Agricultural Building to Domestic Dwelling’ (Drawing Ref: O18, dated 28/05/2024), an extract of which is shown below and a copy of which is presented in Appendix E. The red-line boundary on the drawing below represents the domestic curtilage of the development.

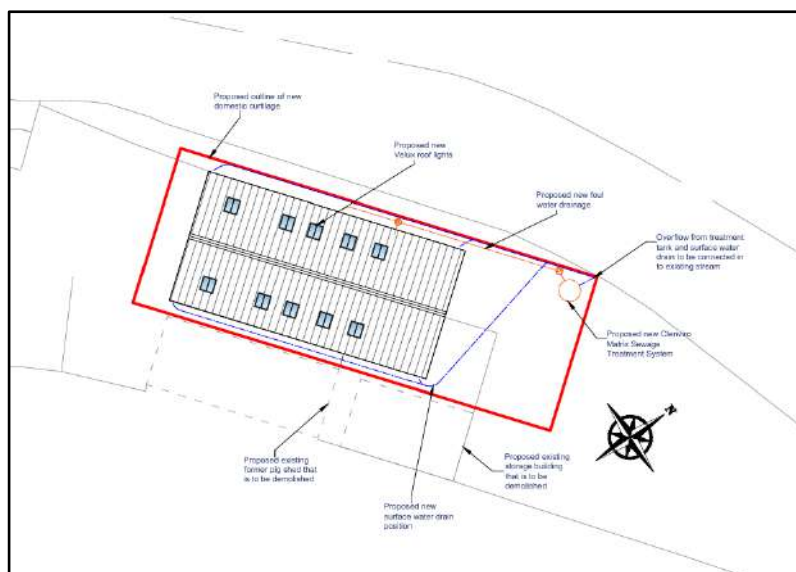


Figure 1: Extract from the Proposed Development Plan

1.3 Objective & Scope of Work

1.3.1 The objective of this report is to provide a qualitative assessment of the potential risks from contamination and ground gas with consideration to the proposed building conversion to a residential dwelling.

1.3.2 To achieve the objective BEK will undertake the following:

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

1.4 Limitations

1.4.1 The conclusions and recommendations presented in this report are the result of our professional interpretation of the information currently available. BEK reserves the right to amend the conclusions and recommendations if further information becomes available.

1.4.2 However, it should be noted that much of the information has been derived from reports written by others and BEK takes no responsibility for the accuracy of that information. Notwithstanding the above, the reports reviewed have all been written by professional environmental consultants with a duty of care to provide relevant and accurate information.

1.4.3 This report does not include an invasive plant species assessment.

2. SITE DESCRIPTION

2.1 Site Location

2.1.1 The site occupies an area of land located off an access road which joins Ribchester Road to the south-west. The site is located approximately 1.6 km north-west of Ribchester and approximately 3.4 km south-east of Longridge.

2.1.2 The National Grid Reference for the centre of the site is approximately SD 63832 36408. The site location is shown on BEK Drawing No 24080-1, a copy of which is presented in Appendix E.

2.2 Site Layout & Description

2.2.1 A walkover/inspection was conducted by an engineer from BEK in June 2024. Anecdotal information is provided in this section where relevant, which was obtained during liaison with the land owner. A selection of photographs illustrating the existing site layout are presented in Appendix D. The site layout is presented on BEK Drawing No 24080-1, a copy of which is presented in Appendix E.

2.2.2 The site was accessed by a hardstanding tarmacadam access road which leads from Ribchester Road to the site, transitioning a small section of gravel then hardstanding concrete at the site.

2.2.3 The site covers an irregularly shaped plot of land of some 800 m² which is largely overlain by hardstanding concrete which appears to be in good condition. A barn/agricultural building of part cinder block, part wood construction occupies a significant portion of the north/north-east of the site. The barn contains a sliding metal door and a roof of corrugated cement construction which was, at the time of the walkover, thought to potentially contain asbestos.

2.2.4 Sections of the same cement sheeting used for the barn roof were present to the exterior of the building. Discussion with the land owner suggested that the cement sheeting was obtained from a local contractor in 2006 (after the UK asbestos ban in November 1999). Laboratory testing of a bulk sample of the sheeting proved it did not contain asbestos. A copy of the chemical test results for the asbestos testing is provided in Appendix C.

2.2.5 The barn building contained a front-end loader, tracked excavator and trailer amongst other smaller machinery, tools and miscellaneous items.

2.2.6 Hardstanding concrete was present to the west of the barn building, with further concrete present in a thin strip along the southern wall of the barn, and a small section to the rear/east of the barn building. The hardstanding to the rear/east of the barn building contained a cement mixer, metal barrels and other miscellaneous items. The area to the north of the barn building was heavily vegetated.



2.2.7 The hardstanding concrete was inspected for any evidence of leaks/spills and none were found.

2.3 Surrounding Land Use

2.3.1 The site is located within a largely agricultural/rural area, with agricultural fields present to the north, east and south of the site. Buildings are present to the south-west of the site at Pinfold Farm.

3. SITE HISTORY

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

1849

3.2 The earliest available historical maps dating from 1847 show the site to be largely vacant and part of an area of agricultural land, with the exception of the central part of the site which forms part of a road/track for Pinfold Farm. The access road part of the site connects to a Roman Road. Buildings associated with Pinfold Farm are located some 10 m south-east and north-west of the southern part of the site. Ponds are located some 100 m north and 220 m north-east of the site. Features associated with Buckley Sandstone Quarries are located some 200 m north-east of the site at their closest point and include shafts, pumps, pits and a forge. Buildings are present at Buckley Hall some 200 m north of the site. A river is located some 220 m east of the site at its closest point.

1892

3.3 The 1892 maps show the site remains relatively unchanged, with the exception of a small outbuilding present in the south of the site on the access road section. An additional pond is located circa 160 m east of the site. Buckley Quarries located some 200 m north-east of the site are now marked as disused.

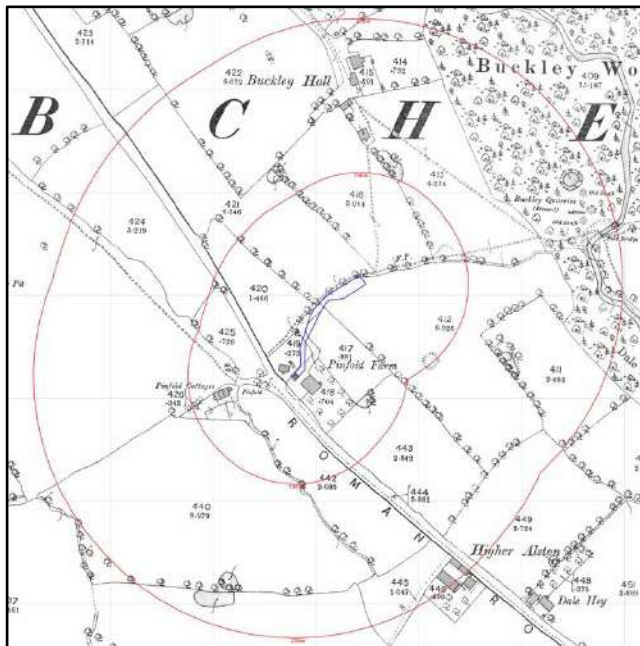


Figure 2: Extract from the 1892 map.

1912

- 3.4 The 1912 maps show no significant changes to the site. A south-east flowing river/stream is located approximately 60 m south-west of the site. An additional pond is located some 100 m east of the site.

1932

- 3.5 The 1932 maps show no significant changes to the site or the areas surrounding the site.

1967

- 3.6 The 1967 maps show no significant changes to the site. Additional buildings are present at Pinfold Farm immediately off site to the east of the southern section of the site. Additional buildings are also present as Buckley Hall some 180 m north of the site.

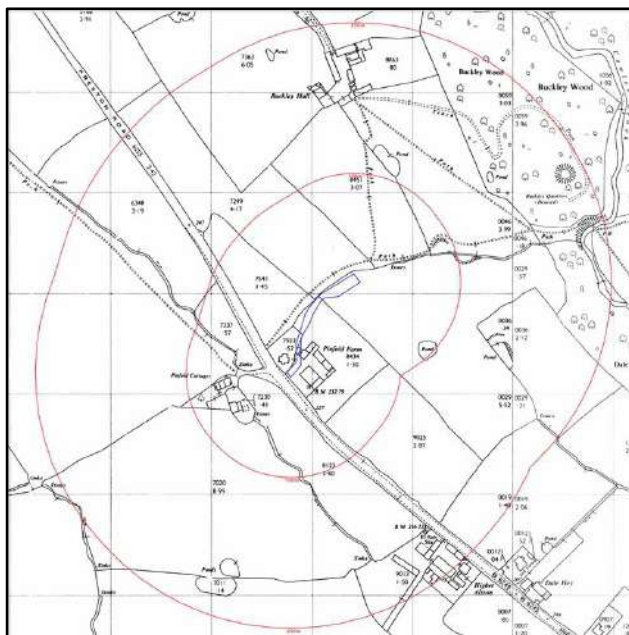


Figure 3: Extract from the 1967 map.

1994

- 3.7 The 1994 maps show no significant changes to the site or the areas surrounding the site.

2003

- 3.8 The 2003 maps show no significant changes to the site or the areas surrounding the site.

2013

- 3.9 Aerial photography dating from 2013 shows the present-day barn building in the north of the site and associated hardstand concrete has been constructed. The access road to the barn area has also been constructed. A smaller outbuilding is located immediately south of the barn building.



Figure 4: Extract from 2013 Aerial Photography

4. ENVIRONMENTAL SETTING

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

4.1 **Geology**

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

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

Made Ground

4.1.3 According to the Enviro & GeoInsight Report there is one record of made ground located some 204 m north-east of the site. This is likely to be associated with the operation of 'Buckley' sandstone quarry.

Superficial Geology

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

Bedrock

4.1.5 The Enviro & GeoInsight Report indicates that the underlying solid geology comprises the 'Silsden Formation - Mudstone' which typically comprises 'fine to very coarse grained pebbly sandstone, interbedded with grey siltstone and mudstone'. This strata generally has a low permeability.

Faults/Linear Features

4.1.6 There are no faults or linear features located within 250 m of the site.

4.2 **Mining & Ground Stability**

4.2.1 Information in the Enviro & GeoInsight Report indicates that the site not located in an area that may have been affected by coal mining and in accordance with the Coal Authority 'Risk Based Approach to Development Management' the risks from coal mining are not considered further.

4.2.2 The Enviro & GeoInsight Report indicates that there are 9 records of surface ground workings located within 250 m of the site as summarised in Table 1 below:

Location	Land Use	Year of Mapping
71 m north-east	Unspecified Pit	1932
83 m north-east	Unspecified Disused Quarries	1951
109 m north-east	Pond	1951 - 1994
135 m east	Pond	1910 – 1951
188 m south	Pond	1951 – 1994
194 m south	Pond	1892 – 1932
211 m north-east	Unspecified Disused Quarries	1910 - 1932
217 m east	Unspecified Quarries	1932
220 m north-east	Disused Quarries	1951 - 1994

Table 1: Summary of Surface Ground Workings

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

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

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

4.3 Hydrogeology

4.3.1 The superficial deposits underlying the site are classified by the EA as ‘Secondary Undifferentiated’ aquifer which are ‘assigned where it is not possible to attribute either category A or B to a rock type.’ These aquifers were formerly referred to as ‘unproductive’.

4.3.2 The bedrock underlying the site is classified by the EA as ‘Secondary A’ aquifer which are described as ‘permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers’.

4.3.3 The Enviro & GeoInsight Report indicates that site is not located within a groundwater source protection zone and there are no groundwater abstractions located within 250 m of the site.

4.4 Hydrology

4.4.1 There are five surface water features located within 250 m of the site as summarised in Table 2 below.

Location	Type	Ground Level	Name
38 m north-east	Inland River	Surface	N/A
44 m south-west	Inland River	Surface	N/A
220 m east	Inland River	Surface	Boyce's Brook
227 m south-east	Inland River	Surface	N/A
245 m south-west	Inland River	Surface	N/A

Table 2: Summary of Surface Water Features

4.4.2 There are no registered licensed discharge consents to controlled waters located within 250 m of the site.

4.4.3 The site is not considered to be at risk from flooding.

4.4.4 There are no surface water abstractions located within 250 m of the site.

4.5 Contaminated Land & Landfill Activities

4.5.1 Information provided in the Enviro & GeoInsight Report indicates that there are no historical or current landfill sites or waste sites located on or within 250 m of the site.

4.5.2 There are 3 registered waste exemptions located 9 m south-west of site which refer to the burning of agricultural waste, the spreading of waste on agricultural land and the use of waste in construction. These are unlikely to impact on the site.

4.5.3 There are no Environmental Agency pollution incidents located within 250 m of the site.

4.5.4 There are no NIHHS or COMAH sites, recorded Part A(1), Part A(2), Part B or IPPC Authorised Activities located within 250 m of the site.

4.5.5 There are two historical electricity substations located some 200 m south-east and 227 m south-east of the site.

4.5.6 There are several historical potentially contaminative land uses located within 250 m of the site, the majority of which refer to features of the historic 'Buckley' sandstone quarry located upwards of 170 m north-east of the site. These are unlikely to impact on the site.



4.6 Sensitive Land Uses

4.6.1 The site is not affected by any of the ecological systems identified as a statutory receptor in the DETR Circular 01/2006.

4.7 Radon

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

4.8 Unexploded Ordnance

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

5. POTENTIAL POLLUTANT LINKAGES

5.1 General

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

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

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

5.2 Potential Sources of Contamination

5.2.1 Based on the earliest available maps dating from 1849, the site was noted to be largely vacant, with the exception of the central part of the access road part of the site which formed part of a road/track for Pinfold Farm. The site then remained relatively unchanged until circa 2013 when aerial photography showed the hardstanding area and barn building in the north of the site had been constructed. The site then remained relatively unchanged until present day.

5.2.2 The site walkover/inspection confirmed that the hardstanding area and barn building in the north of the site were present, as well as the access road which connects the barn building to Ribchester Road to the south. The hardstanding concrete was found to be in good condition and no evidence of any spills/leaks was encountered during inspection, will all machinery present within the barn building noted to be relatively new and having only housed within the building for a short period of time (Since circa 2013 at the most). The hardstanding concrete is to be retained as is, along with the tarmac access road, as part of the development.

- 5.2.3 Sections of cement sheeting used for the barn roof, thought to potentially contain asbestos, were present to the rear of the barn building in an area of grass which BEK understands is to be retained as the garden area of the dwelling. Discussion with the land owner suggested that the cement sheeting was obtained from a local contractor in 2006 (after the UK asbestos ban in November 1999). Laboratory testing of a bulk sample of the sheeting proved it did not contain asbestos and thus does not represent a risk to human health within the garden area. Moreover, historical mapping shows the garden area has remained vacant and unchanged since the earliest available maps (1894) and no sources of contamination are considered to be present.
- 5.2.4 Considering the history of the site, no potential sources of contamination have been identified and the potential for significant contamination and/or risks from ground gas to be present is considered to be very low/negligible.
- 5.2.5 Furthermore, risks to controlled waters are considered to be very low/negligible given the absence of any potential sources of contamination.



6. CONCLUSIONS & RECOMMENDATIONS

- 6.1 Based on the findings of the Preliminary Risk Assessment herein, there are no potentially significant sources of contamination or ground gas at the site and no further works are required.
- 6.2 However, we provide the following recommendations:
- (i) If alterations to the proposed development are made which involve the breaking out of hardstanding or importation of materials/soils, BEK should be informed and this report may be subject to revision.
 - (ii) Groundworkers should ensure that all ground conditions encountered are as anticipated. If ground conditions differ or there is evidence for the present of contamination then works should cease and specialist advice sought.
 - (iii) The movement of waste soils on site should be covered by Permit Exemptions or through preparing a Material Management Plan (MMP) as part of compliance with DoW:CoP. Any soils removed from site should be done so following the Duty of Care Regulations.

APPENDIX A

Historical OS Maps

Site Details:

PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: County Series

Map date: 1847

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
 Revised N/A
 Edition 1847
 Copyright N/A
 Levelled N/A

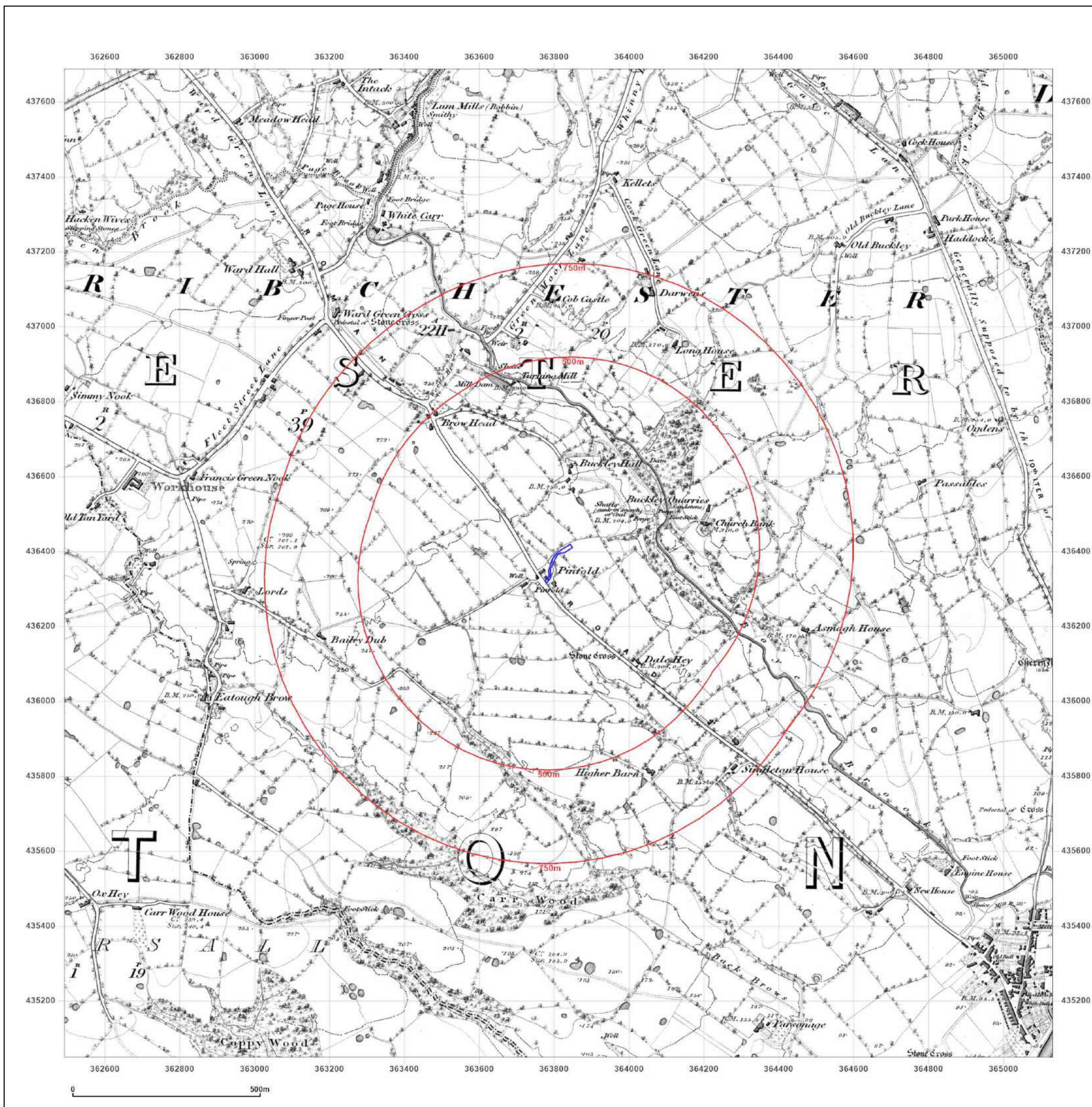


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024


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



Site Details:
 PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: County Series
Map date: 1892
Scale: 1:10,560
Printed at: 1:10,560



Surveyed 1892
 Revised 1892
 Edition N/A
 Copyright N/A
 Levelled N/A

Surveyed 1892
 Revised 1892
 Edition N/A
 Copyright N/A
 Levelled N/A

Powered by

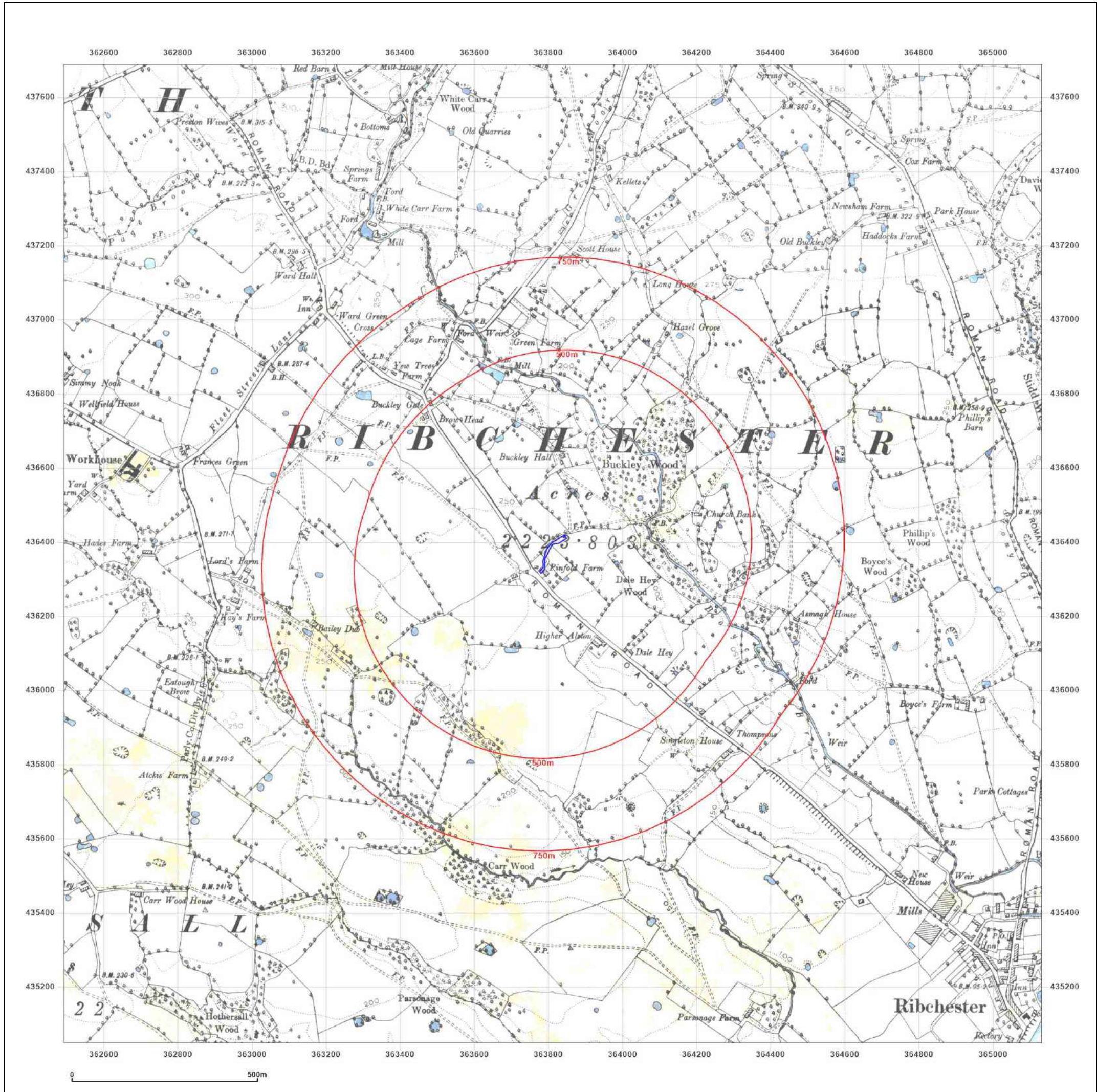


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:

PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: County Series

Map date: 1910

Scale: 1:10,560

Printed at: 1:10,560



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

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

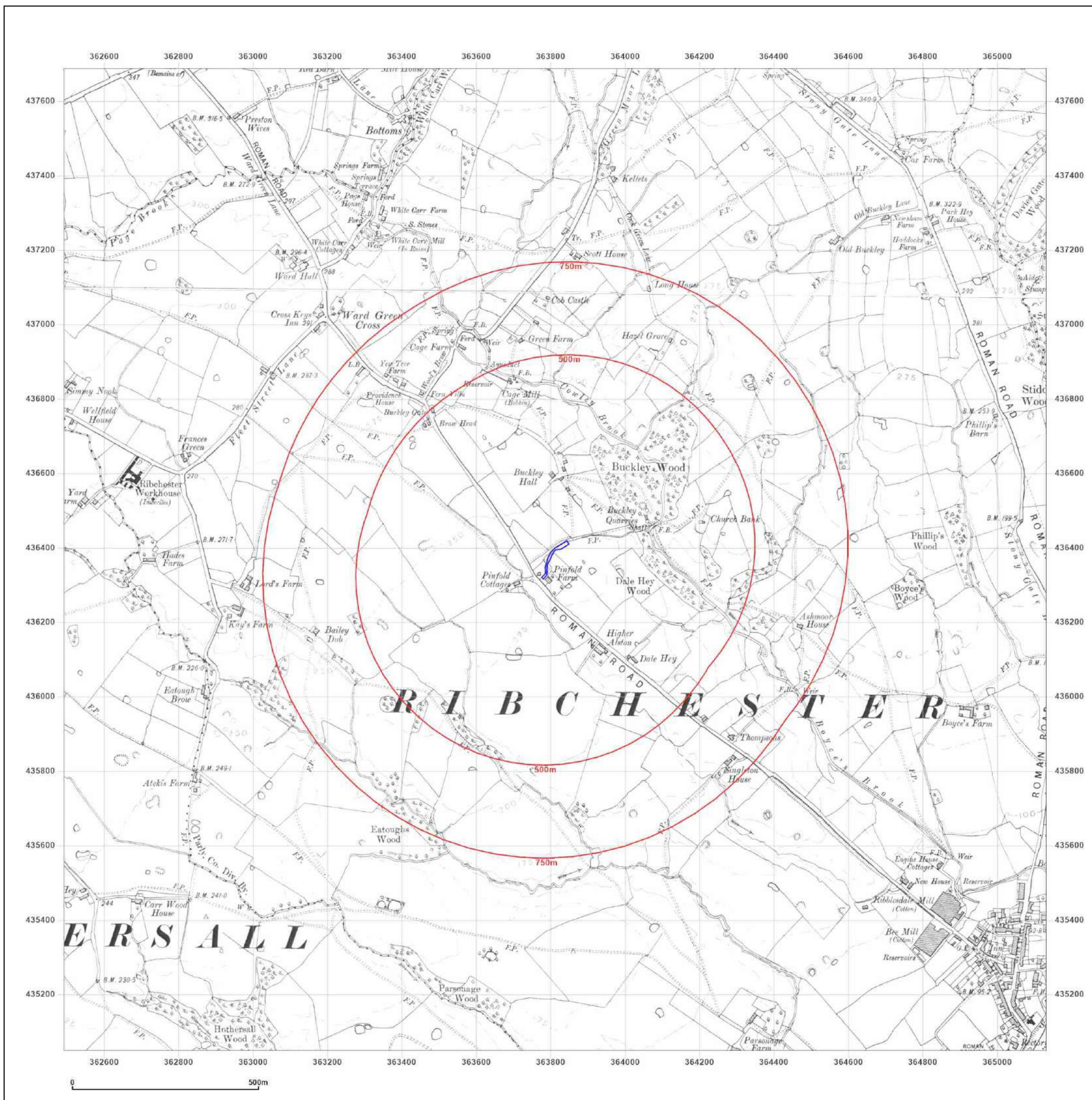


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024


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



Site Details:
 PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: County Series
Map date: 1932
Scale: 1:10,560
Printed at: 1:10,560



Surveyed 1844
 Revised 1932
 Edition N/A
 Copyright N/A
 Levelled N/A

Surveyed 1844
 Revised 1932
 Edition N/A
 Copyright N/A
 Levelled N/A

Powered by

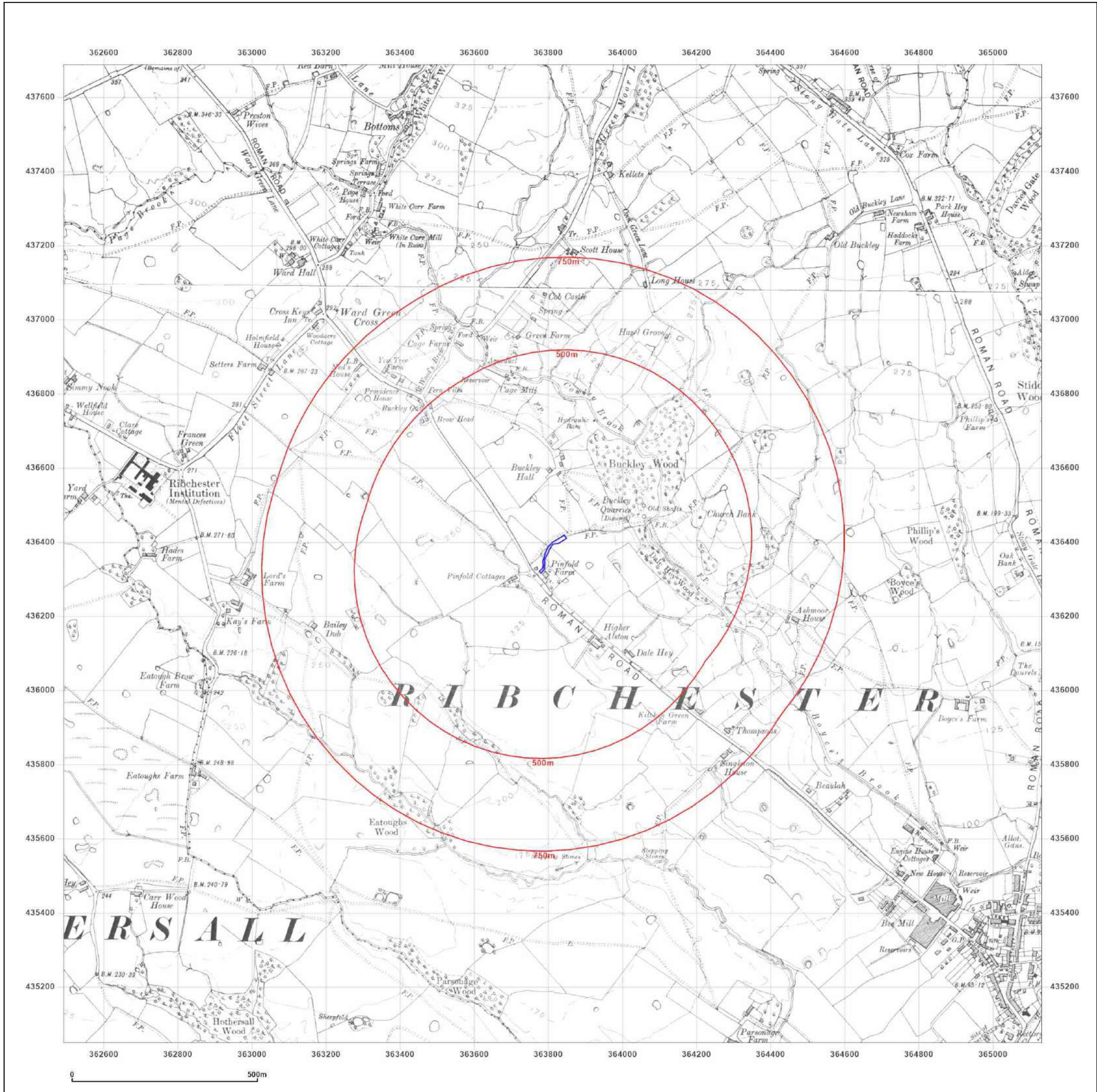


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:

PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: Provisional

Map date: 1951

Scale: 1:10,560

Printed at: 1:10,560



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

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

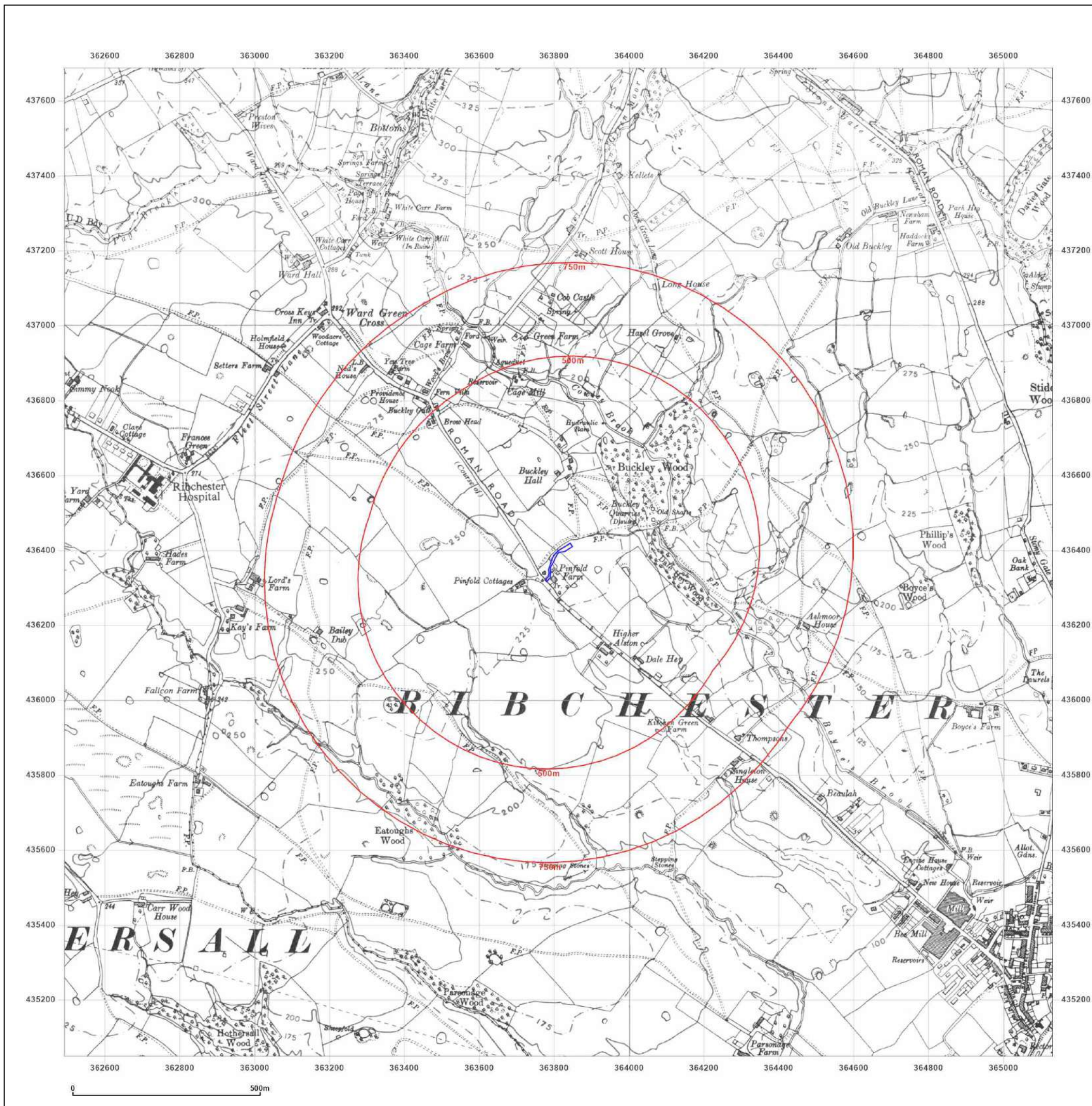


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:

PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: Provisional

Map date: 1951

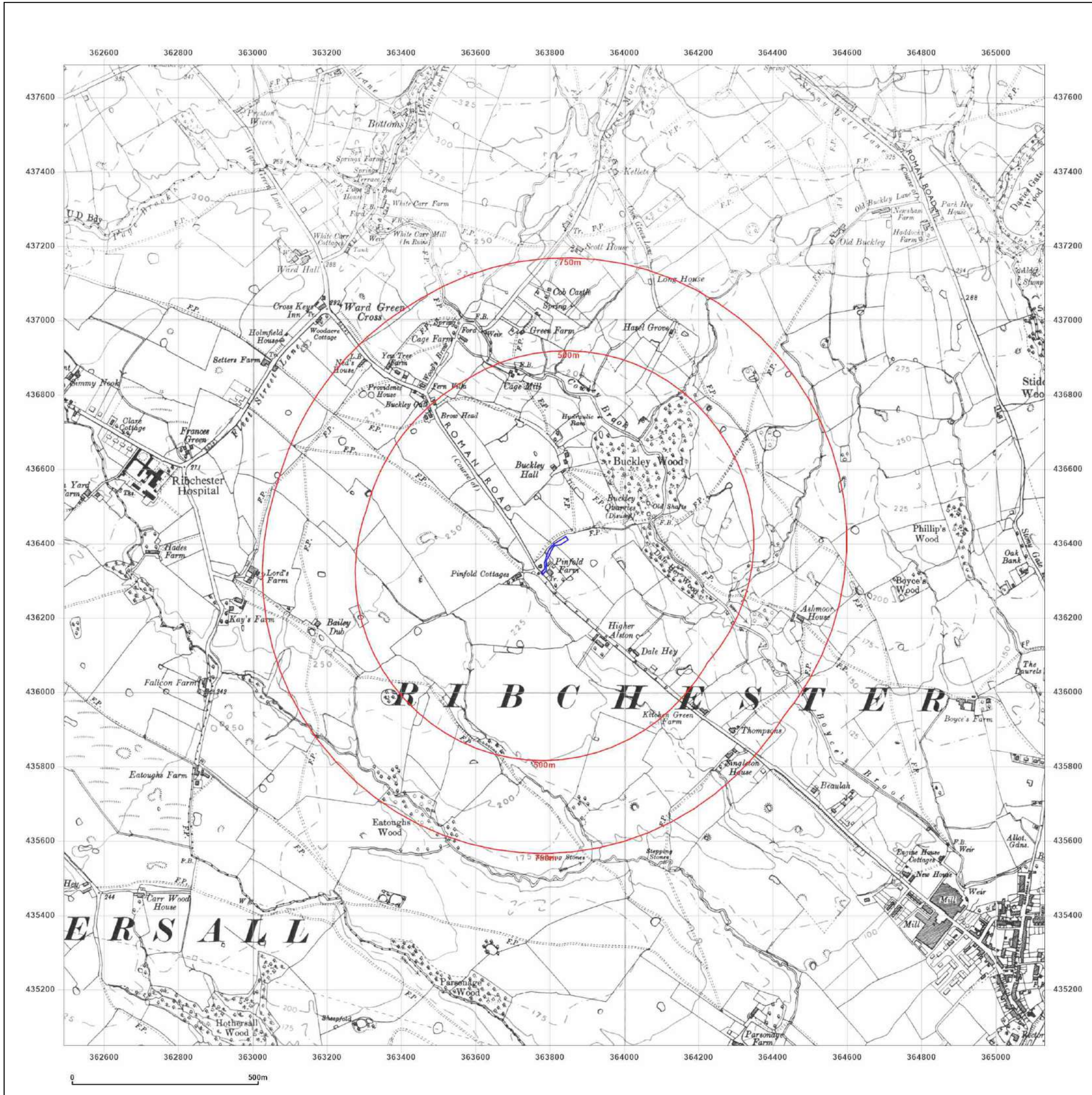
Scale: 1:10,560

Printed at: 1:10,560



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

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



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

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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

Site Details:

PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: Provisional

Map date: 1969

Scale: 1:10,560

Printed at: 1:10,560



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

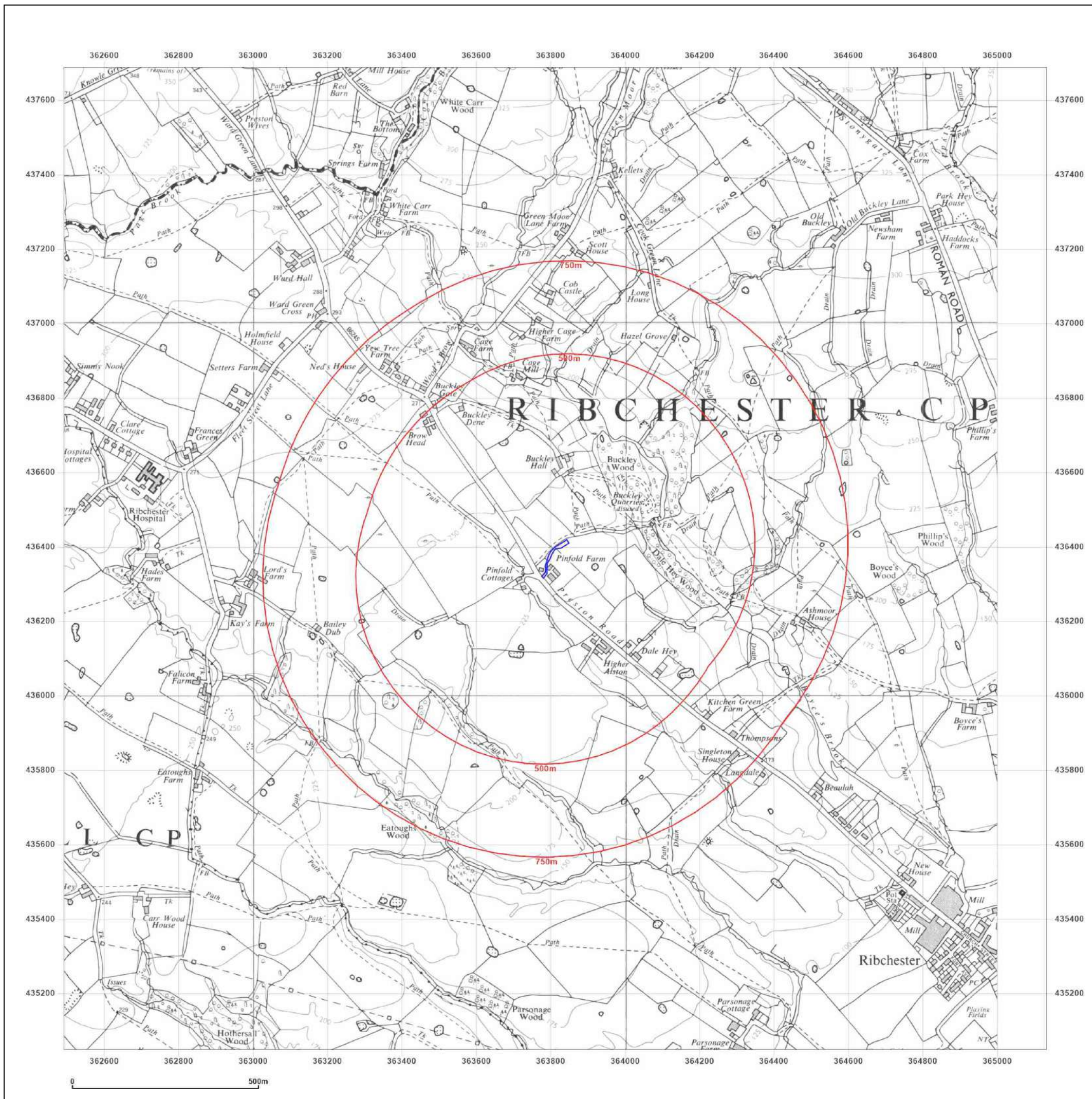


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:

PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: National Grid

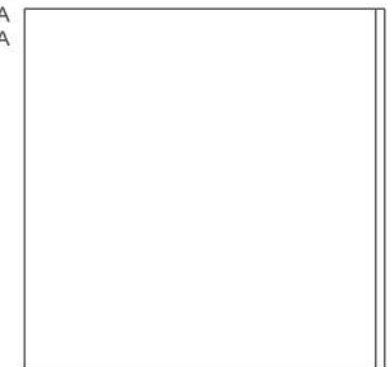
Map date: 1994

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1967
 Revised 1994
 Edition N/A
 Copyright N/A
 Levelled N/A

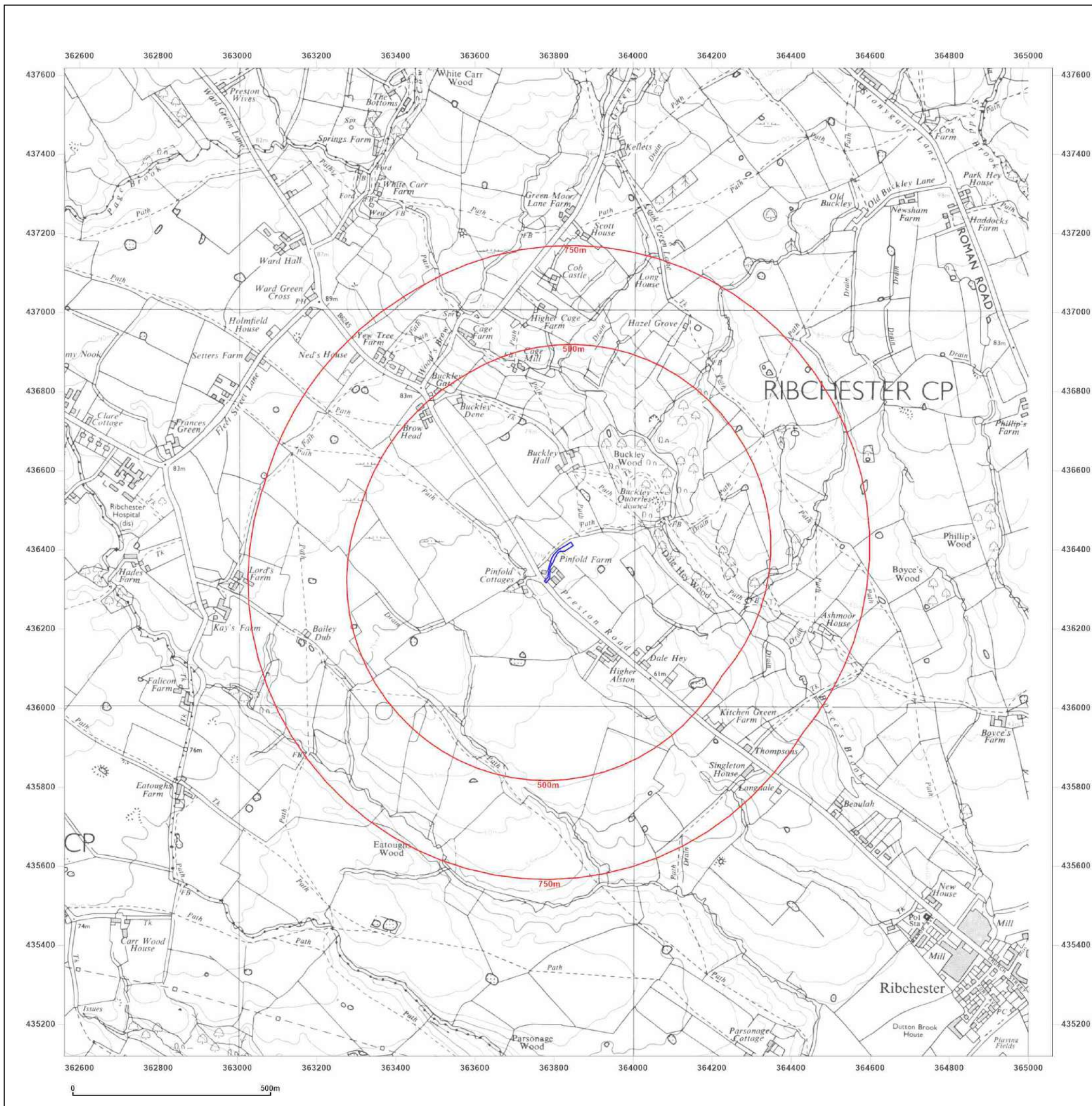


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024


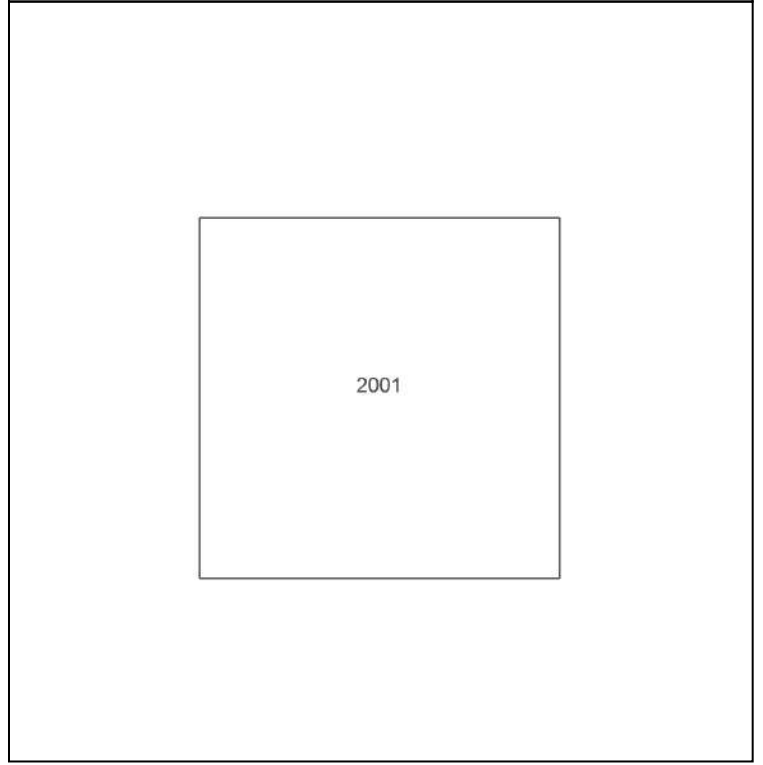
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:
 PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

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

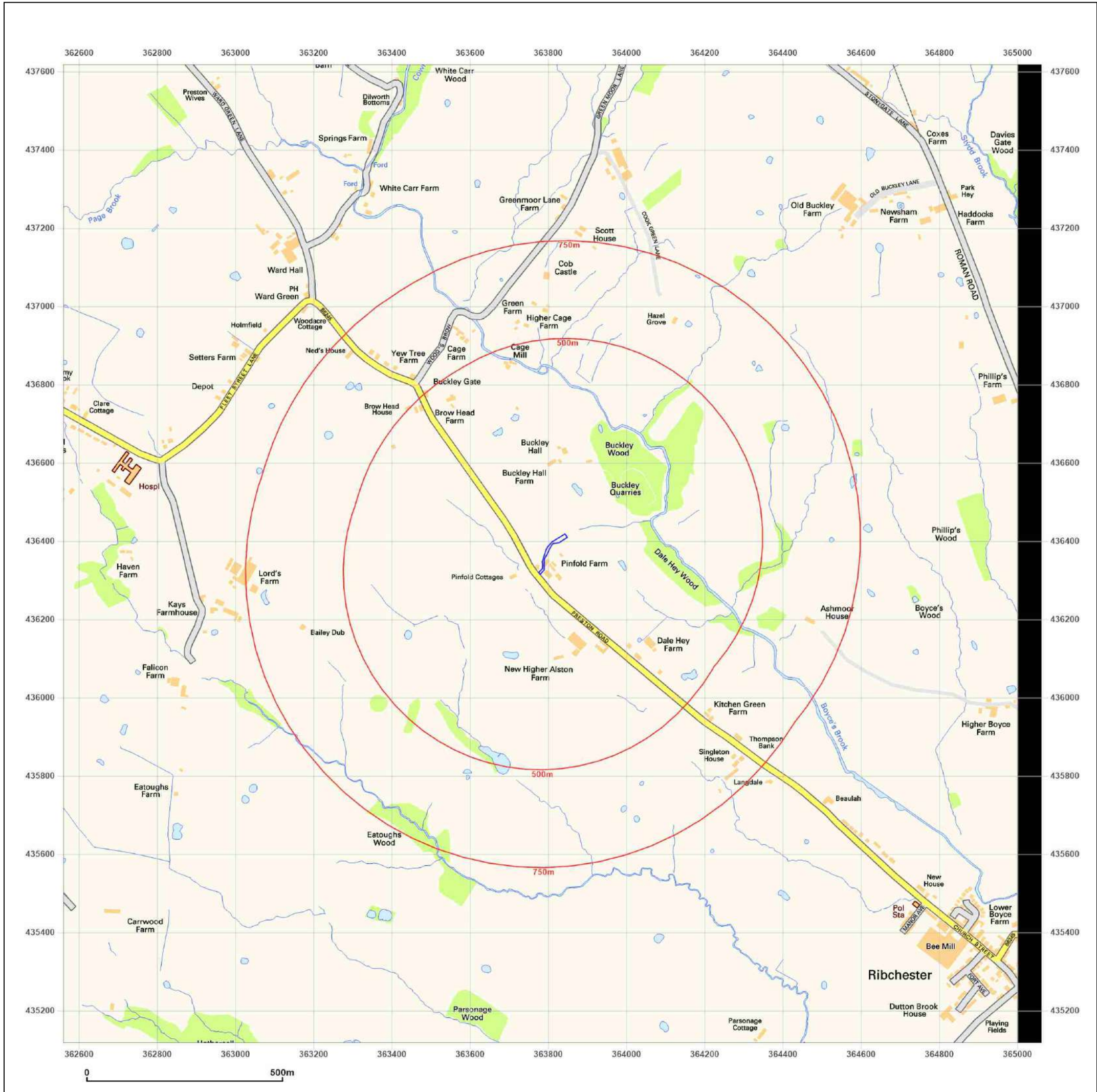



Powered by  Produced by Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



0 500m

Site Details:

PINFOLD FARM, RIBCHESTER

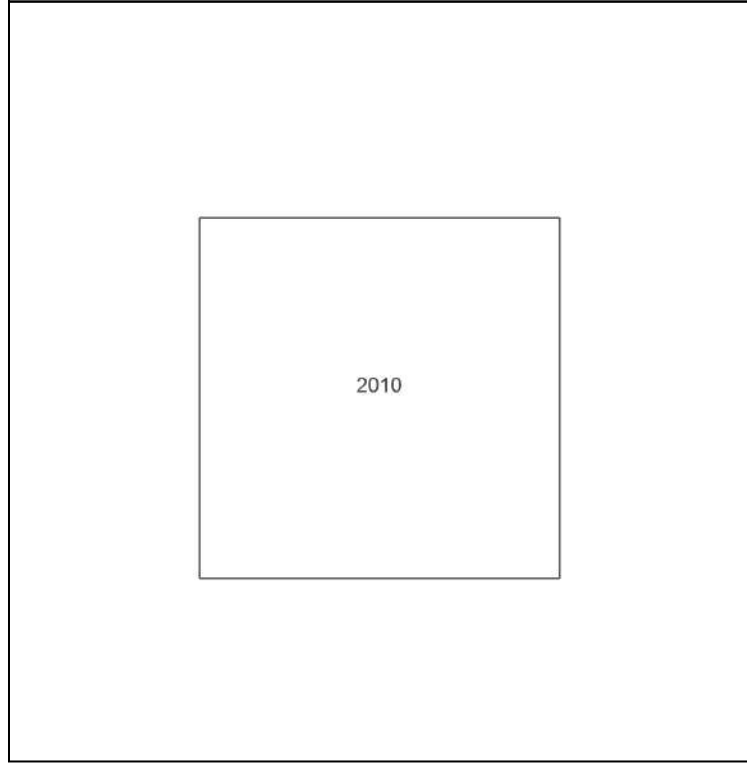
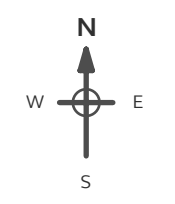
Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

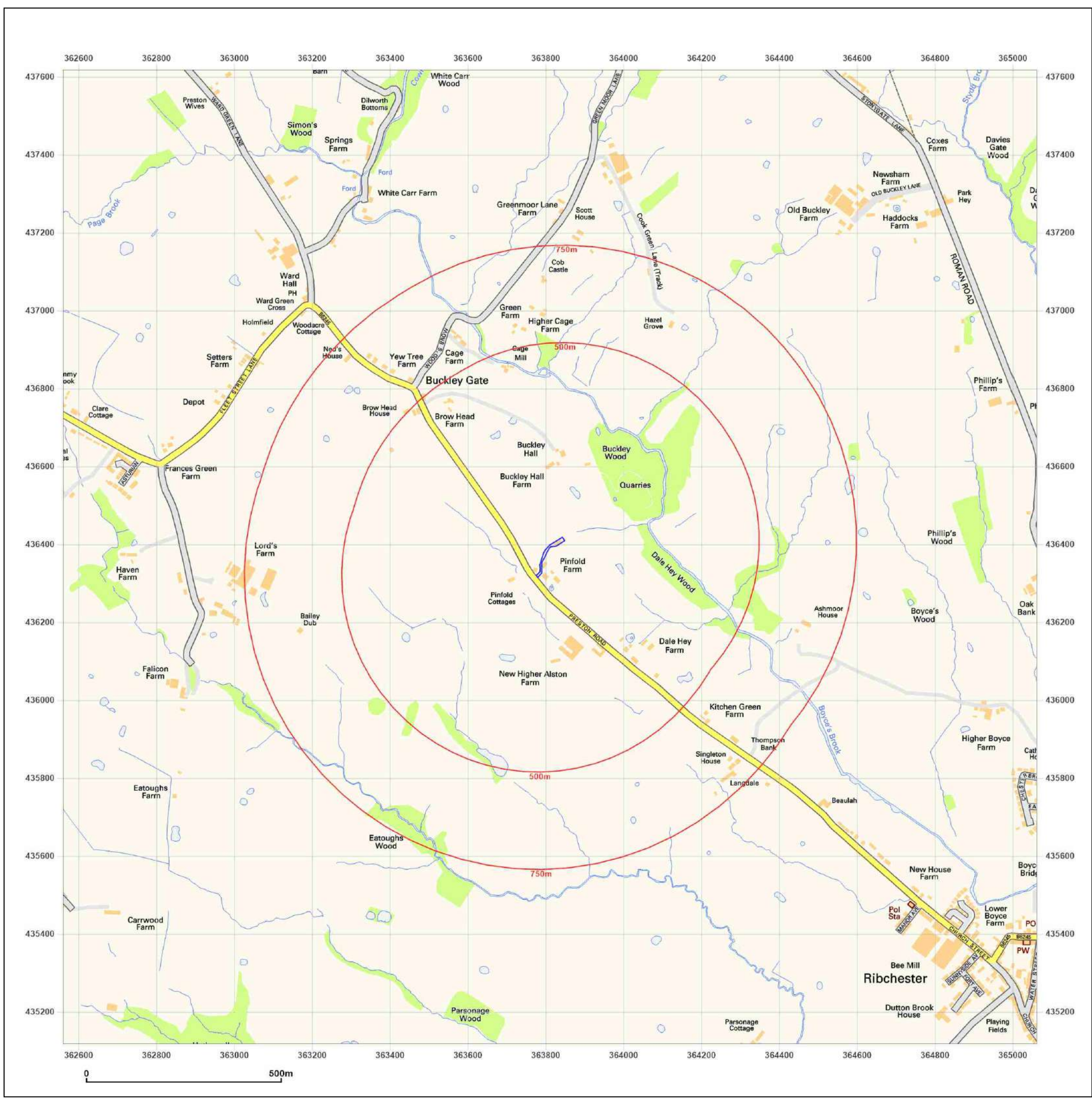


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:
 PINFOLD FARM, RIBCHESTER

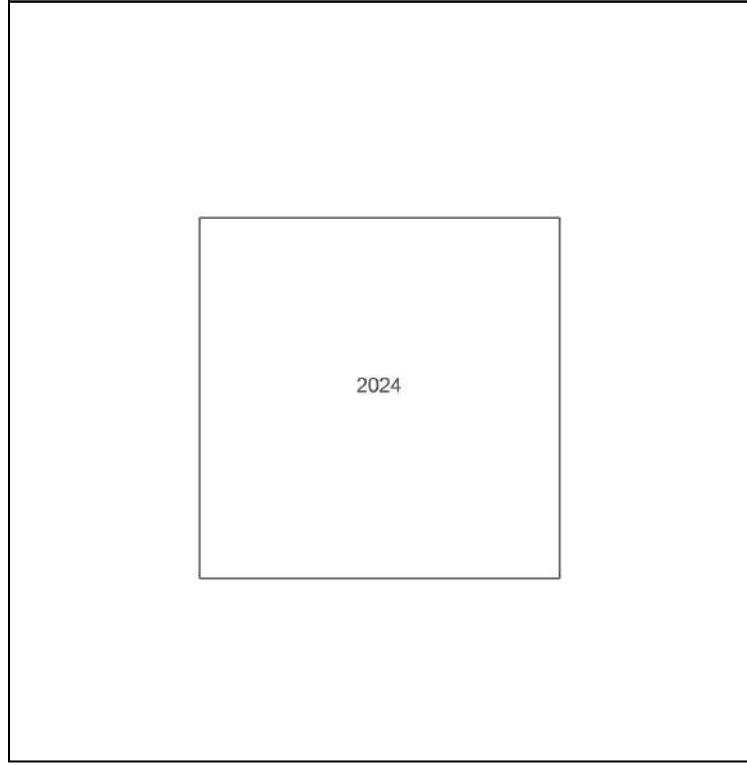
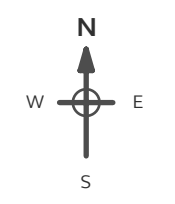
Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: National Grid

Map date: 2024

Scale: 1:10,000

Printed at: 1:10,000

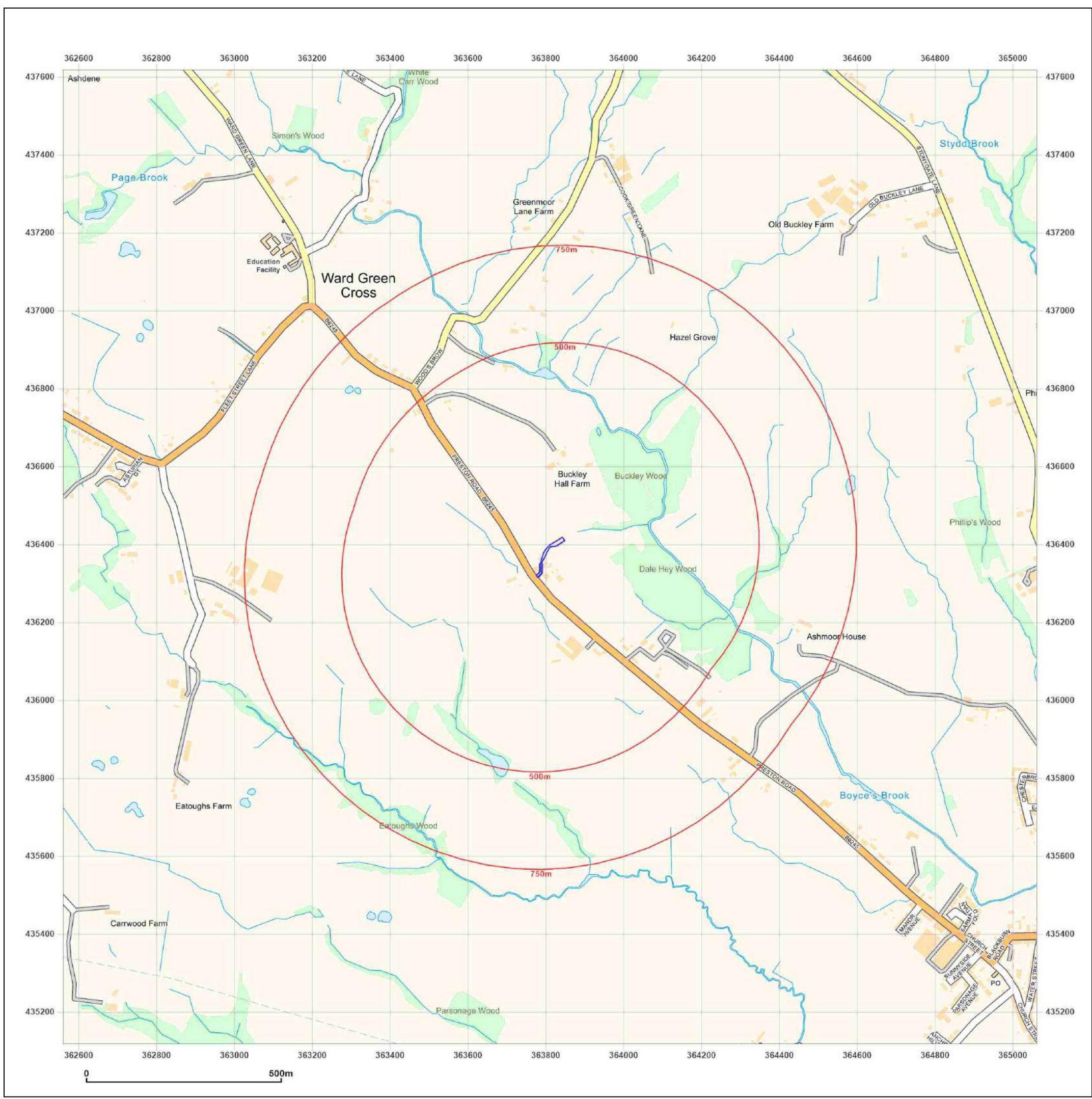


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:

PINFOLD FARM, RIBCHESTER

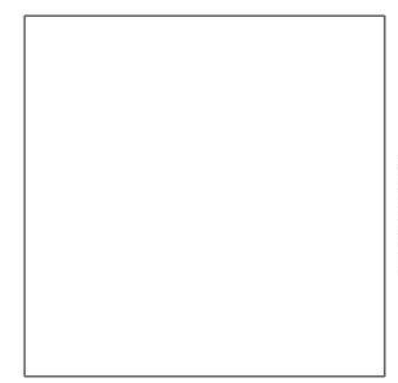
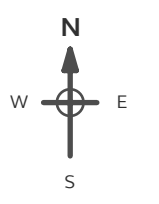
Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: County Series

Map date: 1892

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1892
 Revised 1892
 Edition N/A
 Copyright N/A
 Levelled N/A

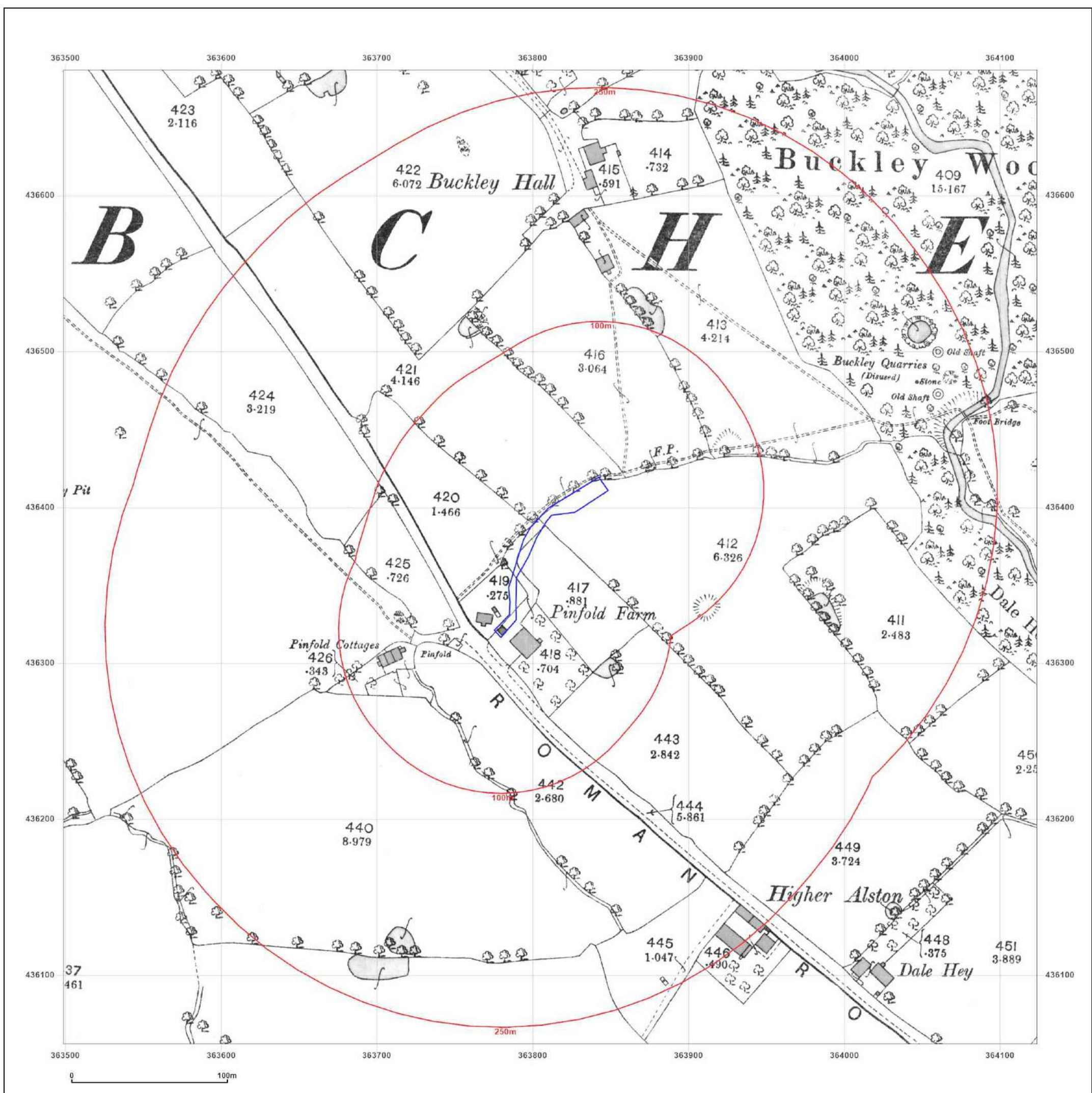


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:

PINFOLD FARM, RIBCHESTER

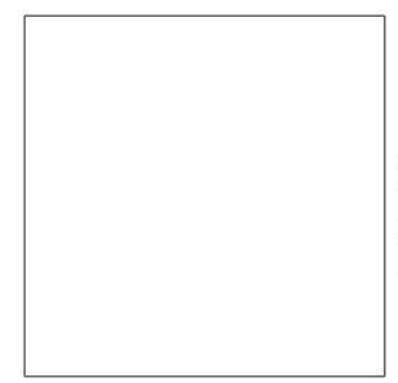
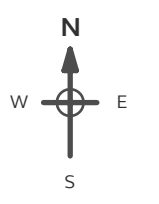
Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: County Series

Map date: 1912

Scale: 1:2,500

Printed at: 1:2,500



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

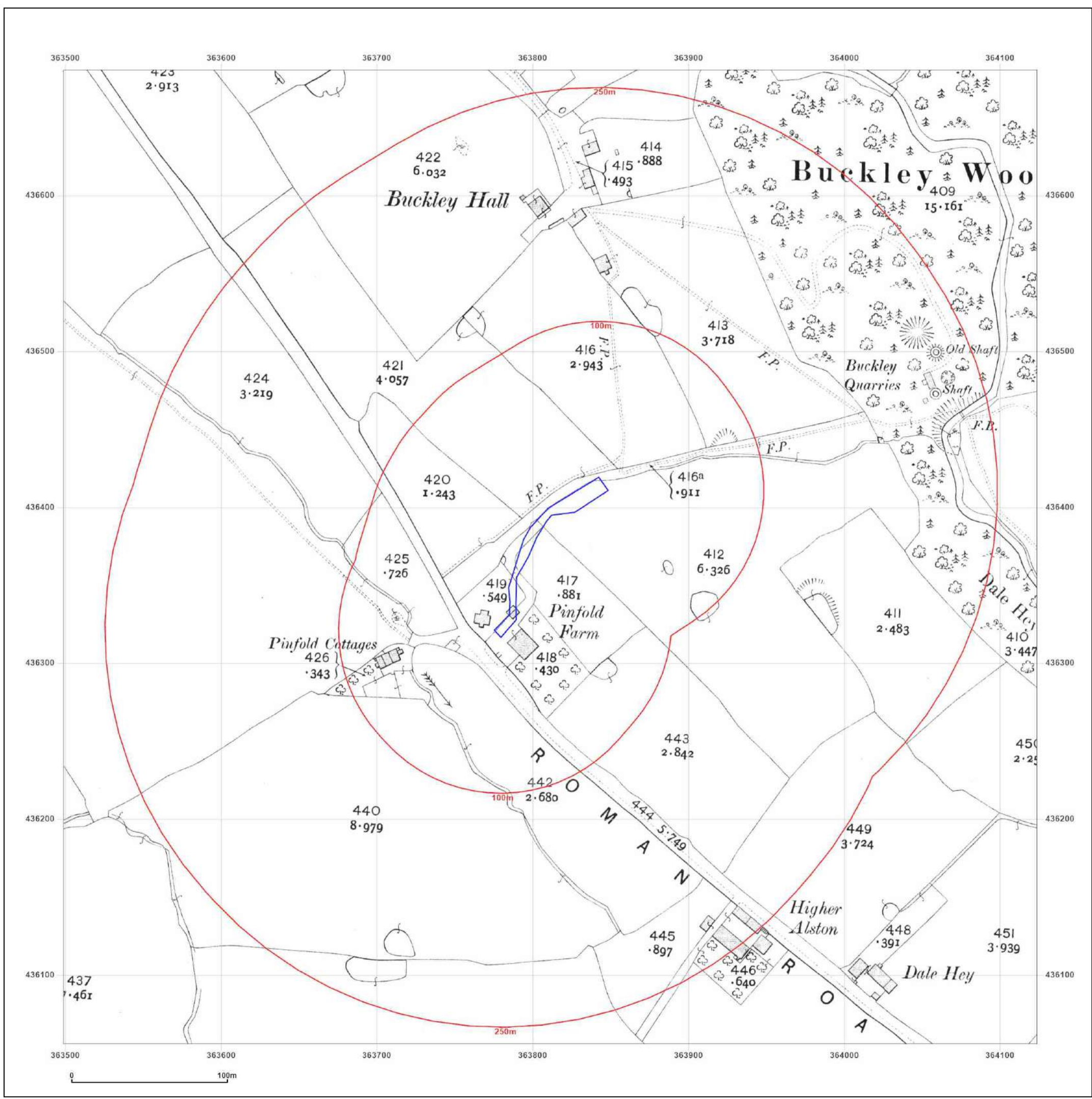


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

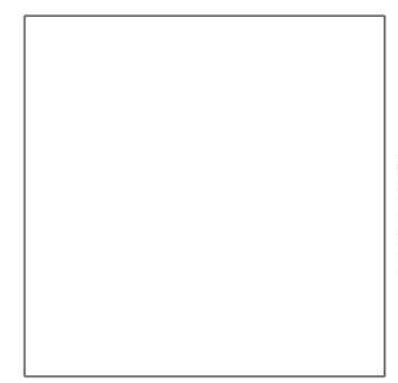
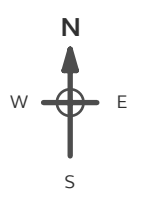
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:
 PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: County Series
Map date: 1932
Scale: 1:2,500
Printed at: 1:2,500



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

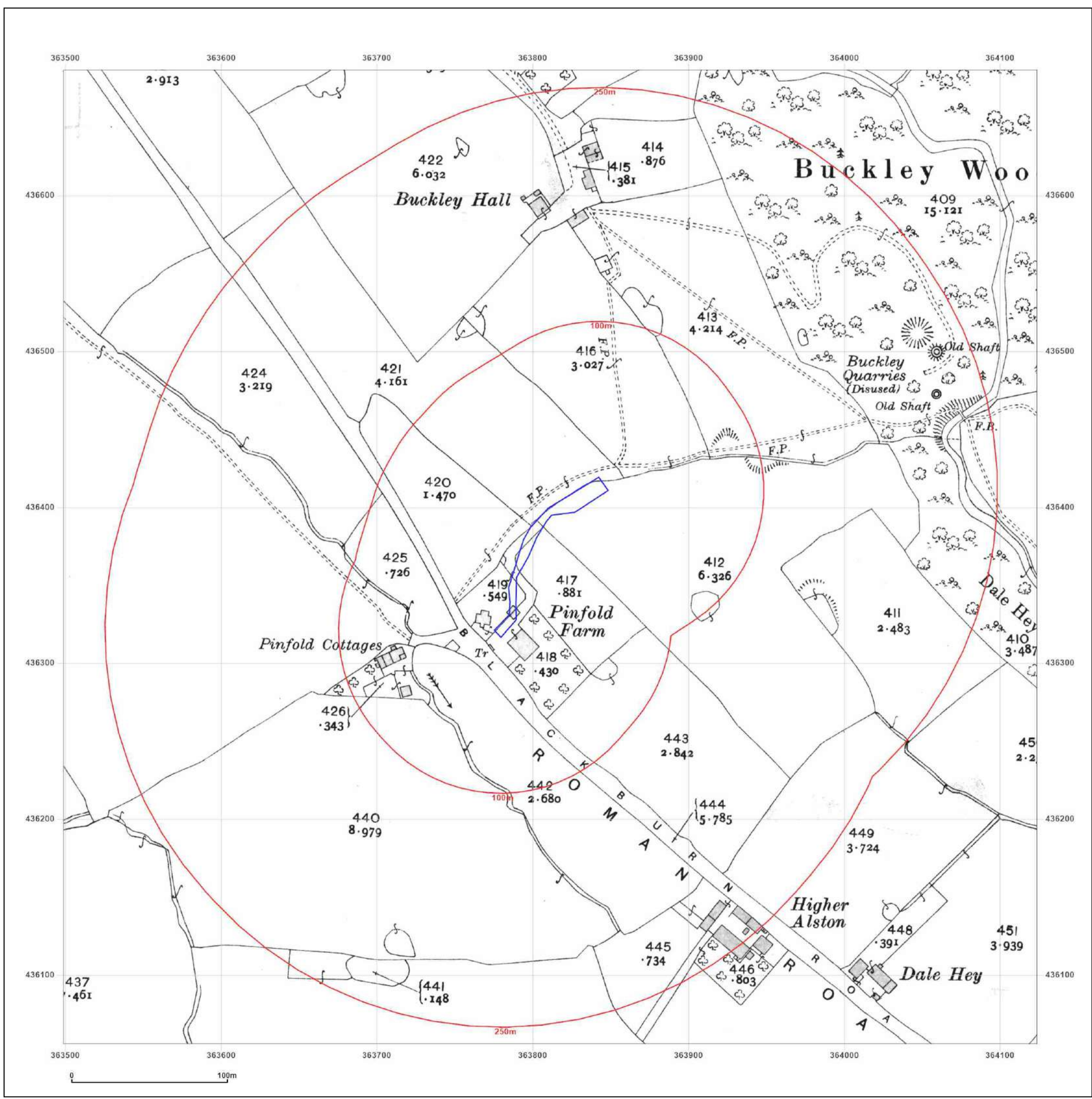


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

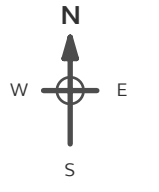
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



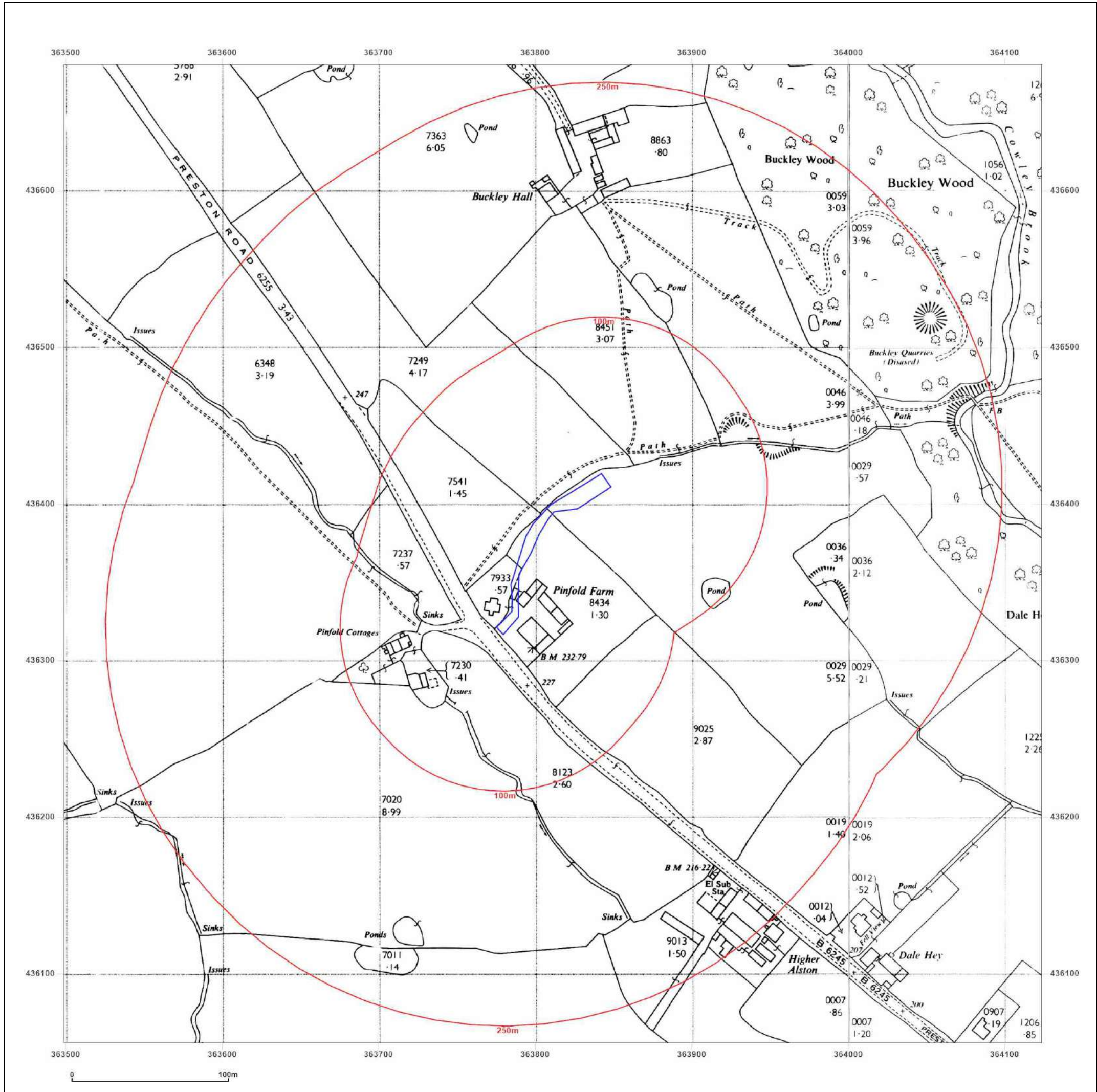
Site Details:
 PINFOLD FARM, RIBCHESTER

Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: National Grid
Map date: 1967
Scale: 1:2,500
Printed at: 1:2,500



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



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

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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

Site Details:

PINFOLD FARM, RIBCHESTER

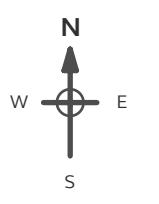
Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: National Grid

Map date: 1967

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1967
 Revised 1967
 Edition N/A
 Copyright 1967
 Levelled 1961

Surveyed 1967
 Revised 1967
 Edition N/A
 Copyright 1967
 Levelled 1961

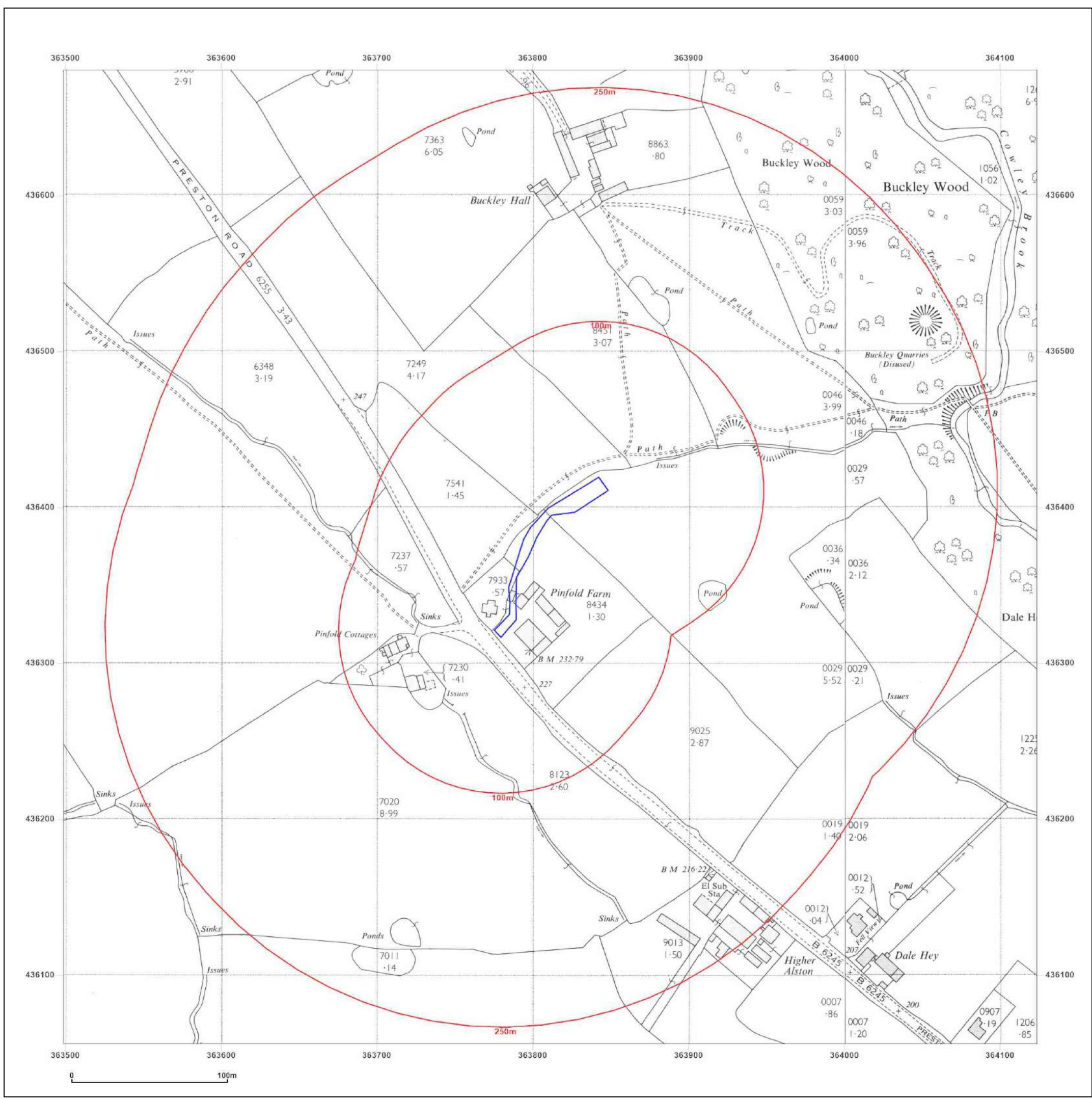


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:

PINFOLD FARM, RIBCHESTER

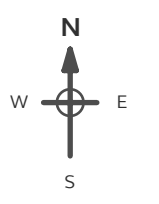
Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: National Grid

Map date: 1994

Scale: 1:2,500

Printed at: 1:2,500



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

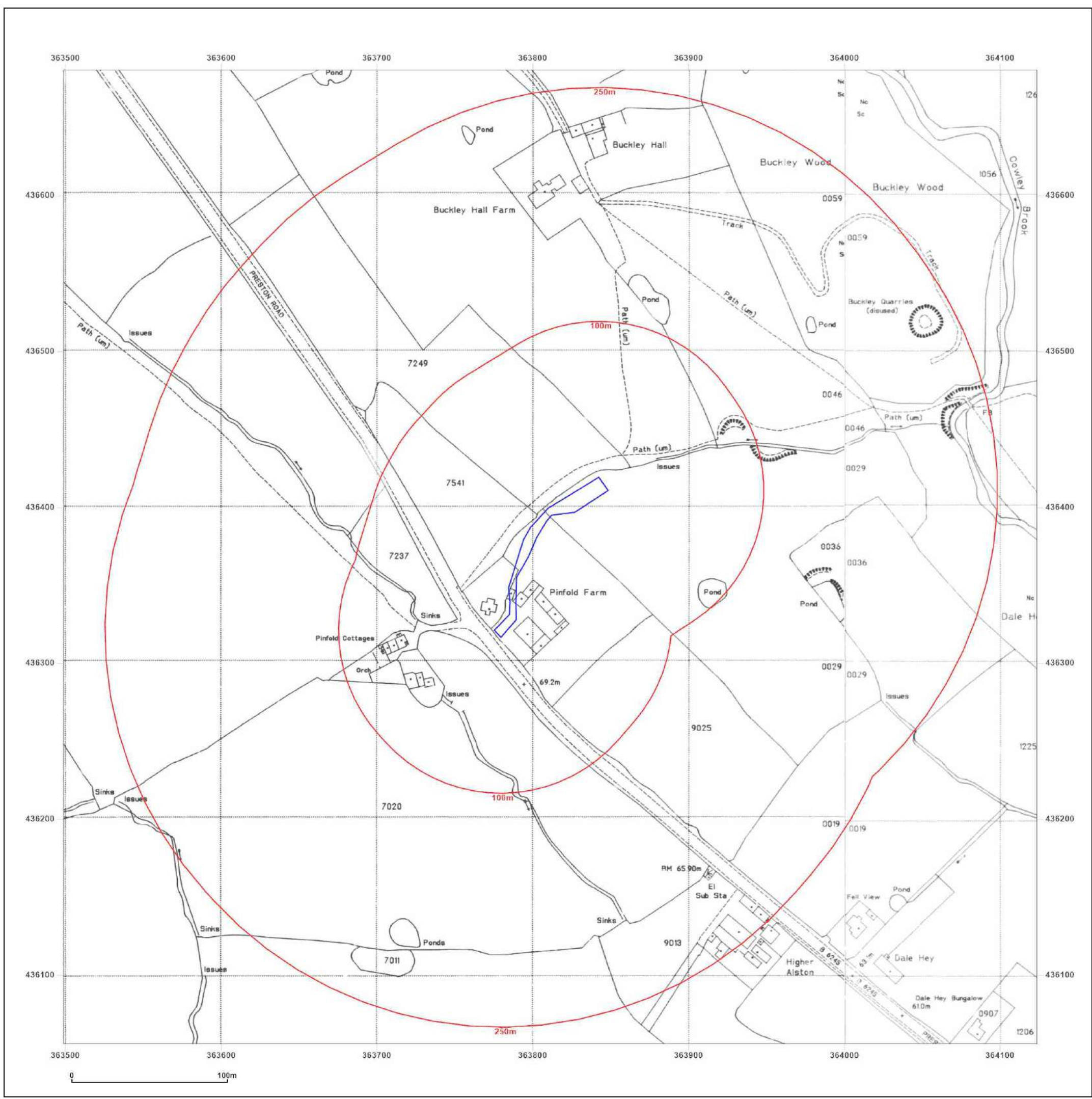


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



Site Details:

PINFOLD FARM, RIBCHESTER

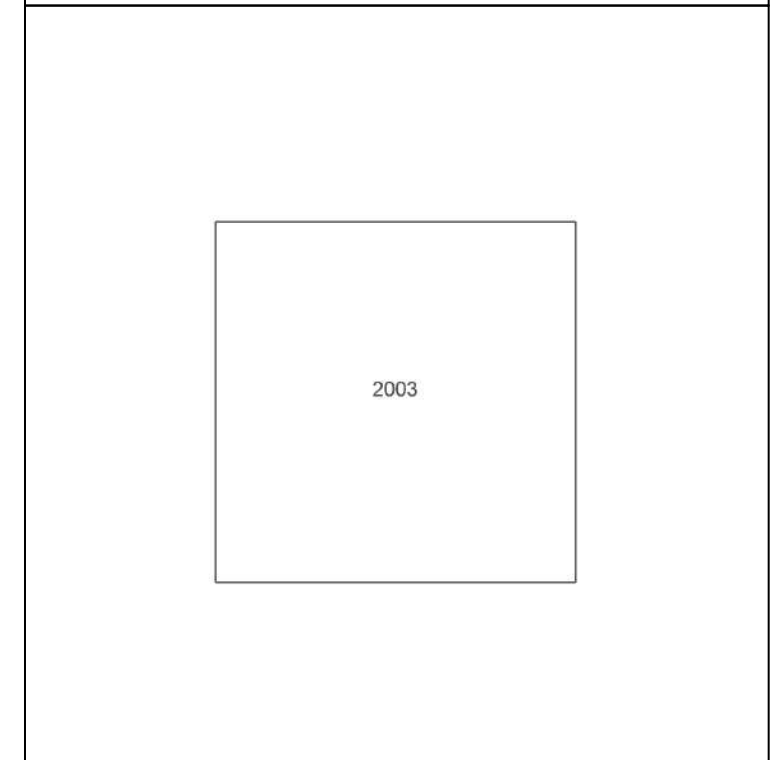
Client Ref: 8278-24080-AH
Report Ref: GS-KK8-NCR-AB7-JDO
Grid Ref: 363811, 436368

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

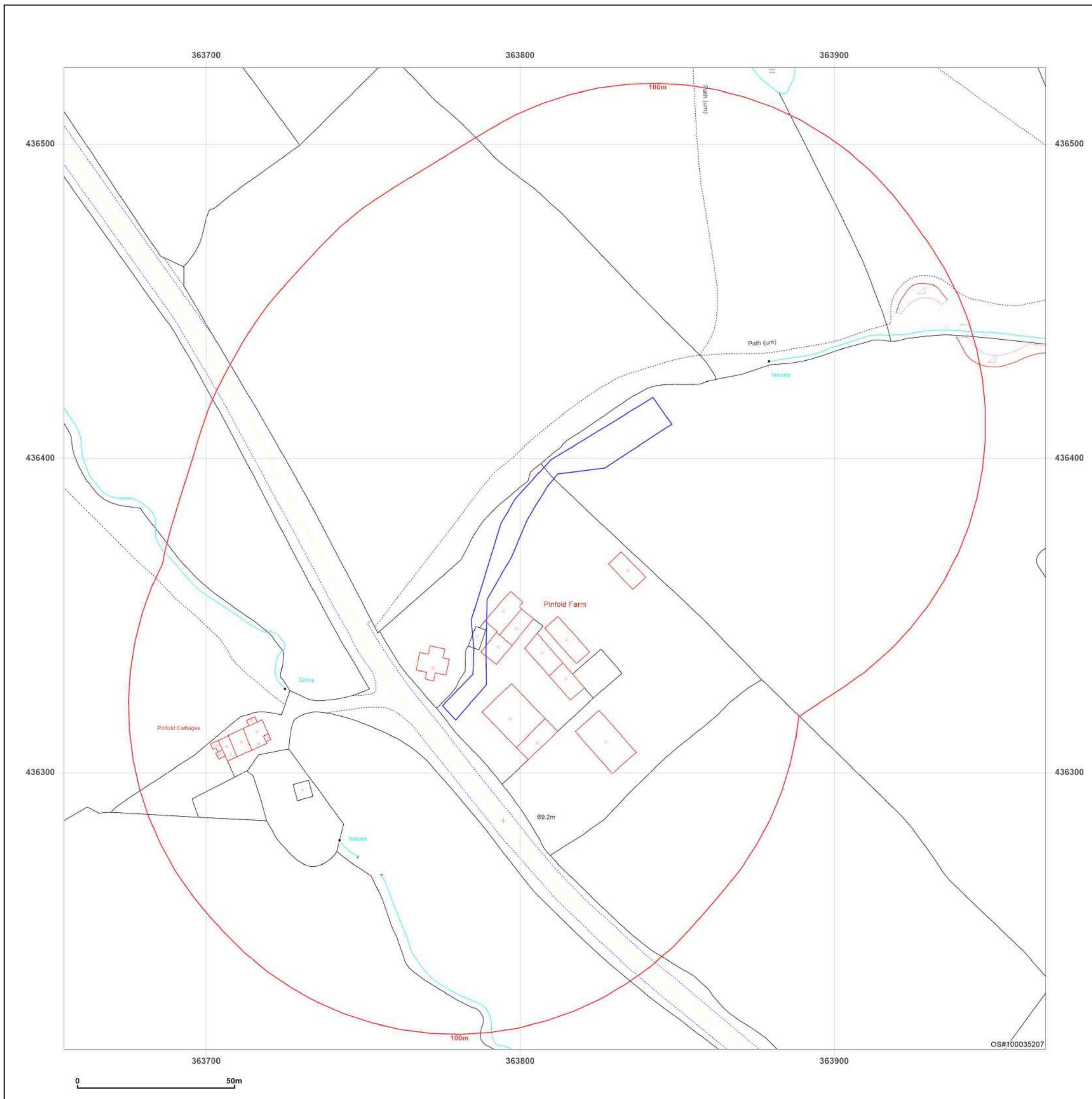


Produced by
 Groundsure Insights
 T: 08444 159000
 E: info@groundsure.com
 W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 09 July 2024

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



APPENDIX B

Enviro+GeoInsight Report

PINFOLD FARM, RIBCHESTER

Order Details

Date: 09/07/2024
Your ref: 8278-24080-AH
Our Ref: GS-JW8-CLQ-CD9-J99

Site Details

Location: 363809 436380
Area: 0.08 ha
Authority: [Ribble Valley Borough Council](#) ↗



[Summary of findings](#)

[p. 2 >](#)

[Aerial image](#)

[p. 9 >](#)

[OS MasterMap site plan](#)

[p.14 >](#)

[Insight User Guide](#) ↗

Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	15	16	-
17	1.2	Historical tanks	0	0	0	0	-
17 >	1.3 >	Historical energy features >	0	0	2	0	-
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	0	17	23	-
21	2.2	Historical tanks	0	0	0	0	-
21 >	2.3 >	Historical energy features >	0	0	2	0	-
22	2.4	Historical petrol stations	0	0	0	0	-
22	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
23	3.1	Active or recent landfill	0	0	0	0	-
23	3.2	Historical landfill (BGS records)	0	0	0	0	-
24	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
24	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
24	3.5	Historical waste sites	0	0	0	0	-
24	3.6	Licensed waste sites	0	0	0	0	-
24 >	3.7 >	Waste exemptions >	0	3	0	0	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
26 >	4.1 >	Recent industrial land uses >	0	0	2	-	-
27	4.2	Current or recent petrol stations	0	0	0	0	-
27	4.3	Electricity cables	0	0	0	0	-
27	4.4	Gas pipelines	0	0	0	0	-
27	4.5	Sites determined as Contaminated Land	0	0	0	0	-



27	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
28	4.7	Regulated explosive sites	0	0	0	0	-
28	4.8	Hazardous substance storage/usage	0	0	0	0	-
28	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
28	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
28	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
29	4.12	Radioactive Substance Authorisations	0	0	0	0	-
29	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
29	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
29	4.15	Pollutant release to public sewer	0	0	0	0	-
29	4.16	List 1 Dangerous Substances	0	0	0	0	-
30	4.17	List 2 Dangerous Substances	0	0	0	0	-
30	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
30	4.19	Pollution inventory substances	0	0	0	0	-
30	4.20	Pollution inventory waste transfers	0	0	0	0	-
30	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
31 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
33 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
34 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
35	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
35	5.5	Groundwater vulnerability- local information	None (within 0m)				
36	5.6	Groundwater abstractions	0	0	0	0	0
36	5.7	Surface water abstractions	0	0	0	0	0
36	5.8	Potable abstractions	0	0	0	0	0
36	5.9	Source Protection Zones	0	0	0	0	-
37	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
38 >	6.1 >	Water Network (OS MasterMap) >	0	3	8	-	-



39 >	6.2 >	Surface water features >	0	2	4	-	-
40 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
40 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
40 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
42	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
42	7.2	Historical Flood Events	0	0	0	-	-
42	7.3	Flood Defences	0	0	0	-	-
43	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
43	7.5	Flood Storage Areas	0	0	0	-	-
44	7.6	Flood Zone 2	None (within 50m)				
44	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
45 >	8.1 >	Surface water flooding >	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding >					
47 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
48	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
49	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
49	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
49	10.4	Special Protection Areas (SPA)	0	0	0	0	0
49	10.5	National Nature Reserves (NNR)	0	0	0	0	0
50	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
50 >	10.7 >	Designated Ancient Woodland >	0	0	1	0	6
50	10.8	Biosphere Reserves	0	0	0	0	0
51	10.9	Forest Parks	0	0	0	0	0
51	10.10	Marine Conservation Zones	0	0	0	0	0
51	10.11	Green Belt	0	0	0	0	0
51	10.12	Proposed Ramsar sites	0	0	0	0	0



51	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
52	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
52	10.15	Nitrate Sensitive Areas	0	0	0	0	0
52	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
53 >	10.17 >	<u>SSSI Impact Risk Zones ></u>	1	-	-	-	-
54	10.18	SSSI Units	0	0	0	0	0
Page	Section	<u>Visual and cultural designations ></u>	On site	0-50m	50-250m	250-500m	500-2000m
55	11.1	World Heritage Sites	0	0	0	-	-
56	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
56	11.3	National Parks	0	0	0	-	-
56 >	11.4 >	<u>Listed Buildings ></u>	0	0	1	-	-
57	11.5	Conservation Areas	0	0	0	-	-
57	11.6	Scheduled Ancient Monuments	0	0	0	-	-
57	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	<u>Agricultural designations ></u>	On site	0-50m	50-250m	250-500m	500-2000m
58 >	12.1 >	<u>Agricultural Land Classification ></u>	Grade 3 (within 250m)				
59	12.2	Open Access Land	0	0	0	-	-
59	12.3	Tree Felling Licences	0	0	0	-	-
59 >	12.4 >	<u>Environmental Stewardship Schemes ></u>	0	1	0	-	-
59	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	<u>Habitat designations ></u>	On site	0-50m	50-250m	250-500m	500-2000m
60 >	13.1 >	<u>Priority Habitat Inventory ></u>	0	0	3	-	-
61	13.2	Habitat Networks	0	0	0	-	-
61	13.3	Open Mosaic Habitat	0	0	0	-	-
61	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	<u>Geology 1:10,000 scale ></u>	On site	0-50m	50-250m	250-500m	500-2000m
62 >	14.1 >	<u>10k Availability ></u>	Identified (within 500m)				
63	14.2	Artificial and made ground (10k)	0	0	0	0	-
64	14.3	Superficial geology (10k)	0	0	0	0	-



64	14.4	Landslip (10k)	0	0	0	0	-
65	14.5	Bedrock geology (10k)	0	0	0	0	-
65	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
66 >	15.1 >	50k Availability >	Identified (within 500m)				
67 >	15.2 >	Artificial and made ground (50k) >	0	0	1	0	-
68	15.3	Artificial ground permeability (50k)	0	0	-	-	-
69 >	15.4 >	Superficial geology (50k) >	1	0	1	2	-
70 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
70 >	15.6 >	Landslip (50k) >	0	0	2	3	-
71	15.7	Landslip permeability (50k)	None (within 50m)				
72 >	15.8 >	Bedrock geology (50k) >	1	0	0	0	-
73 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
73	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
74	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence >					
75 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
76 >	17.2 >	Running sands >	Very low (within 50m)				
77 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
78 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
79 >	17.5 >	Landslides >	Very low (within 50m)				
80 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
82 >	18.1 >	BritPits >	0	0	1	0	-
83 >	18.2 >	Surface ground workings >	0	0	21	-	-
84 >	18.3 >	Underground workings >	0	0	5	0	0
84	18.4	Underground mining extents	0	0	0	0	-
85	18.5	Historical Mineral Planning Areas	0	0	0	0	-



85 >	18.6 >	Non-coal mining >	1	0	0	0	0
85	18.7	JPB mining areas	None (within 0m)				
85	18.8	The Coal Authority non-coal mining	0	0	0	0	-
86	18.9	Researched mining	0	0	0	0	-
86	18.10	Mining record office plans	0	0	0	0	-
86	18.11	BGS mine plans	0	0	0	0	-
86	18.12	Coal mining	None (within 0m)				
87	18.13	Brine areas	None (within 0m)				
87	18.14	Gypsum areas	None (within 0m)				
87	18.15	Tin mining	None (within 0m)				
87	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
88	19.1	Natural cavities	0	0	0	0	-
88	19.2	Mining cavities	0	0	0	0	0
88	19.3	Reported recent incidents	0	0	0	0	-
88	19.4	Historical incidents	0	0	0	0	-
89	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
90 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
92 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	0	-	-	-
92	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
92	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
93	22.1	Underground railways (London)	0	0	0	-	-
93	22.2	Underground railways (Non-London)	0	0	0	-	-
93	22.3	Railway tunnels	0	0	0	-	-
93	22.4	Historical railway and tunnel features	0	0	0	-	-
93	22.5	Royal Mail tunnels	0	0	0	-	-



94	22.6	Historical railways	0	0	0	-	-
94	22.7	Railways	0	0	0	-	-
94	22.8	Crossrail 1	0	0	0	0	-
94	22.9	Crossrail 2	0	0	0	0	-
94	22.10	HS2	0	0	0	0	-



Recent aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2024. All Rights Reserved.

Capture Date: 03/04/2023

Site Area: 0.08ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 9 July 2024

Recent site history - 2020 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2024. All Rights Reserved.

Capture Date: 16/04/2020

Site Area: 0.08ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 9 July 2024

Recent site history - 2017 aerial photograph



Capture Date: 03/04/2017

Site Area: 0.08ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 9 July 2024

Recent site history - 2013 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2024. All Rights Reserved.

Capture Date: 25/05/2013

Site Area: 0.08ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 9 July 2024

Recent site history - 2001 aerial photograph



Capture Date: 12/05/2001

Site Area: 0.08ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 9 July 2024

OS MasterMap site plan



Site Area: 0.08ha



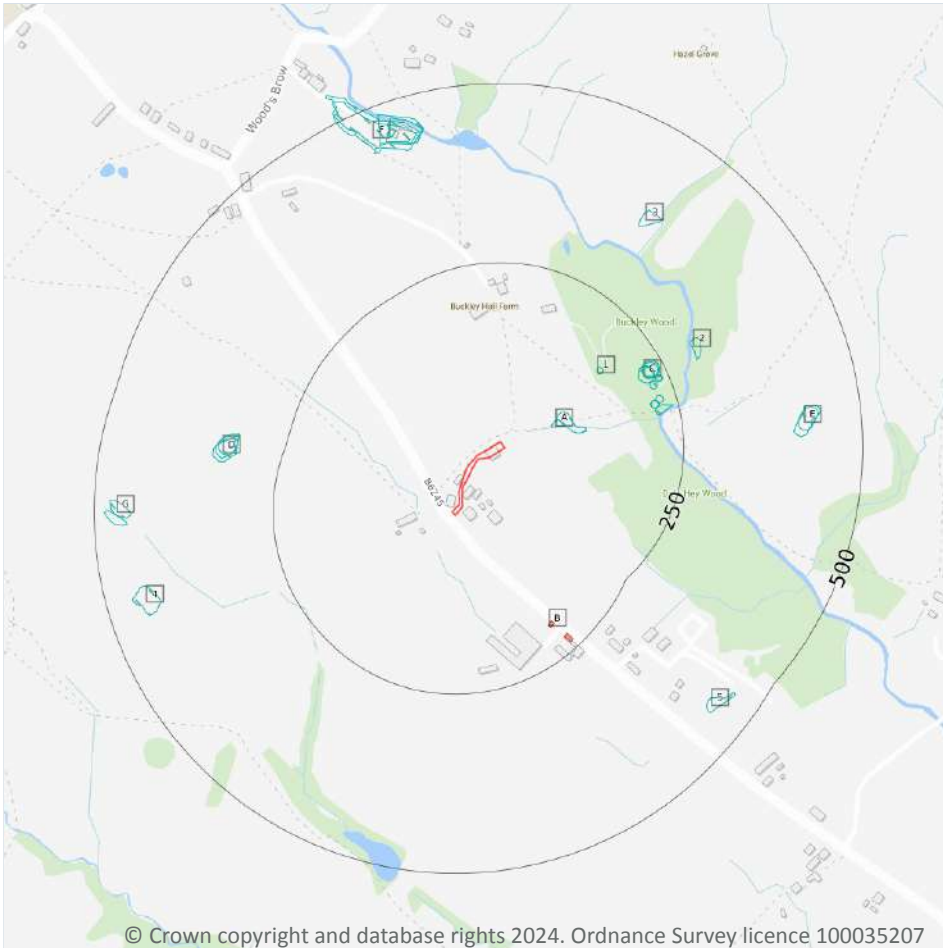
Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 9 July 2024

1 Past land use



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

1.1 Historical industrial land uses

Records within 500m **31**

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

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

ID	Location	Land use	Dates present	Group ID
A	71m NE	Unspecified Pit	1932	678167

ID	Location	Land use	Dates present	Group ID
A	83m NE	Unspecified Disused Quarries	1951	653808
1	167m NE	Unspecified Shafts	1847	685413
C	211m NE	Unspecified Quarries	1910	692043
C	211m NE	Unspecified Disused Quarries	1932	715418
C	213m E	Unspecified Old Shaft	1932	671721
C	213m E	Unspecified Shaft	1910	672845
C	217m E	Unspecified Quarries	1932	692016
C	219m NE	Unspecified Shafts	1847	685414
C	220m NE	Disused Quarries	1967	700399
C	220m NE	Unspecified Disused Quarries	1951 - 1994	720586
C	220m NE	Unspecified Old Shaft	1932	671722
C	221m E	Unspecified Old Shafts	1951	691229
C	231m NE	Unspecified Old Shafts	1951	691228
C	234m NE	Unspecified Pump	1847	691668
2	295m NE	Sandstone Quarries	1847	692668
D	312m W	Unspecified Pit	1910 - 1932	734124
D	314m W	Unspecified Pit	1951	724390
D	315m W	Unspecified Pit	1892	723856
3	358m NE	Unspecified Pit	1994	677763
E	404m E	Unspecified Pit	1932 - 1951	708160
E	412m E	Pits	1967	685015
4	426m SW	Unspecified Pit	1892 - 1951	712597
F	426m N	Unspecified Mill	1910 - 1932	790868
F	432m N	Unspecified Mill	1969 - 1994	755110
F	433m N	Unspecified Mill	1892	743274
F	434m N	Unspecified Mill	1951	723778
5	437m SE	Unspecified Pit	1910	676937
G	448m W	Unspecified Pit	1951	678172



ID	Location	Land use	Dates present	Group ID
F	451m N	Turning Mill	1847	679050
G	454m W	Unspecified Pit	1932	678168

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

2

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

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

ID	Location	Land use	Dates present	Group ID
B	200m SE	Electricity Substation	1967	49004
B	227m SE	Electricity Substation	1994	48997

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

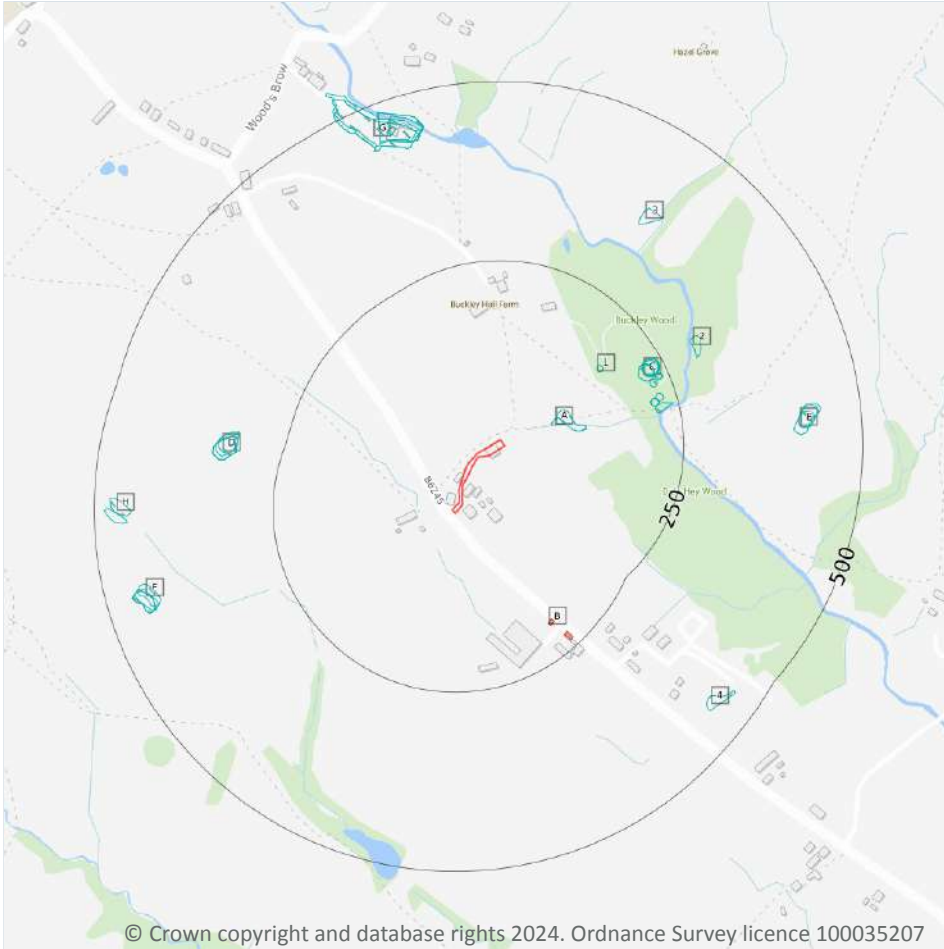
0

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

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



2 Past land use - un-grouped



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

2.1 Historical industrial land uses

Records within 500m **40**

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	71m NE	Unspecified Pit	1932	678167
A	83m NE	Unspecified Disused Quarries	1951	653808
1	167m NE	Unspecified Shafts	1847	685413

ID	Location	Land Use	Date	Group ID
C	211m NE	Unspecified Quarries	1910	692043
C	211m NE	Unspecified Disused Quarries	1932	715418
C	213m E	Unspecified Shaft	1910	672845
C	213m E	Unspecified Old Shaft	1932	671721
C	217m E	Unspecified Quarries	1932	692016
C	219m NE	Unspecified Shafts	1847	685414
C	220m NE	Disused Quarries	1967	700399
C	220m NE	Unspecified Disused Quarries	1951	720586
C	220m NE	Unspecified Disused Quarries	1969	720586
C	220m NE	Unspecified Disused Quarries	1994	720586
C	220m NE	Unspecified Old Shaft	1932	671722
C	221m E	Unspecified Old Shafts	1951	691229
C	231m NE	Unspecified Old Shafts	1951	691228
C	234m NE	Unspecified Pump	1847	691668
2	295m NE	Sandstone Quarries	1847	692668
D	312m W	Unspecified Pit	1932	734124
D	312m W	Unspecified Pit	1910	734124
D	314m W	Unspecified Pit	1951	724390
D	315m W	Unspecified Pit	1892	723856
3	358m NE	Unspecified Pit	1994	677763
E	404m E	Unspecified Pit	1932	708160
E	412m E	Pits	1967	685015
E	412m E	Unspecified Pit	1951	708160
F	426m SW	Unspecified Pit	1951	712597
G	426m N	Unspecified Mill	1932	790868
G	426m N	Unspecified Mill	1910	790868
F	430m SW	Unspecified Pit	1892	712597
G	432m N	Unspecified Mill	1969	755110



ID	Location	Land Use	Date	Group ID
G	432m N	Unspecified Mill	1994	755110
G	433m N	Unspecified Mill	1892	743274
G	434m N	Unspecified Mill	1951	723778
F	436m W	Unspecified Pit	1932	712597
F	436m W	Unspecified Pit	1910	712597
4	437m SE	Unspecified Pit	1910	676937
H	448m W	Unspecified Pit	1951	678172
G	451m N	Turning Mill	1847	679050
H	454m W	Unspecified Pit	1932	678168

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

0

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'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

2

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
B	200m SE	Electricity Substation	1967	49004
B	227m SE	Electricity Substation	1994	48997

This data is sourced from Ordnance Survey / Groundsure.



2.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

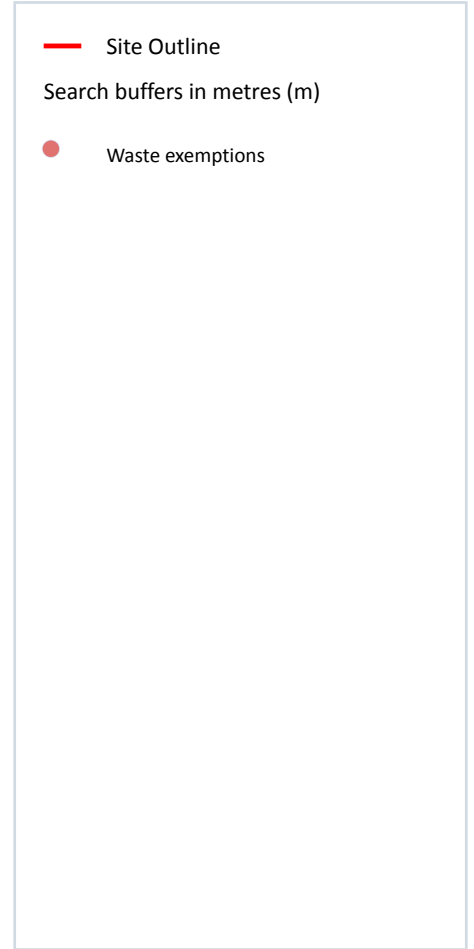
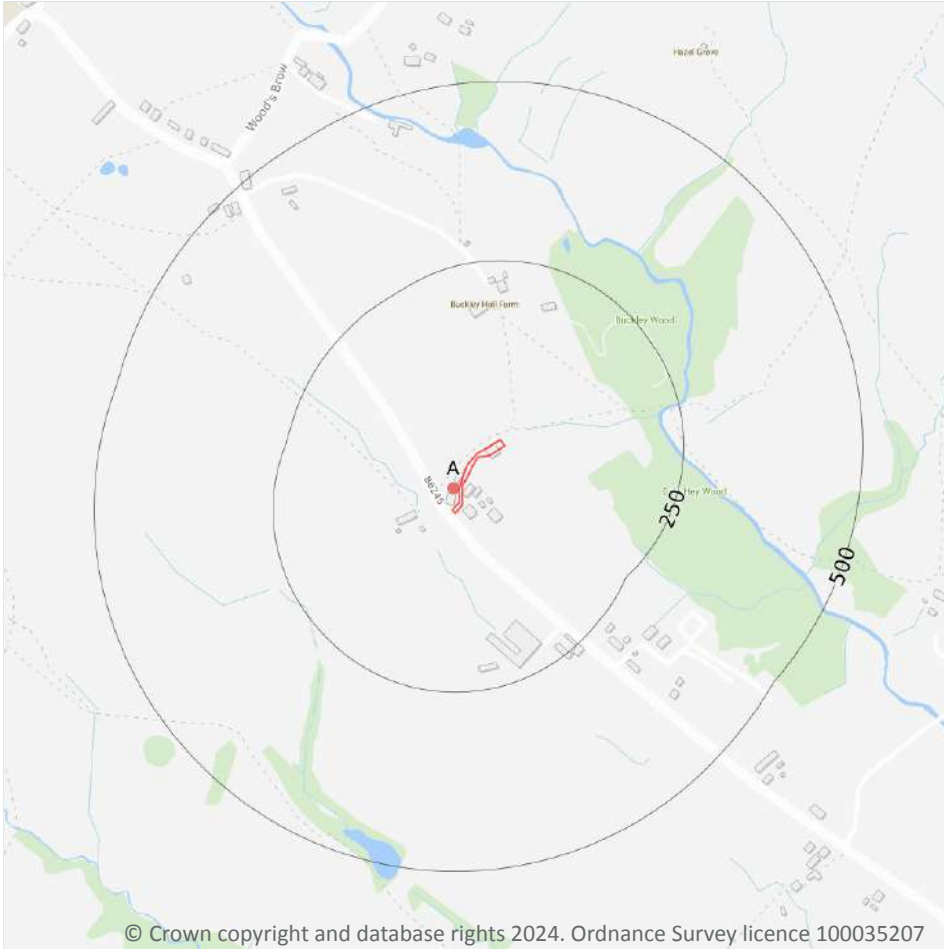
0

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

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m

0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m

0

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

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

3.5 Historical waste sites

Records within 500m

0

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

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

3.6 Licensed waste sites

Records within 500m

0

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

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

3.7 Waste exemptions

Records within 500m

3

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 23](#) >

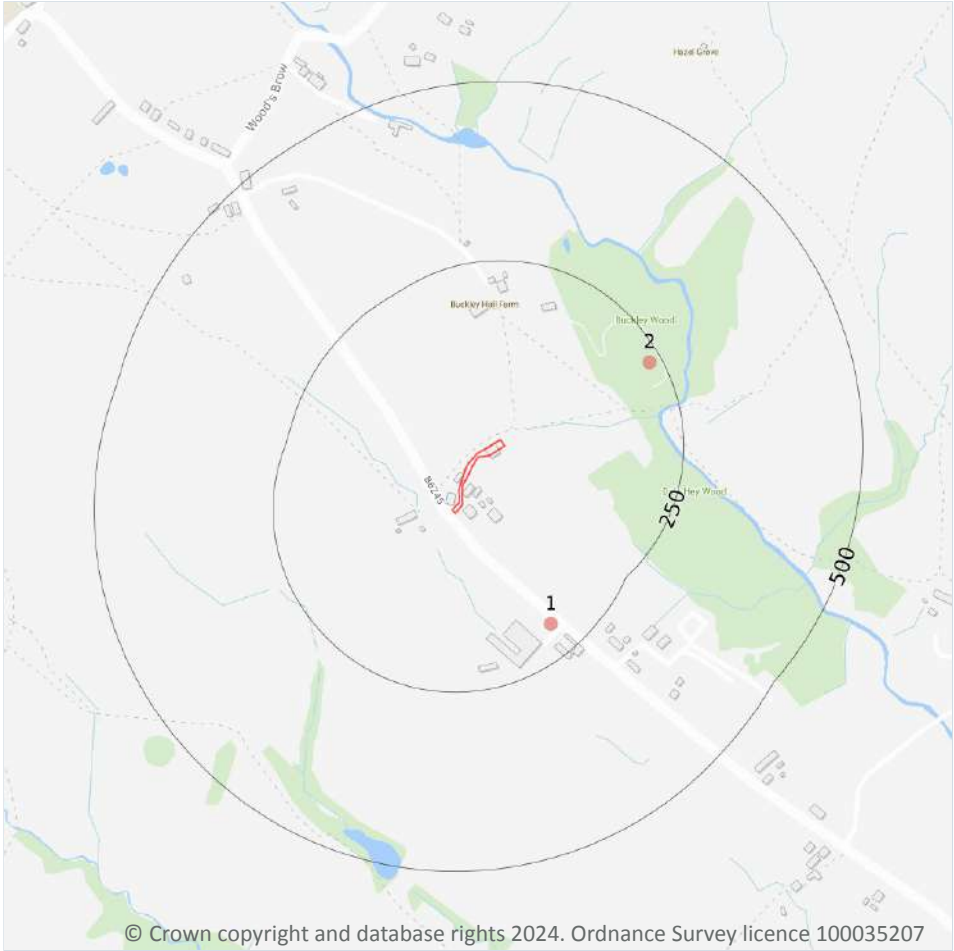


ID	Location	Site	Reference	Category	Sub-Category	Description
A	9m SW	Pinfold Farm Preston Road Preston Lancashire Pr3 3yd	EPR/YH0477ST /A001	Disposing of waste exemption	Agricultural waste only	Burning waste in the open
A	9m SW	Pinfold Farm Preston Road Preston Lancashire Pr3 3yd	EPR/YH0477ST /A001	Using waste exemption	Agricultural waste only	Spreading waste on agricultural land to confer benefit
A	9m SW	Pinfold Farm Preston Road Preston Lancashire Pr3 3yd	EPR/YH0477ST /A001	Using waste exemption	Agricultural waste only	Use of waste in construction

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

© Crown copyright and database rights 2024. Ordnance Survey licence 100035207

4.1 Recent industrial land uses

Records within 250m **2**

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 26](#) >

ID	Location	Company	Address	Activity	Category
1	204m SE	Electricity Sub Station	Lancashire, PR3	Electrical Features	Infrastructure and Facilities
2	233m NE	Buckley Quarries (Disused)	Lancashire, PR3	Unspecified Quarries Or Mines	Extractive Industries

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

0

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

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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

4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m

0

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

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



4.17 List 2 Dangerous Substances

Records within 500m

0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m

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

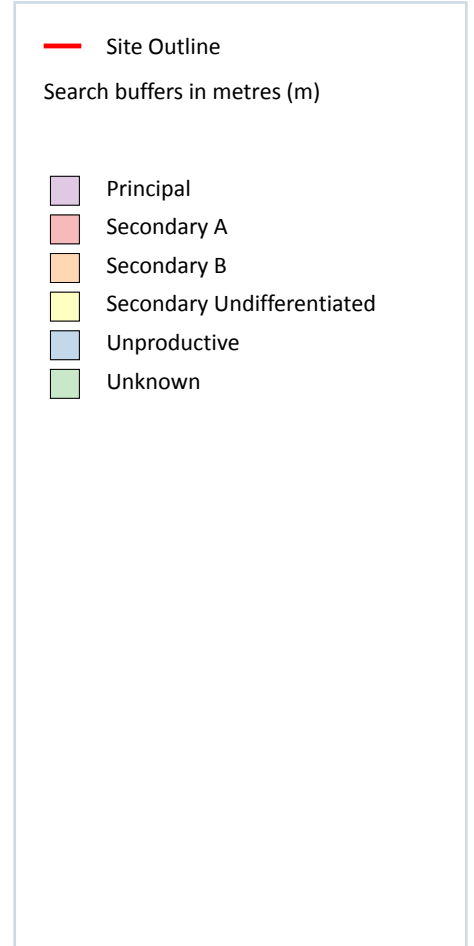
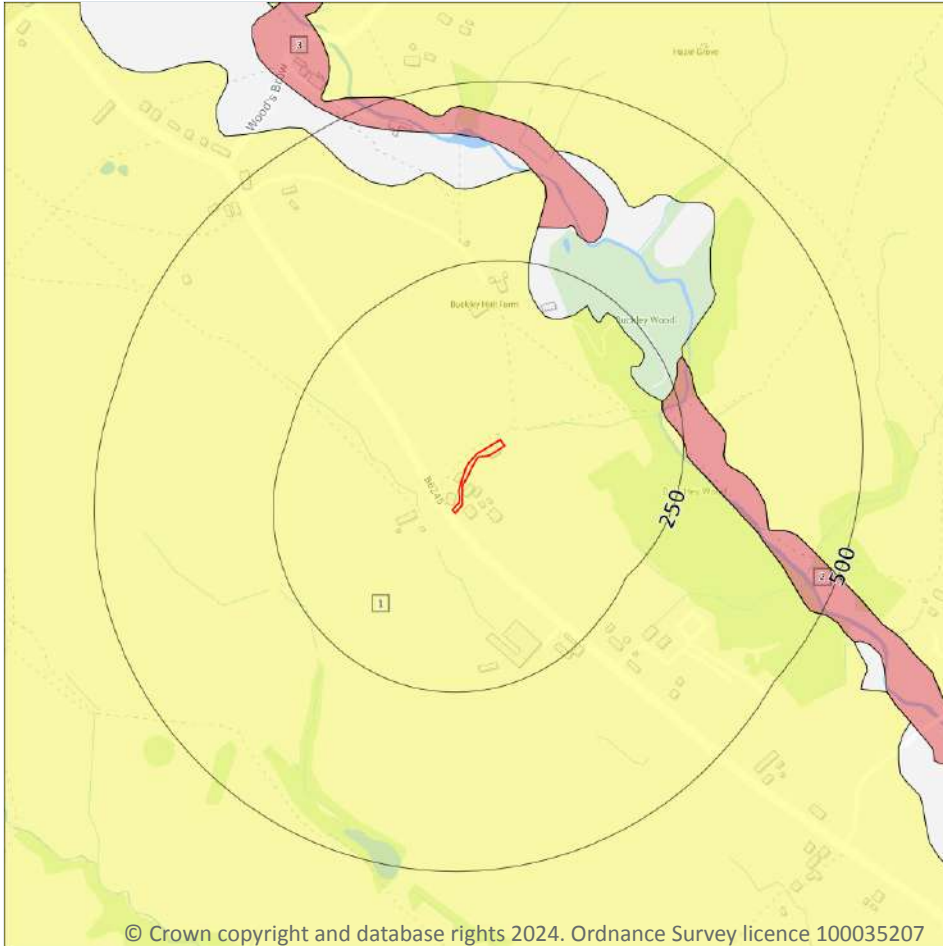
0

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



© Crown copyright and database rights 2024. Ordnance Survey licence 100035207

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 31](#) >

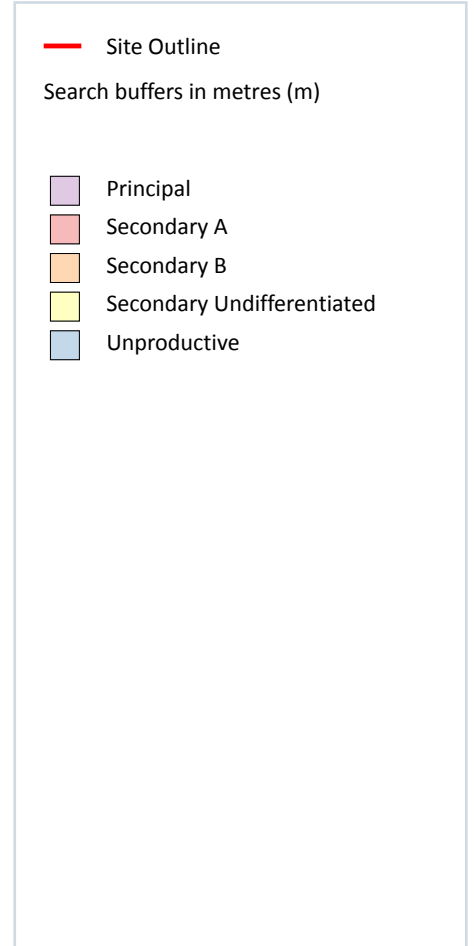
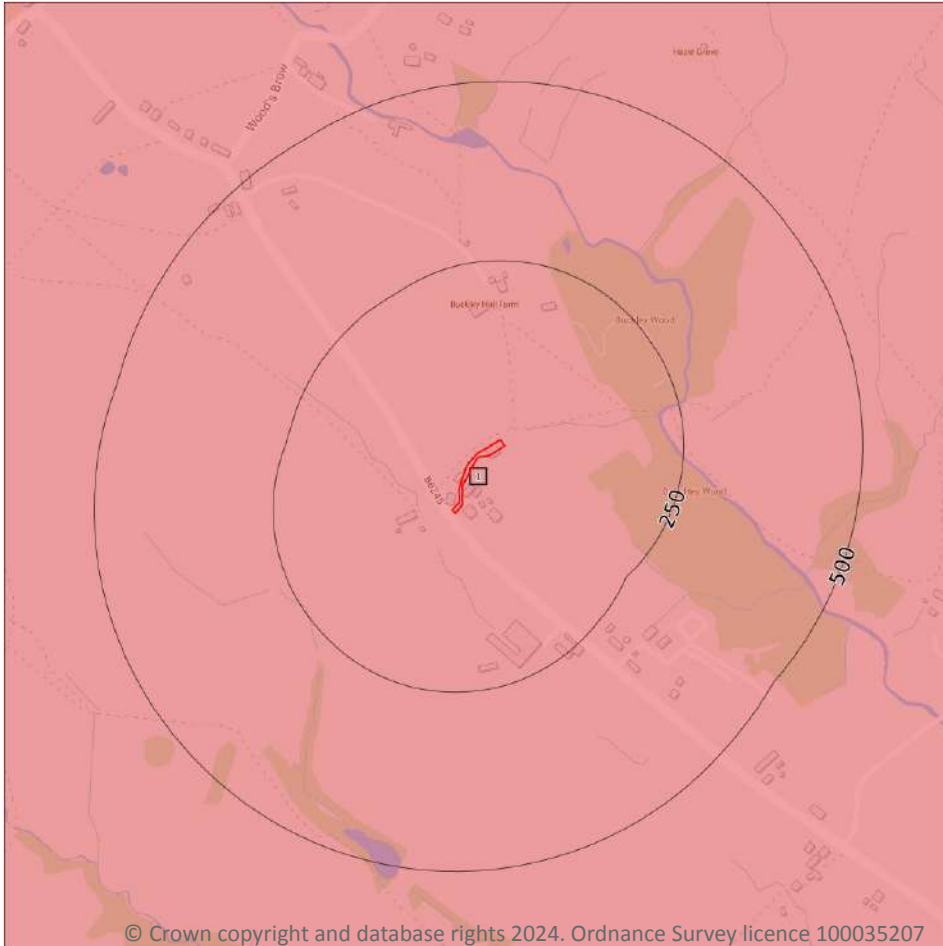
ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	226m 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	301m NE	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



© Crown copyright and database rights 2024. Ordnance Survey licence 100035207

5.2 Bedrock aquifer

Records within 500m

1

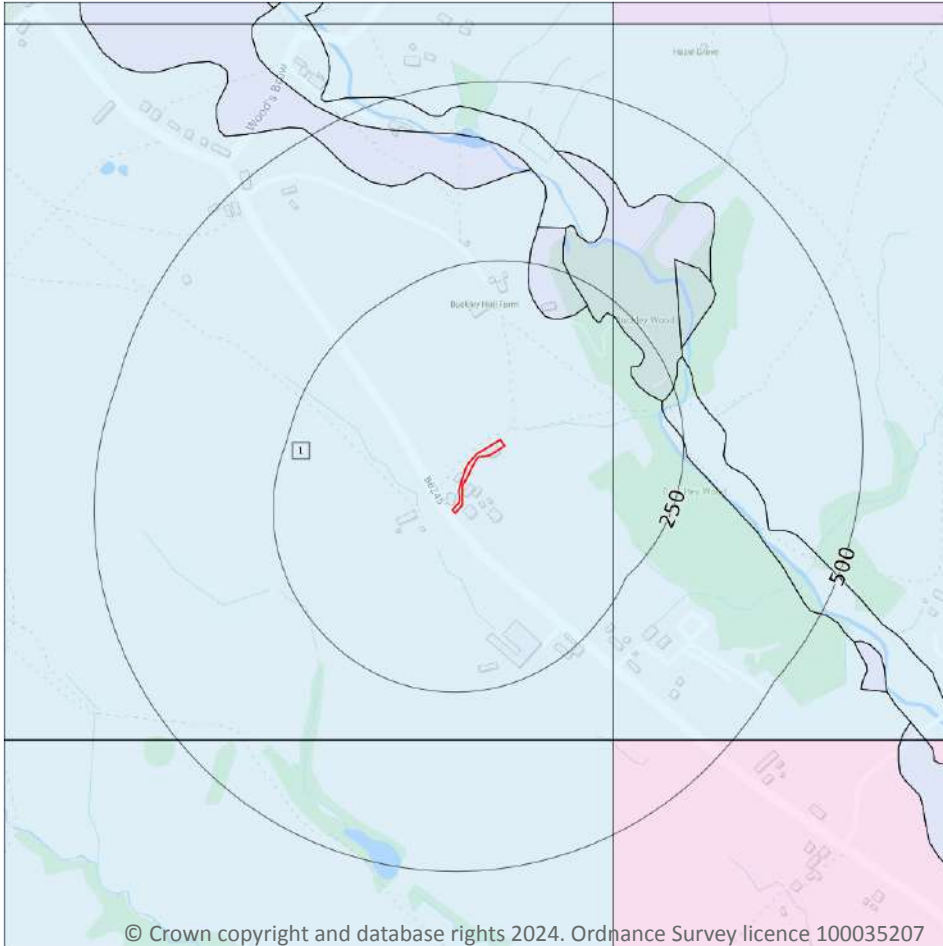
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 33](#) >

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

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

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

1

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

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

Features are displayed on the Groundwater vulnerability map on [page 34](#) >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low 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

5.6 Groundwater abstractions

Records within 2000m

0

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

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

5.7 Surface water abstractions

Records within 2000m

0

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

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

5.8 Potable abstractions

Records within 2000m

0

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

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

5.9 Source Protection Zones

Records within 500m

0

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

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



5.10 Source Protection Zones (confined aquifer)

Records within 500m

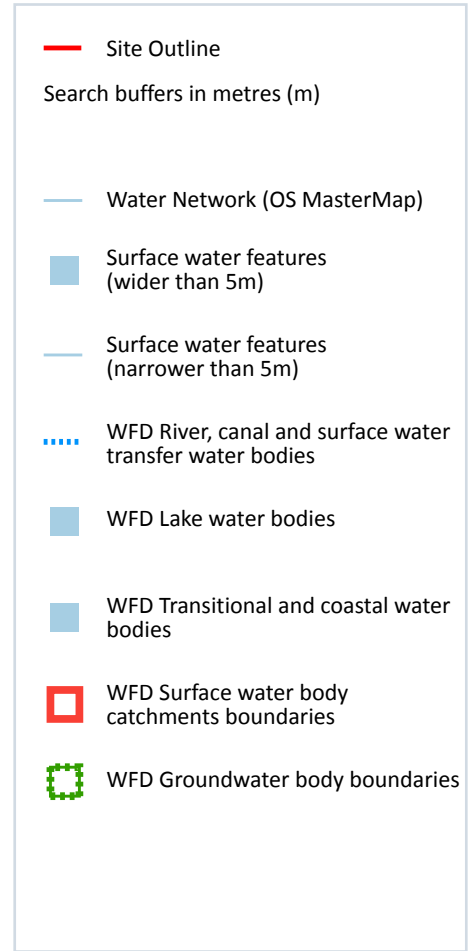
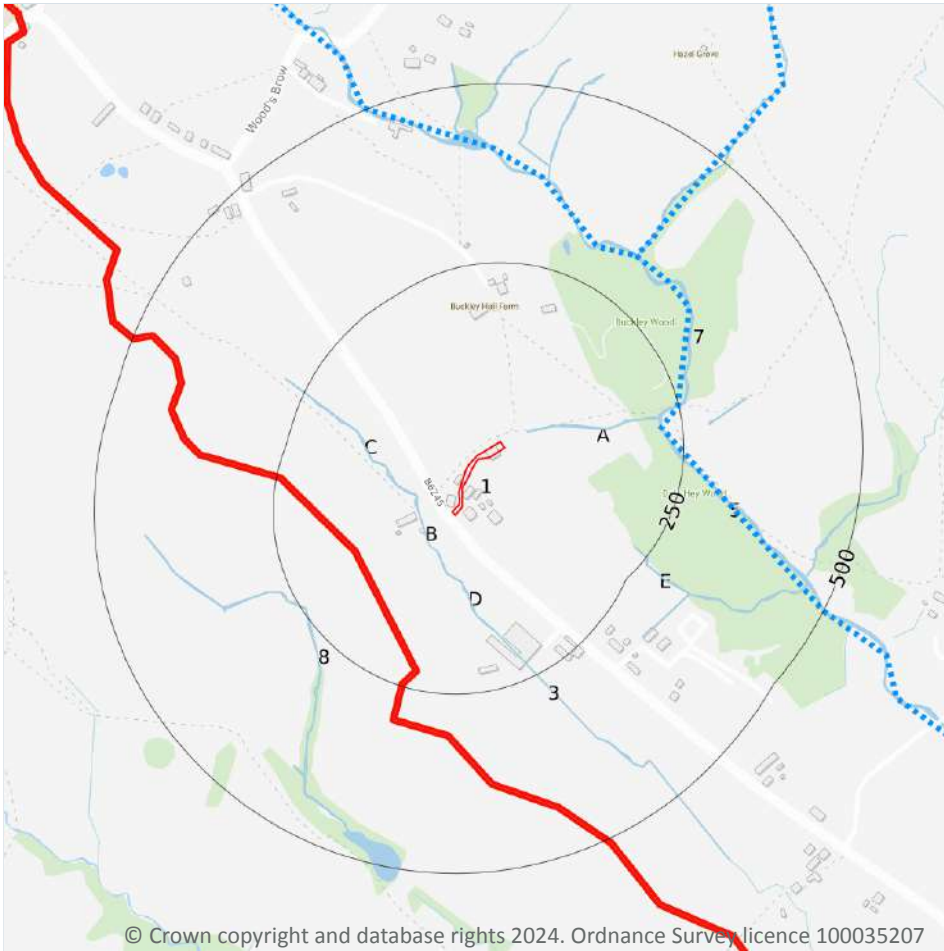
0

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

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



6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m

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 38 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
A	38m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
B	44m SW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
C	48m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	54m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	55m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	56m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	171m S	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
5	220m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Boyce's Brook
7	220m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cowley Brook
E	227m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	245m 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

6

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 38 >](#)



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 38 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River	Duddel Brook	GB112071065700	Big Ribble	Ribble

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 38 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
6	221m E	River	Duddel Brook	GB112071065700 ↗	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 38](#) >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	On site	Ribble Carboniferous Aquifers	GB41202G103000 ↗	Poor	Poor	Good	2019

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



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

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

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

7.2 Historical Flood Events

Records within 250m

0

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

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

7.3 Flood Defences

Records within 250m

0

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

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



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

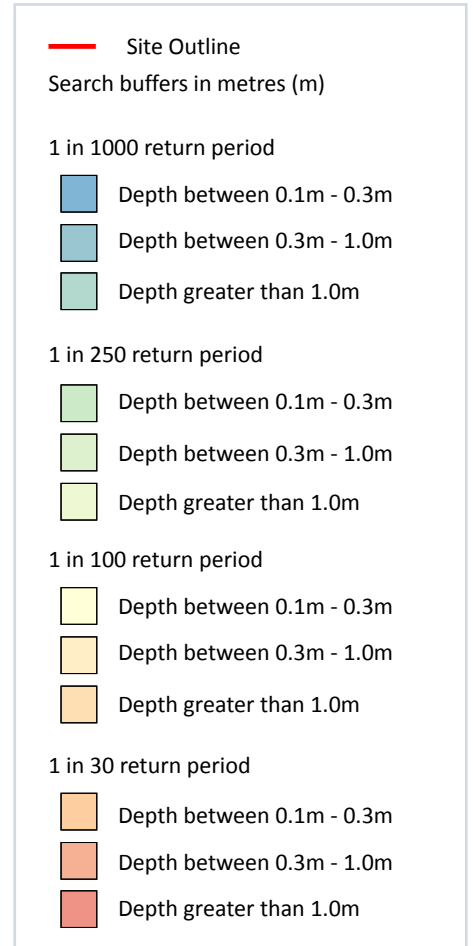
0

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

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



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

Negligible

Highest risk within 50m

1 in 30 year, 0.1m - 0.3m

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

Features are displayed on the Surface water flooding map on [page 45 >](#)

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

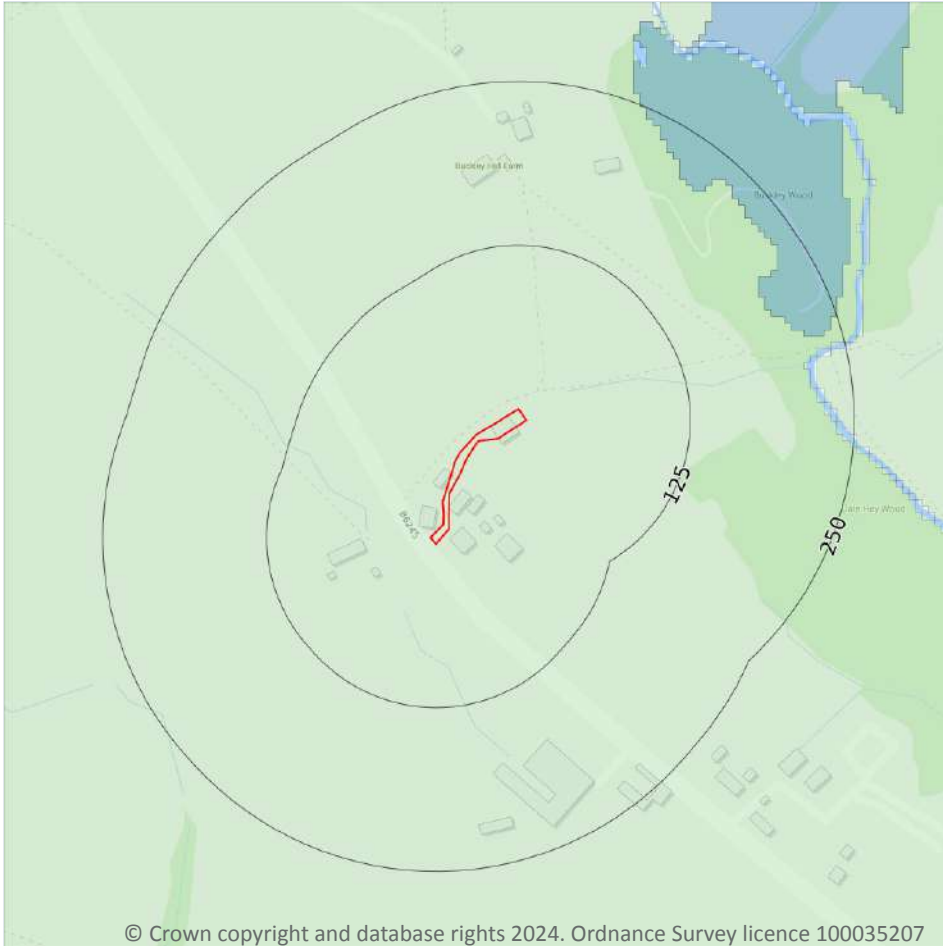
The table below shows the maximum flood depths for a range of return periods for the site.

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

This data is sourced from Ambiental Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

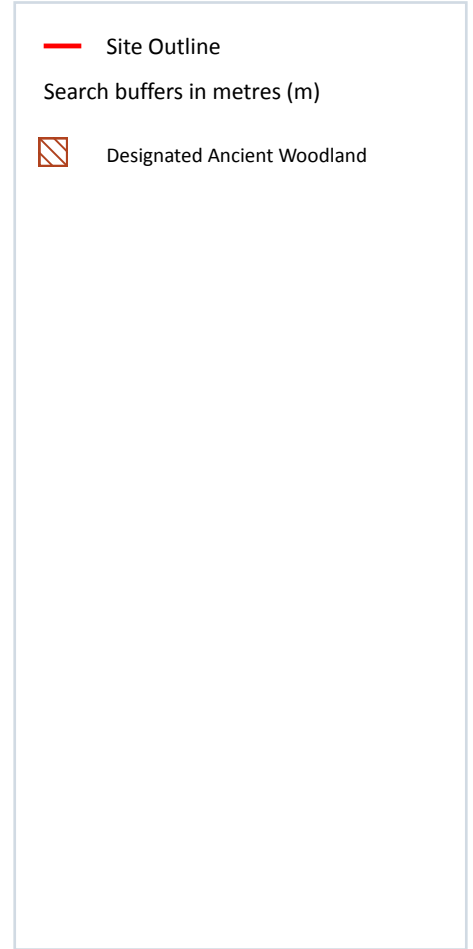
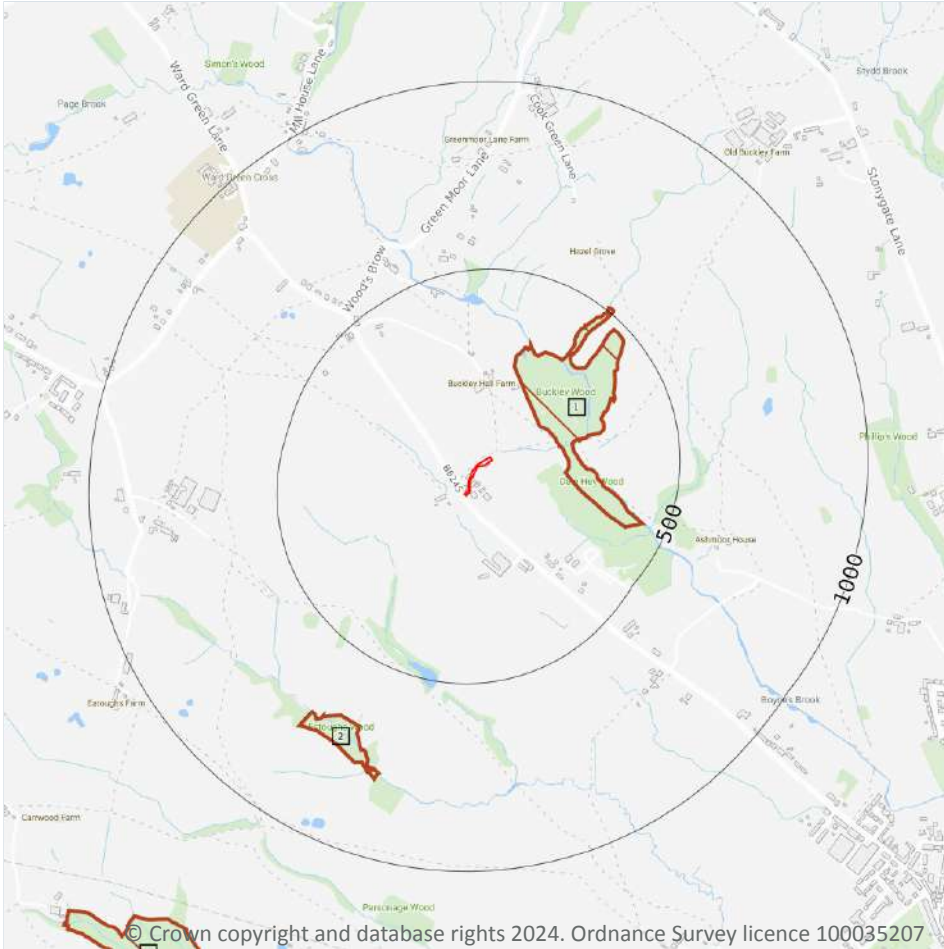
Low

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

Features are displayed on the Groundwater flooding map on [page 47 >](#)

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



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

0

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

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

10.7 Designated Ancient Woodland

Records within 2000m

7

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 48 >](#)

ID	Location	Name	Woodland Type
1	156m NE	Buckley Wood	Ancient & Semi-Natural Woodland
2	673m SW	Unknown	Ancient & Semi-Natural Woodland
3	1320m E	Stidd Wood	Ancient & Semi-Natural Woodland
4	1374m SW	Hothersall Wood	Ancient & Semi-Natural Woodland
-	1772m SW	Leeces Wood	Ancient & Semi-Natural Woodland
-	1805m E	Little Stidd Wood	Ancient & Semi-Natural Woodland
-	1968m E	Duddel Wood	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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



10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

0

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

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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



10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

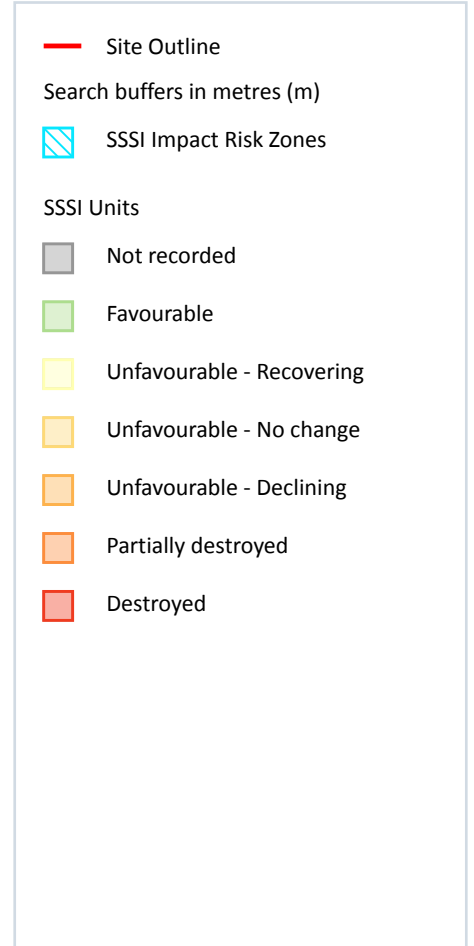
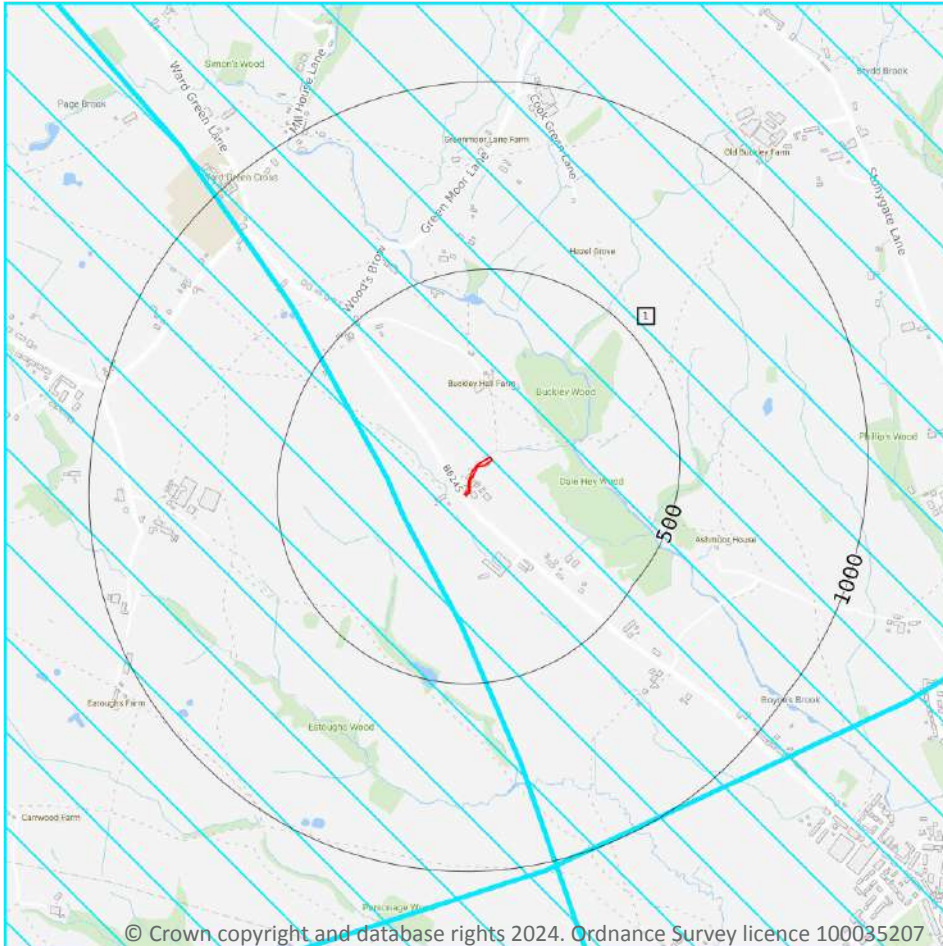
0

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

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



SSSI Impact Zones and Units



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 53](#) >

ID	Location	Type of developments requiring consultation
1	On site	<p>Infrastructure - Airports, helipads and other aviation proposals.</p> <p>Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 4000m².</p> <p>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.</p> <p>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.</p>

This data is sourced from Natural England.

10.18 SSSI Units

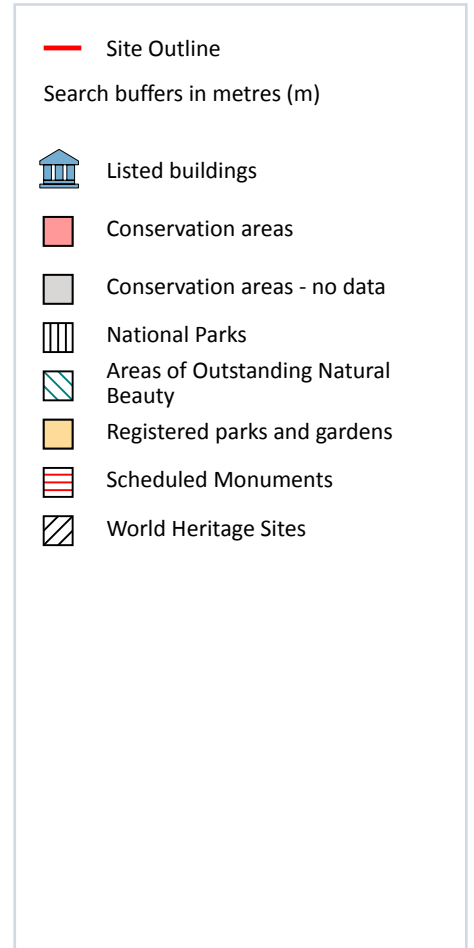
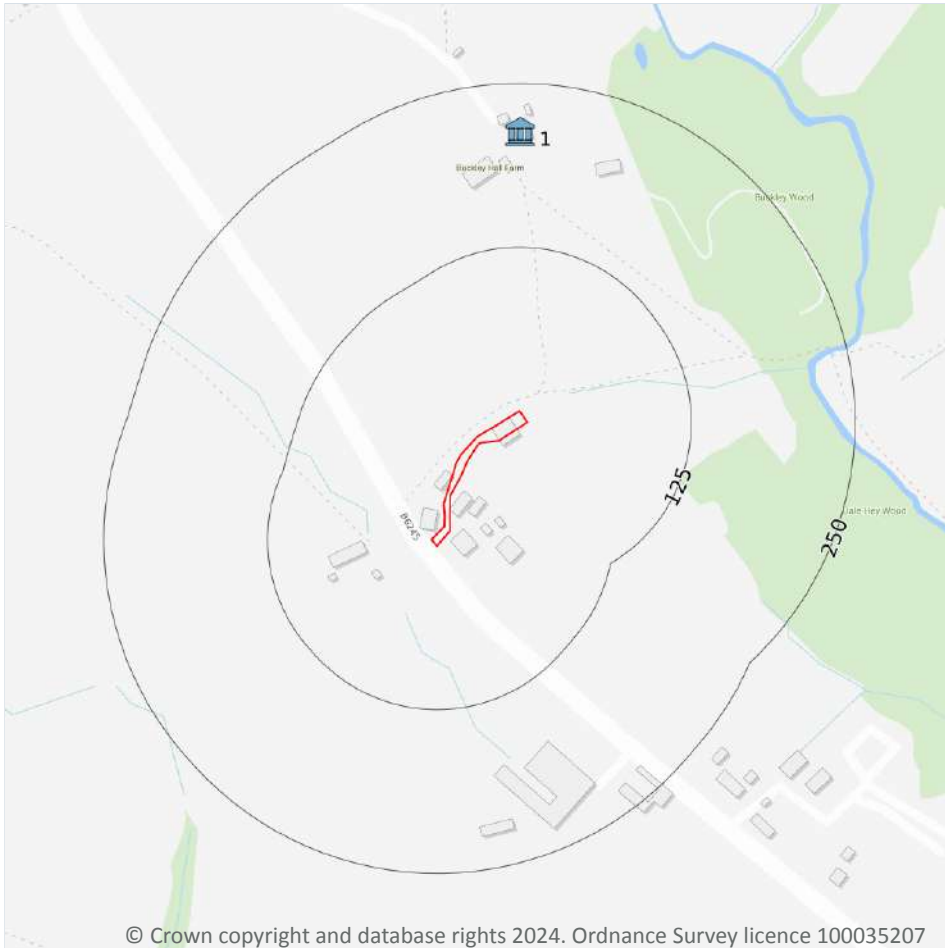
Records within 2000m	0
-----------------------------	----------

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

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



11 Visual and cultural designations



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 55 >](#)

ID	Location	Name	Grade	Reference Number	Listed date
1	214m N	Old Buckley Hall, 350 Metres North-East Of Buckley Hall Farmhouse	II	1362237	22/11/1983

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

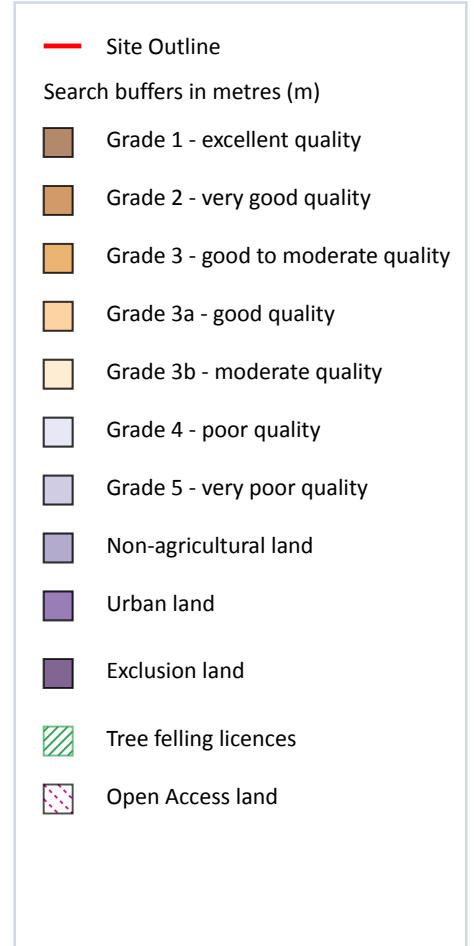
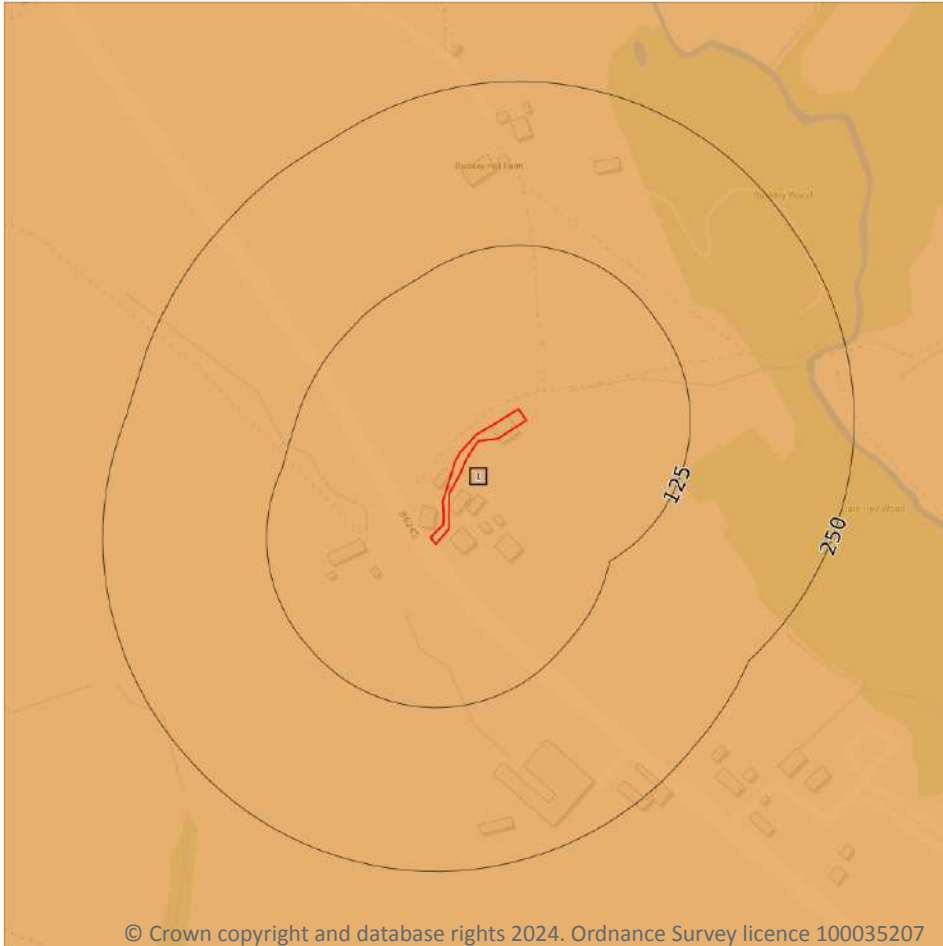
0

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



© Crown copyright and database rights 2024. Ordnance Survey licence 100035207

12.1 Agricultural Land Classification

Records within 250m

1

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

Features are displayed on the Agricultural designations map on [page 58 >](#)

ID	Location	Classification	Description
1	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.

This data is sourced from Natural England.



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 9 July 2024

12.2 Open Access Land

Records within 250m

0

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

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

12.3 Tree Felling Licences

Records within 250m

0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

1

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.

Location	Reference	Scheme	Start Date	End date
15m SW	AG00295483	Entry Level plus Higher Level Stewardship	01/02/2010	31/01/2021

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

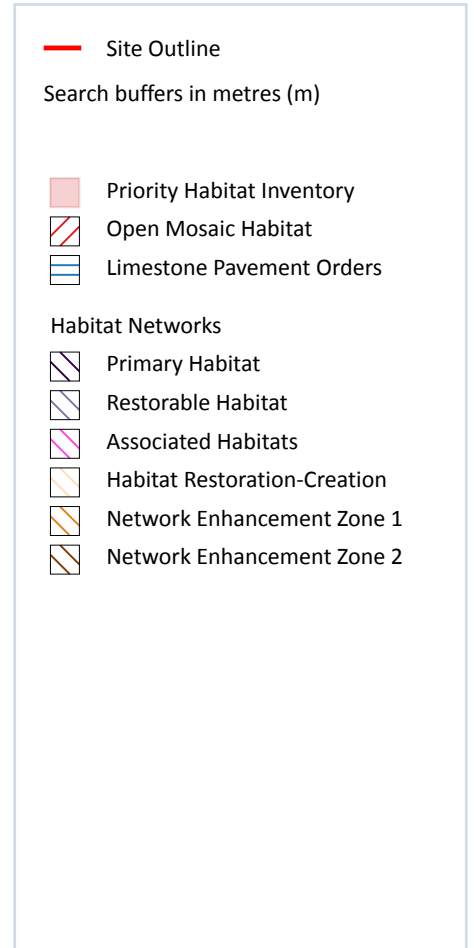
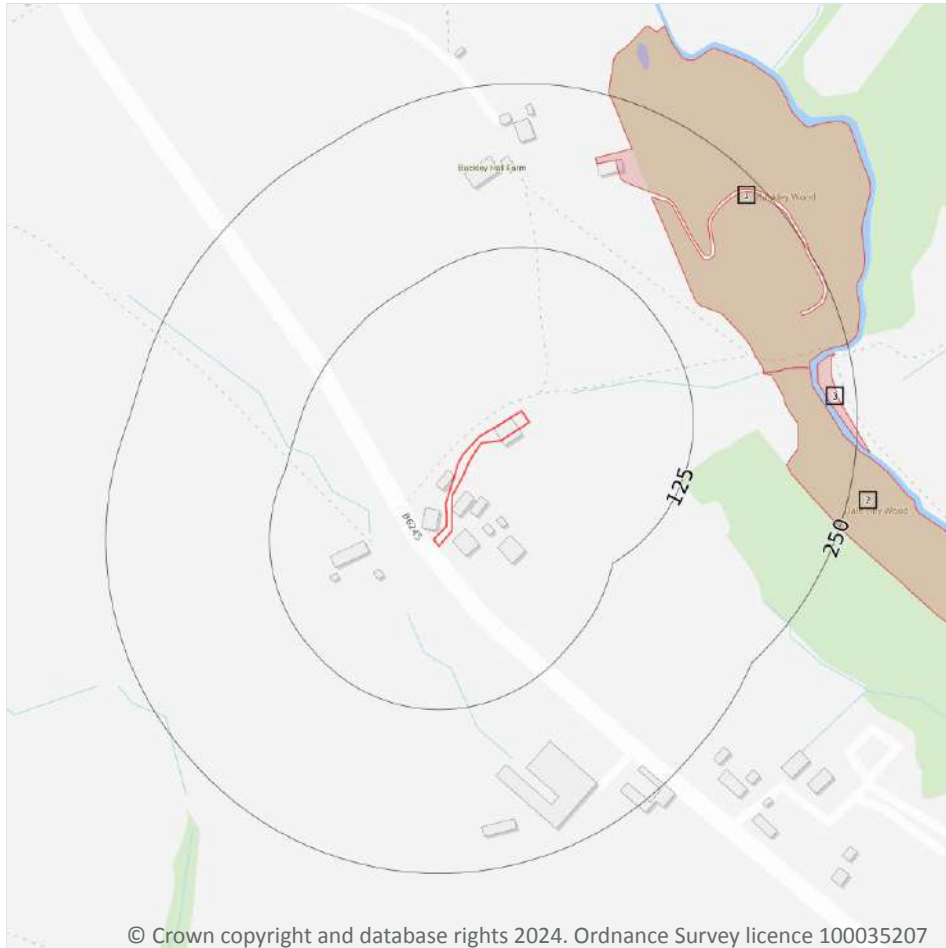
0

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



© Crown copyright and database rights 2024. Ordnance Survey licence 100035207

13.1 Priority Habitat Inventory

Records within 250m

3

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 60 >](#)

ID	Location	Main Habitat	Other habitats
1	157m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	183m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	222m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

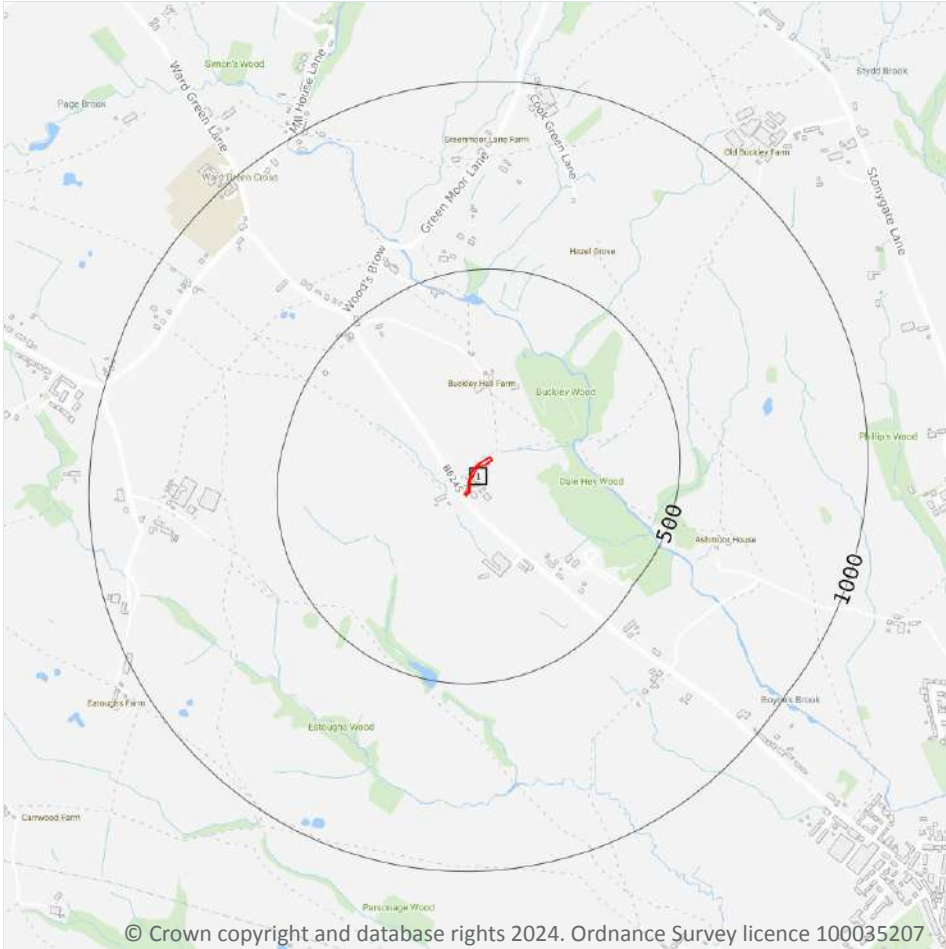
0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 62](#) >

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

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

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

14.5 Bedrock geology (10k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

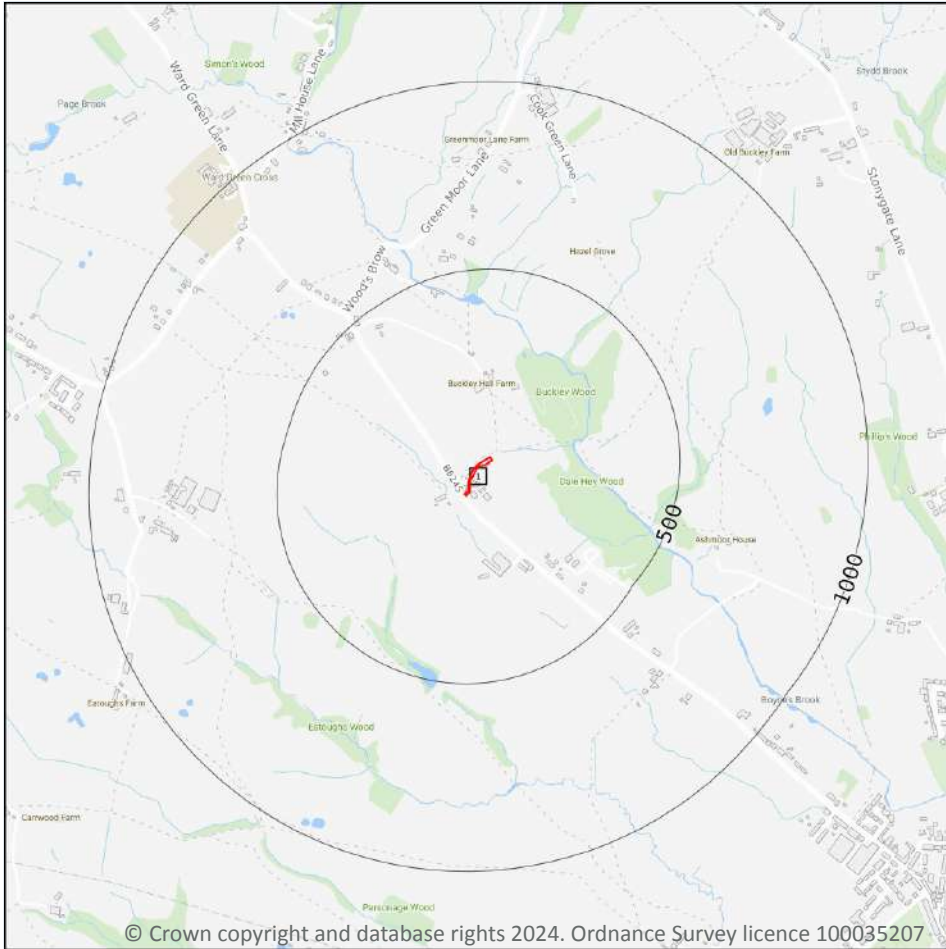
0

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.

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.

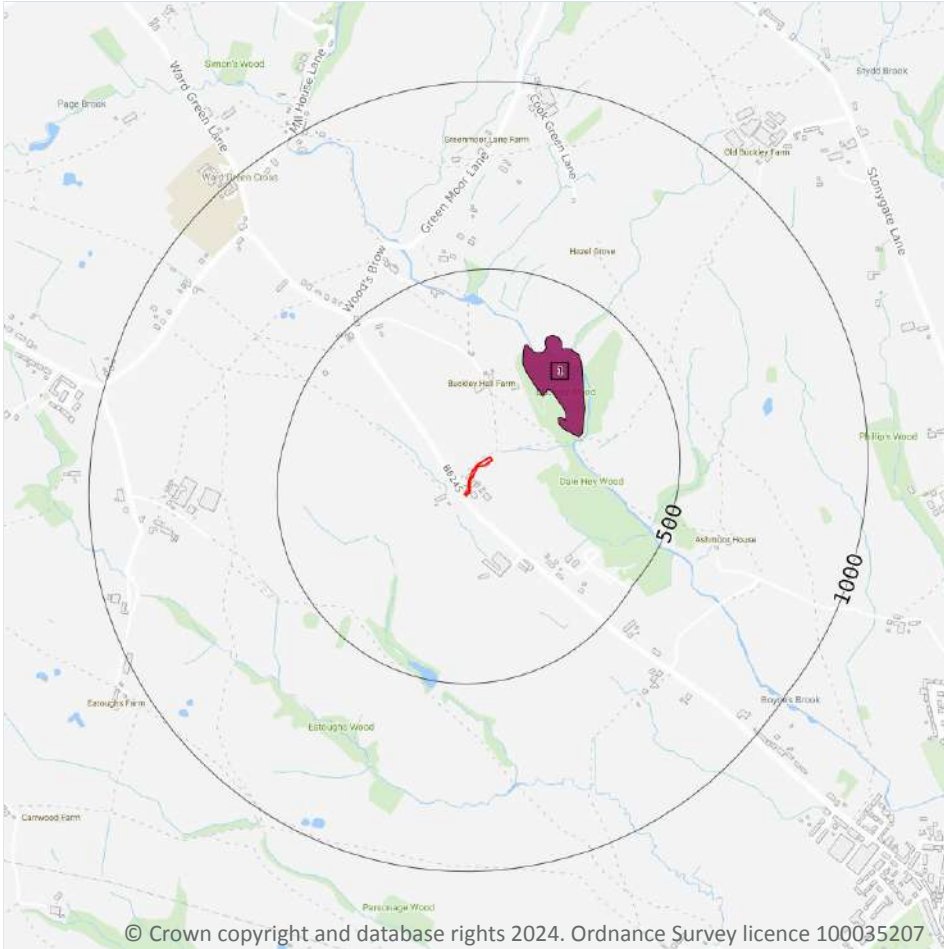
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 66](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW067_garstang_v4

This data is sourced from the British Geological Survey.



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



— Site Outline

Search buffers in metres (m)

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

15.2 Artificial and made ground (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 67 >](#)

ID	Location	LEX Code	Description	Rock description
1	204m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

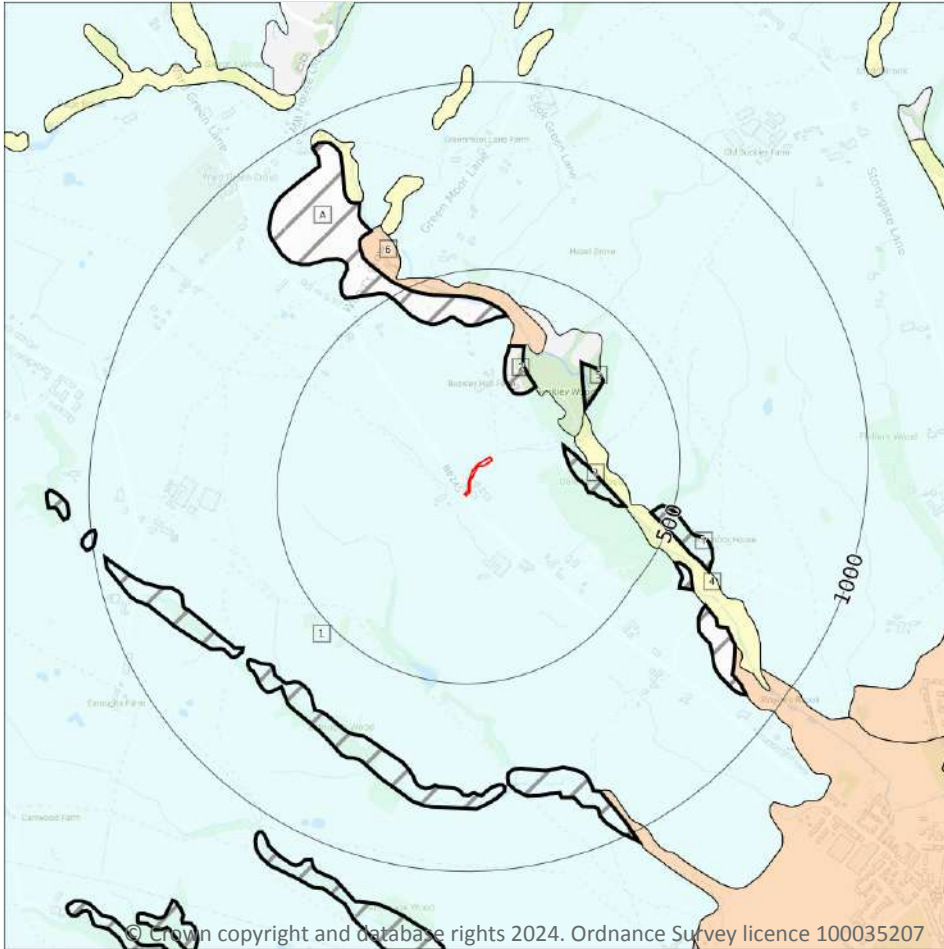
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (50k)
- Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

4

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 69](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON
4	226m E	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
6	301m NE	RTD1-XSV	RIVER TERRACE DEPOSITS, 1	SAND AND GRAVEL



ID	Location	LEX Code	Description	Rock description
A	353m N	SUPD-SED	SUPERFICIAL DEPOSITS	SEDIMENT

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	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

5

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.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 69 >](#)

ID	Location	LEX Code	Description	Rock description
2	183m NE	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY
3	194m E	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY
5	282m NE	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY
A	353m N	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY
7	445m E	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY

This data is sourced from the British Geological Survey.



15.7 Landslip permeability (50k)

Records within 50m

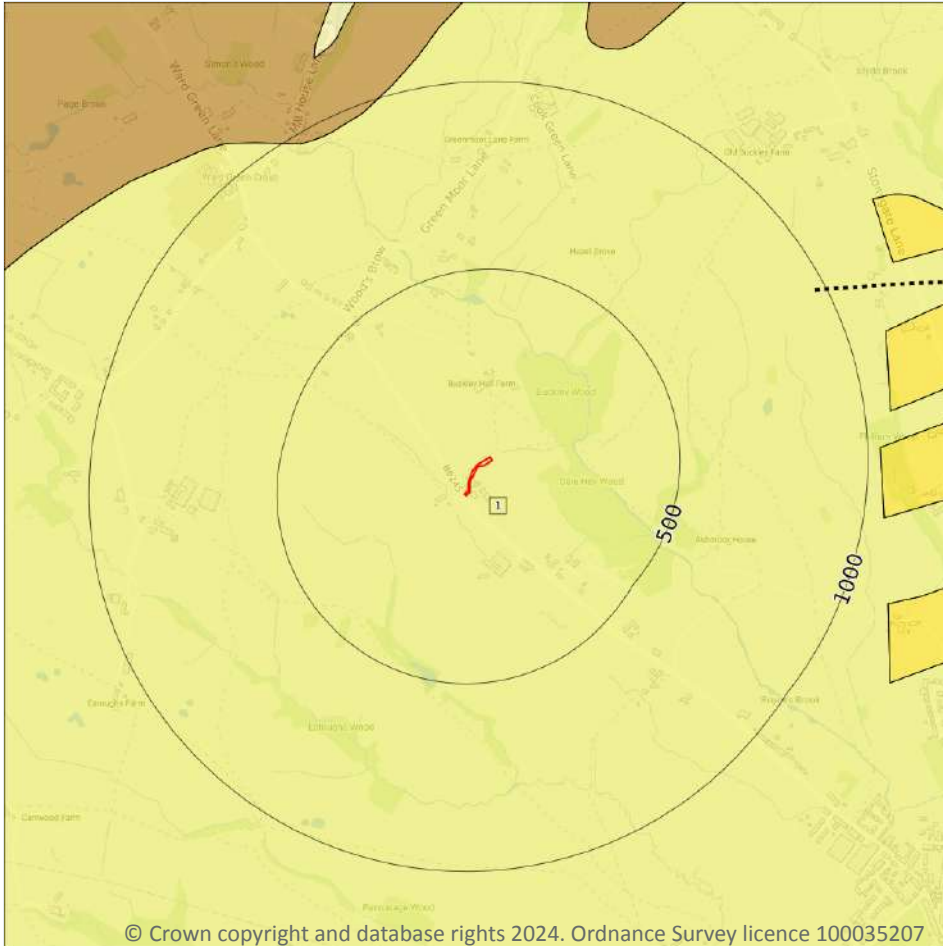
0

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 **1**

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 72 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	SILS-MDST	SILSDEN FORMATION - MUDSTONE	NAMURIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

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

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.



16 Boreholes

16.1 BGS Boreholes

Records within 250m

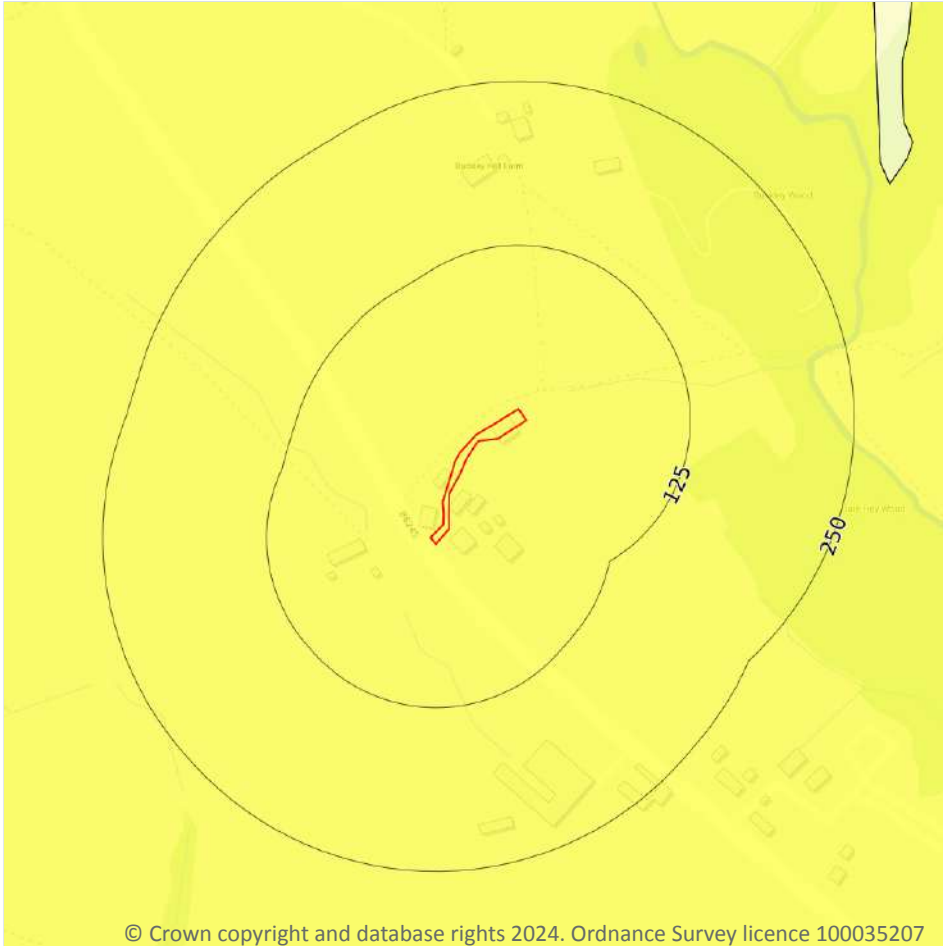
0

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

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m

1

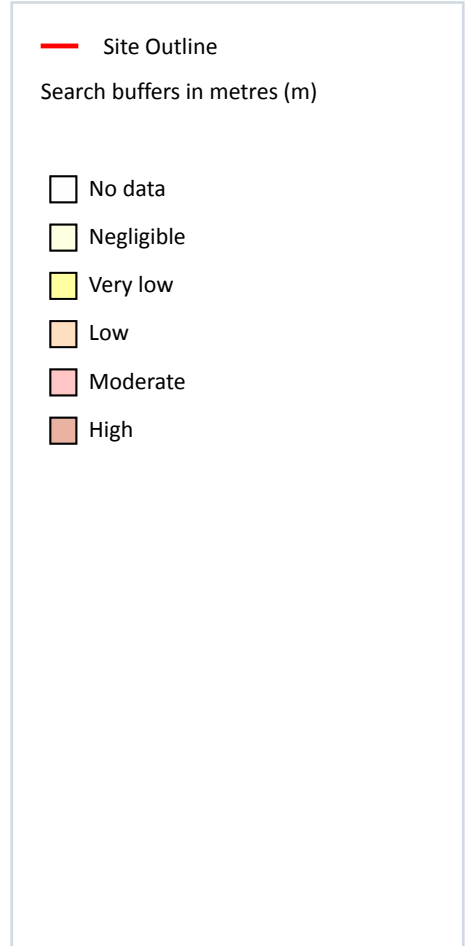
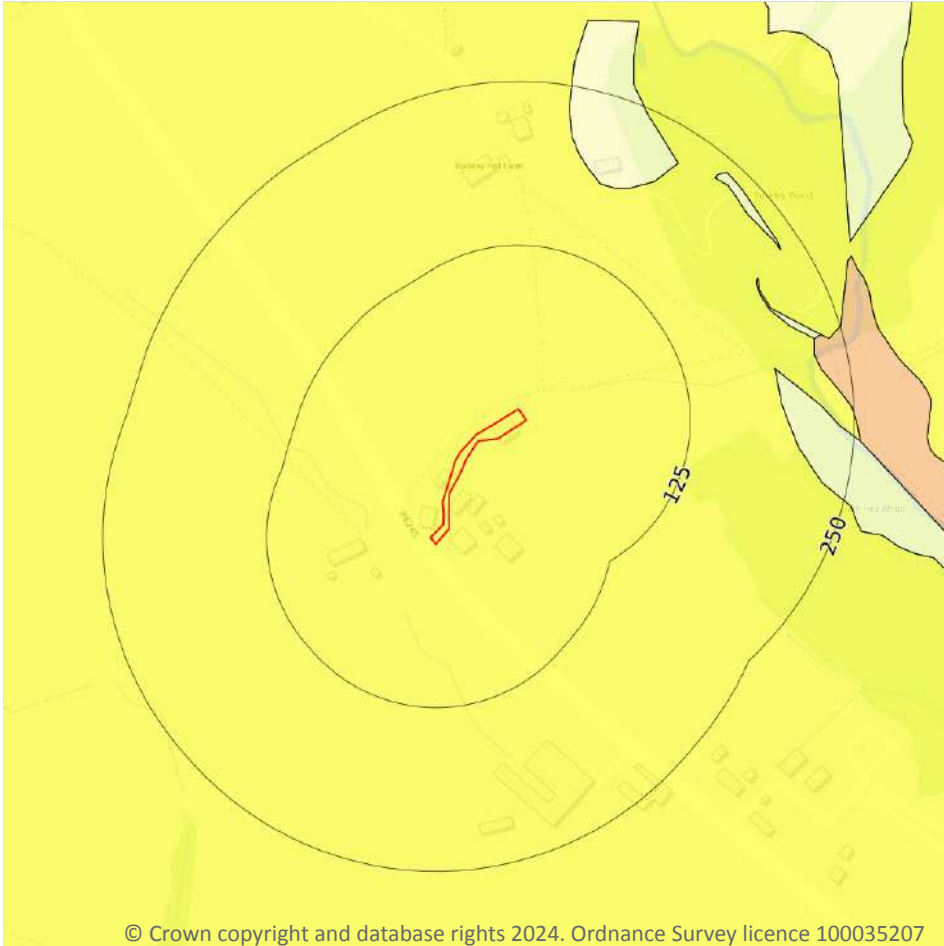
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 75 >](#)

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



© Crown copyright and database rights 2024. Ordnance Survey licence 100035207

17.2 Running sands

Records within 50m

1

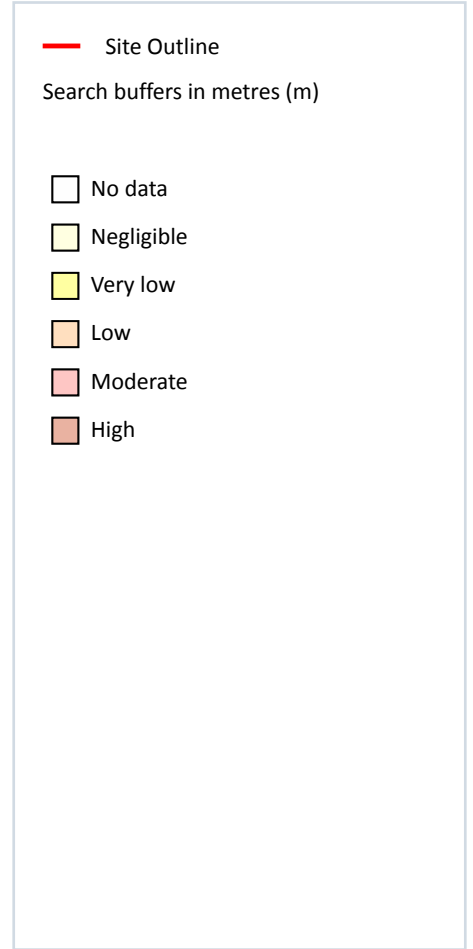
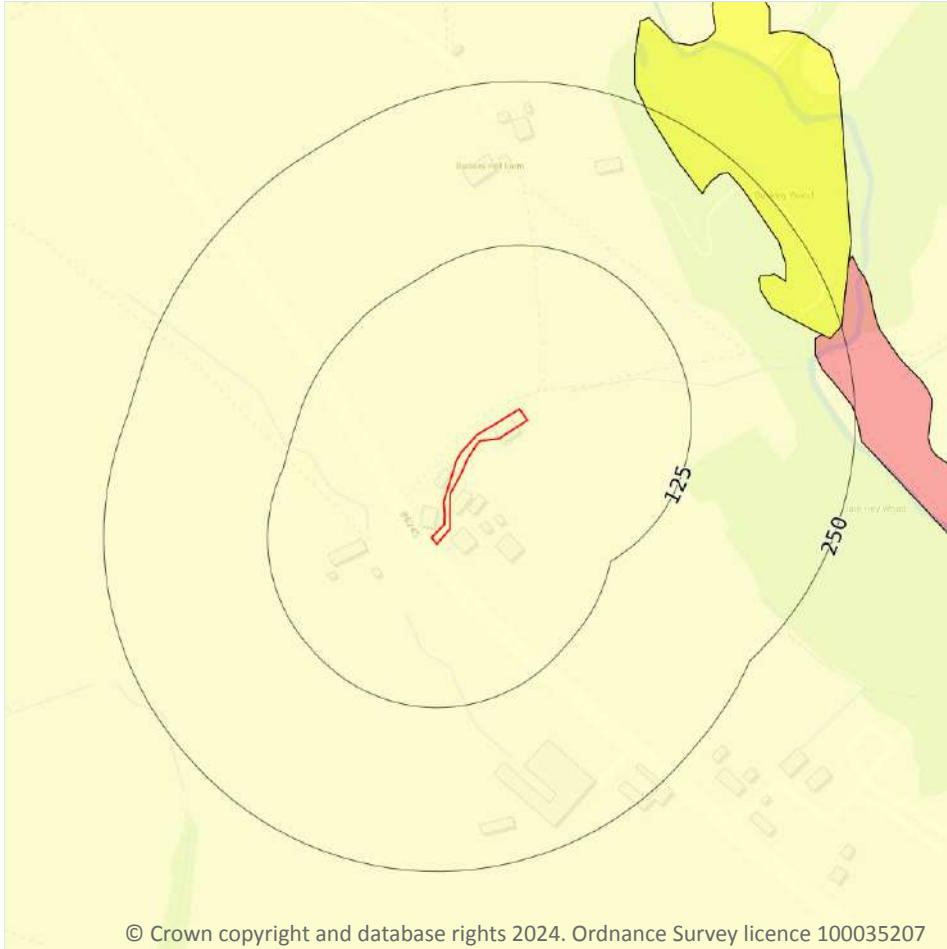
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on [page 76 >](#)

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.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

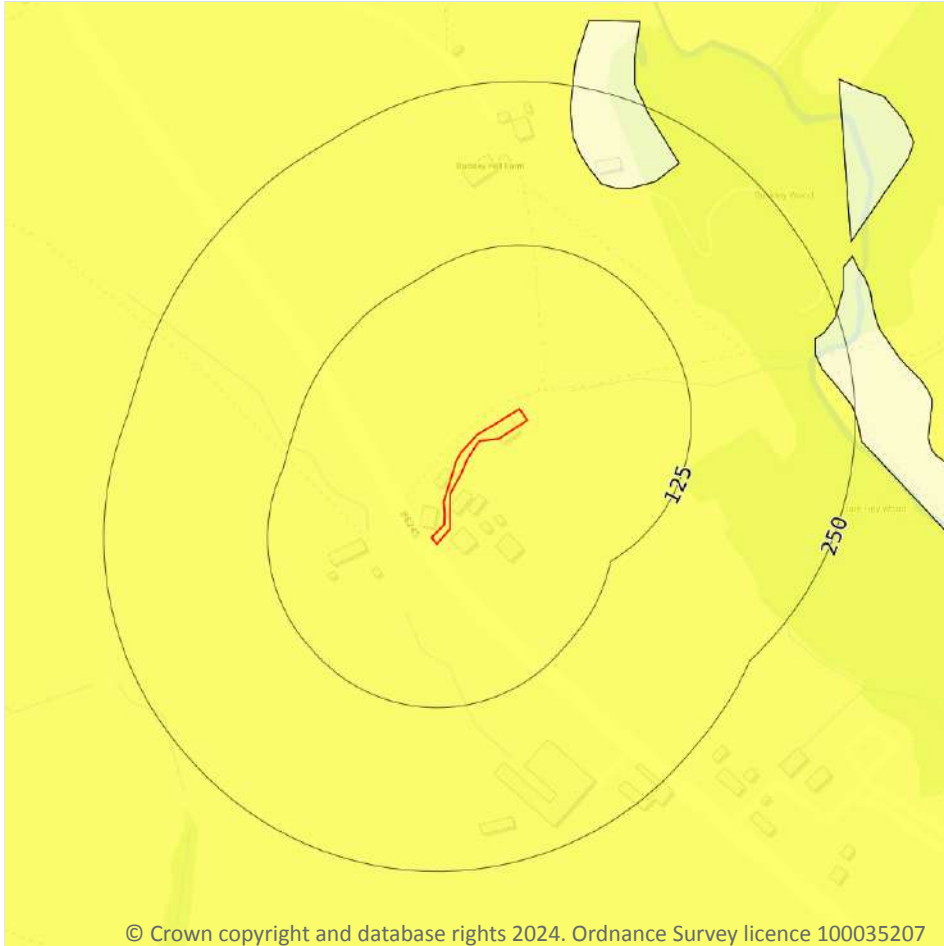
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 77 >](#)

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



— Site Outline

Search buffers in metres (m)

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

© Crown copyright and database rights 2024. Ordnance Survey licence 100035207

17.4 Collapsible deposits

Records within 50m

1

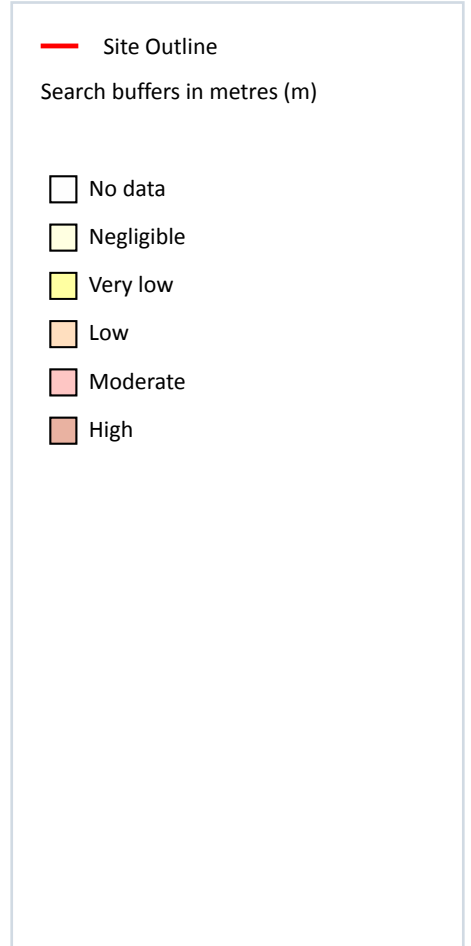
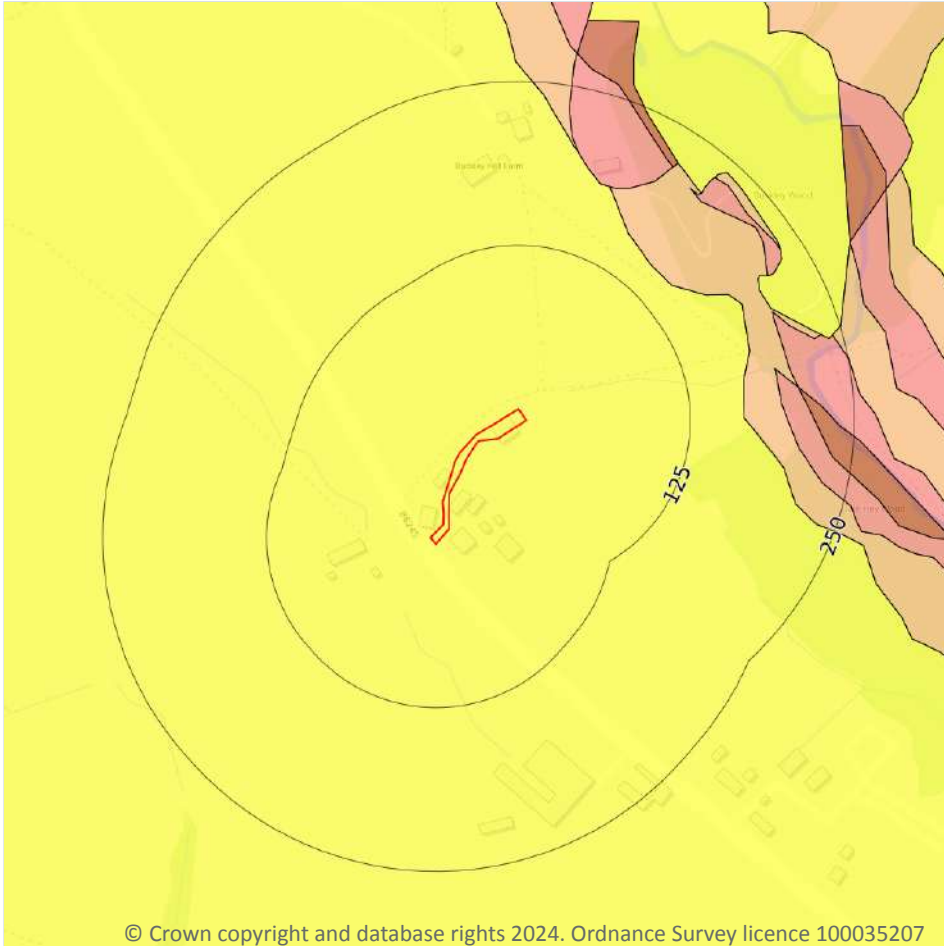
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 78 >](#)

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m

1

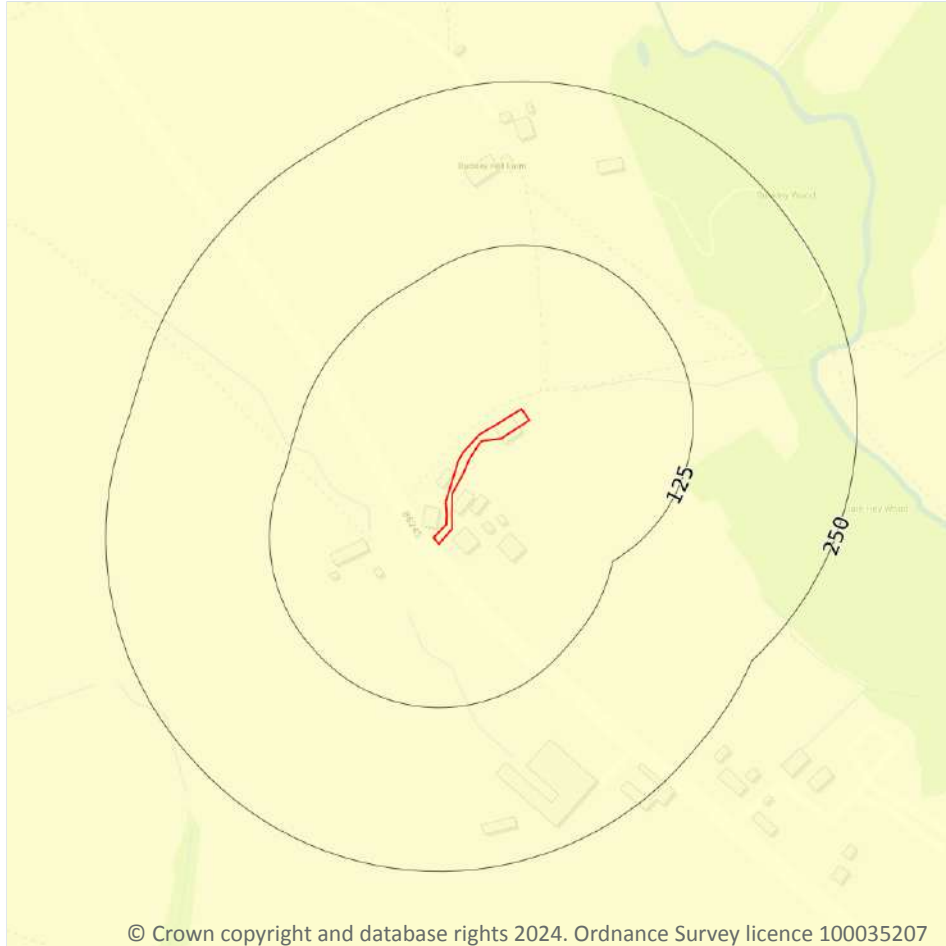
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on [page 79 >](#)

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 80](#)

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

This data is sourced from the British Geological Survey.



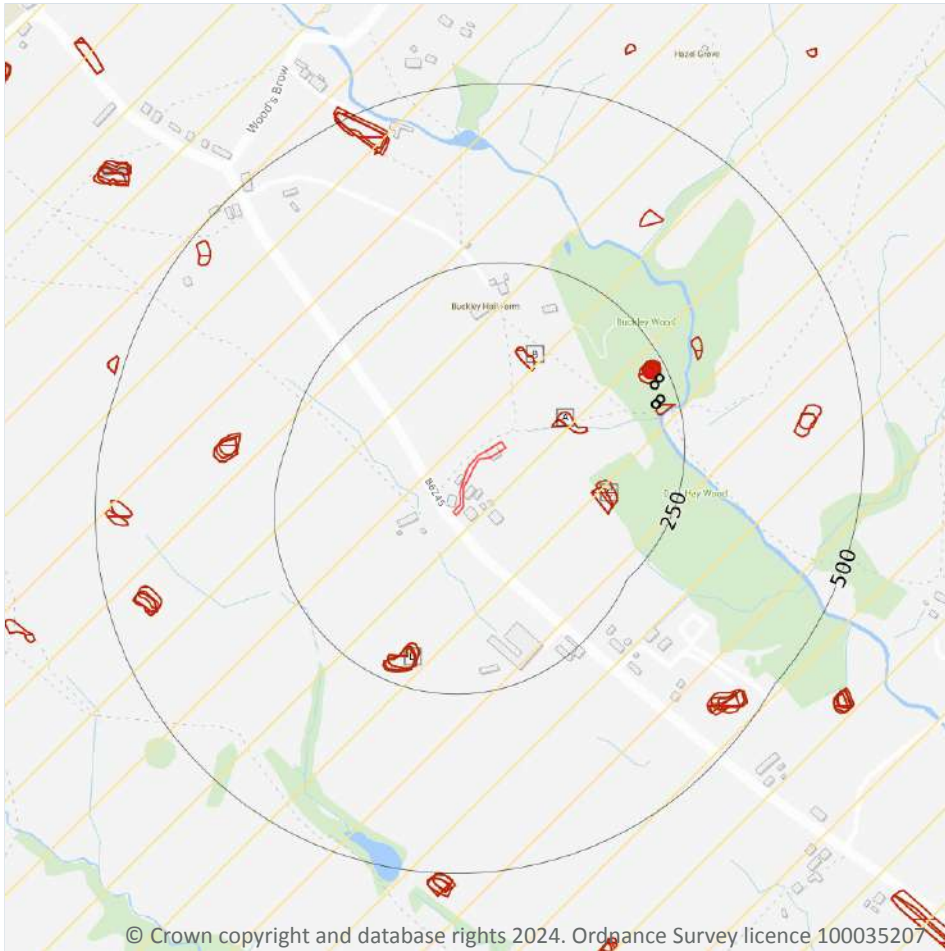
Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Date: 9 July 2024

18 Mining and ground workings



18.1 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 and ground workings map on [page 82](#) >

ID	Location	Details	Description
E	228m NE	Name: Buckley Address: Ribchester, LONGRIDGE, Lancashire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

21

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

Features are displayed on the Mining and ground workings map on [page 82 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
A	71m NE	Unspecified Pit	1932	1:10560
A	83m NE	Unspecified Disused Quarries	1951	1:10560
B	109m NE	Pond	1951	1:10560
B	109m NE	Pond	1969	1:10560
B	109m NE	Pond	1994	1:10000
C	135m E	Pond	1932	1:10560
C	135m E	Pond	1910	1:10560
C	136m E	Pond	1951	1:10560
D	188m S	Ponds	1951	1:10560
D	188m S	Ponds	1969	1:10560
D	188m S	Ponds	1994	1:10000
D	194m S	Ponds	1892	1:10560
D	197m S	Ponds	1932	1:10560
D	197m S	Ponds	1910	1:10560
E	211m NE	Unspecified Quarries	1910	1:10560
E	211m NE	Unspecified Disused Quarries	1932	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
E	217m E	Unspecified Quarries	1932	1:10560
E	220m NE	Disused Quarries	1967	1:2500
E	220m NE	Unspecified Disused Quarries	1951	1:10560
E	220m NE	Unspecified Disused Quarries	1969	1:10560
E	220m NE	Unspecified Disused Quarries	1994	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m

5

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

Features are displayed on the Mining and ground workings map on [page 82 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
E	213m E	Unspecified Shaft	1910	1:10560
E	213m E	Unspecified Old Shaft	1932	1:10560
E	220m NE	Unspecified Old Shaft	1932	1:10560
E	221m E	Unspecified Old Shafts	1951	1:10560
E	231m NE	Unspecified Old Shafts	1951	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m

0

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

This data is sourced from Groundsure.



18.5 Historical Mineral Planning Areas

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

1

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

Features are displayed on the Mining and ground workings map on [page 82 >](#)

ID	Location	Name	Commodity	Class	Likelihood
1	On site	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site

0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m

0

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



This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m

0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m

0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m

0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site

0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site

0

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

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

18.14 Gypsum areas

Records on site

0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site

0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site

0

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

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



19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

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

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



This data is sourced from Groundsure.

19.5 National karst database

Records within 500m

0

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

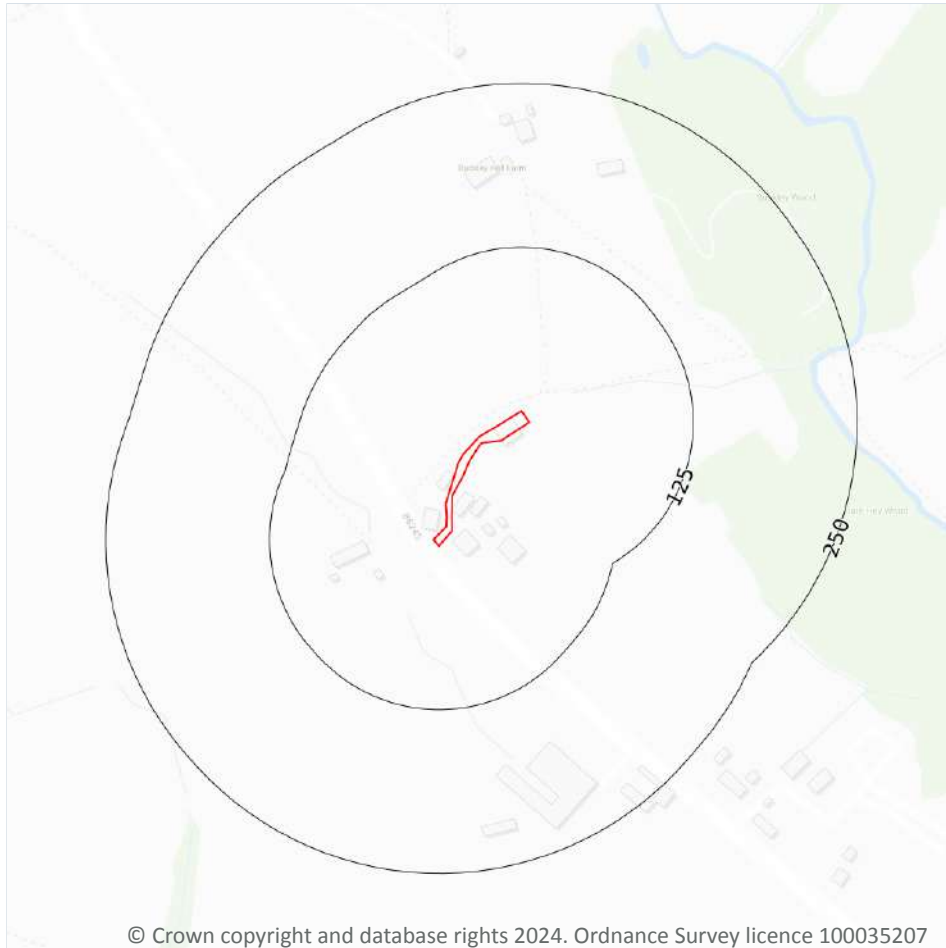
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over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

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

This data is sourced from the British Geological Survey.



20 Radon



— Site Outline
Search buffers in metres (m)

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

20.1 Radon

Records on site

1

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

Features are displayed on the Radon map on [page 90 >](#)

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.



Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Date: 9 July 2024

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

1

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m

0

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m

0

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



This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m

0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.



Data providers

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

Terms and conditions

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



APPENDIX C

Asbestos Testing

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/06134
Issue Number: 1
Date: 24 June, 2024

Client: BEK Enviro Ltd
2 Landwick Court
Metcalf Drive
Altham Business Park
Altham
Lancashire
BB5 5GY

Project Manager: ** USE THIS Mick Buckley/James Mashiter
Project Name: Pinfold Farm, Ribchester
Project Ref: N/A
Order No: 8261-24080-J
Date Samples Received: 20/06/24
Date Instructions Received: 21/06/24
Date Analysis Completed: 24/06/24

Approved by:



Gemma Berrisford
Deputy Client Services Supervisor

Envirolab Job Number: 24/06134

Client Project Name: Pinfold Farm, Ribchester

Client Project Ref: N/A

Lab Sample ID	24/06134/1							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	CEM-1									
Depth to Top										
Depth To Bottom										
Date Sampled	20-Jun-24									
Sample Type	SOLID - BULK									
Sample Matrix Code										
Bulk Fibre ID (inc. matrix)										
Bulk Fibre Identification _D [#]	NAD									A-T-045
Bulk Fibre Identification Matrix (visual) _D	-									A-T-045
Bulk Fibre Identification - Suitable for Water Absorption Test? _D	-									A-T-045

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript “#”	Accredited to ISO 17025
Superscript “M”	Accredited to MCertS
Superscript “U”	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript “A”	Analysis performed on as-received Sample
Subscript “D”	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript “D” on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript “A”	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
N/A	Not applicable

Asbestos

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing, and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any “D” subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only. Results “with Clean up” indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from “TPH CWG with clean up” please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25⁰C / 11550µS/cm @ 20⁰C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: BEK Enviro Ltd, 2 Landwick Court, Metcalfe Drive, Altham Business Park,
Altham, Lancashire , BB5 5GY

Project No: 24/06134
Date Received: 21/06/2024 (am)

Project: Pinfold Farm, Ribchester

Cool Box Temperatures (°C): 19.4

Clients Project No: N/A

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/06134/1
Client Sample No	
Client Sample ID/Depth	CEM-1
Date Sampled	20/06/24
A-T-045	24/06/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

APPENDIX D

Site Photographs



P1: View of the barn entrance. Photo facing south-east



P2: View of where the access road meets the hardstanding of the barn area in the north of the site



P3: View inside the barn building



P4: View inside the barn building



P5: View inside the barn building



P6: View inside the barn building

Comments:



Photographs 1 to 6

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

Site: Land at Pinfold Farm, Ribchester

Title: Appendix D - Site Photographs

Project No: 24080

Created By:
AH

Date:
July 2024

Client: Mr Alan Davies



P7: View along the southern side of the barn building



P8: View of the eastern side/gable end of the barn building



P9: Miscellaneous items to the rear/gable end of the barn building



P10: Miscellaneous items to the rear/gable end of the barn building



P11: Roof sheeting material used in the construction of the barn building proven to be devoid of asbestos through laboratory testing



P12: View along the northern side of the barn building

Comments:



Photographs 7 to 12

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

Site: Land at Pinfold Farm, Ribchester

Title: Appendix D - Site Photographs

Project No: 24080

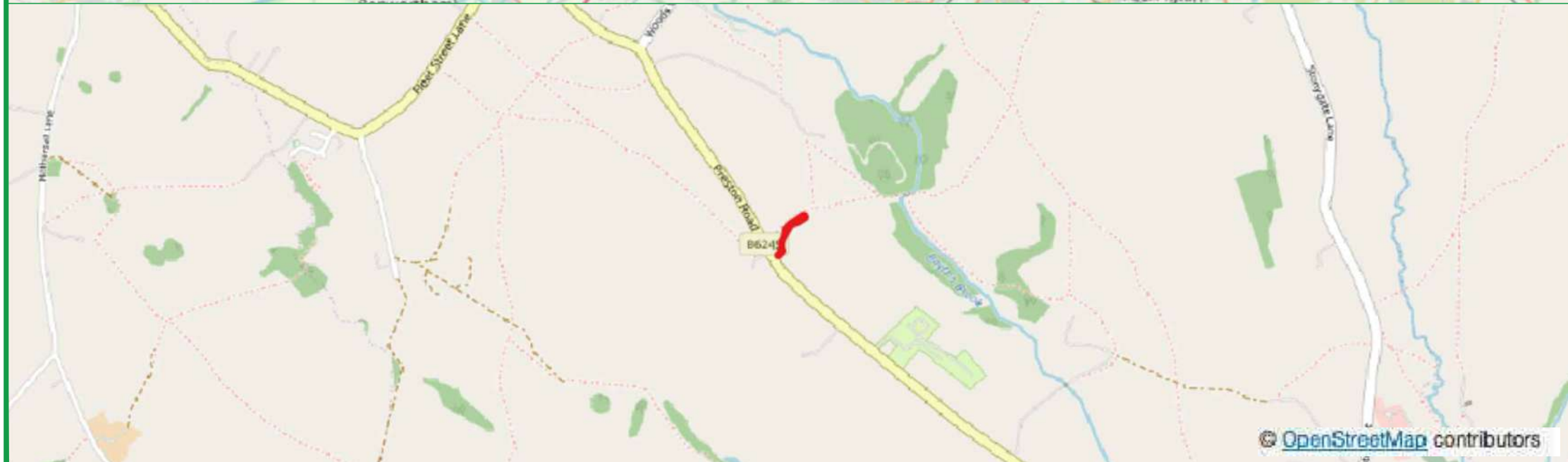
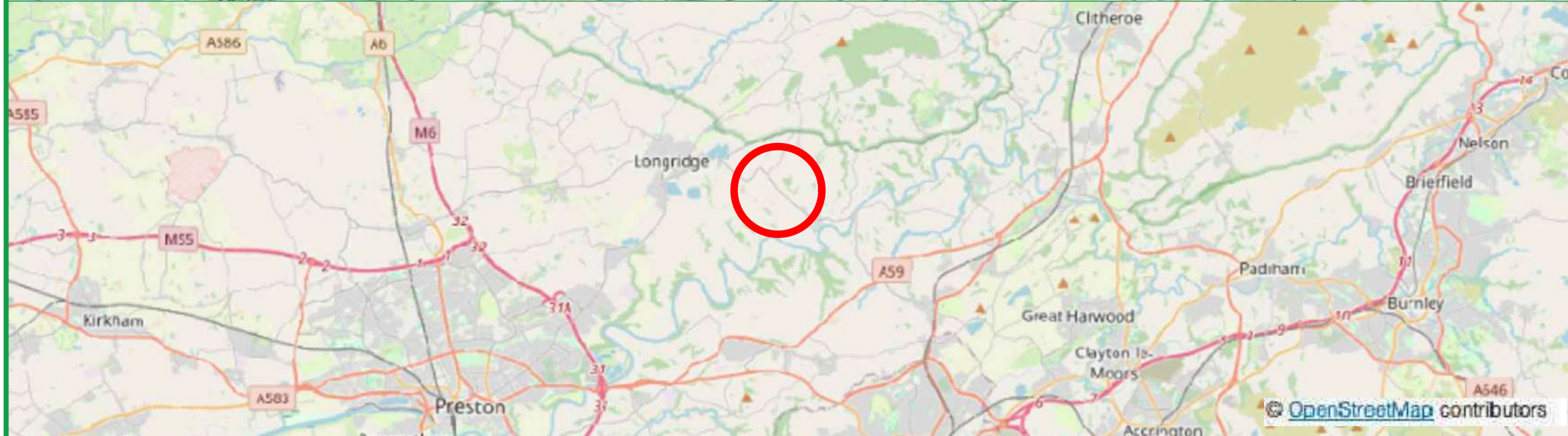
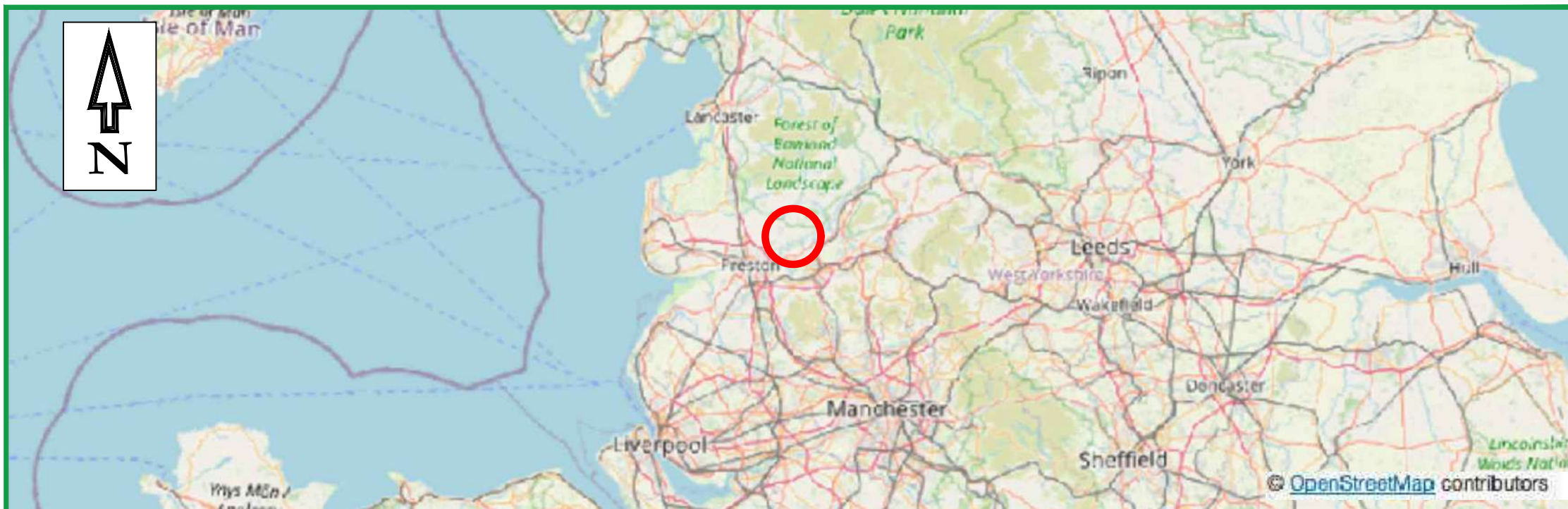
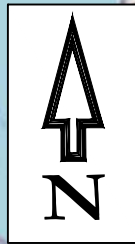
Created By: AH

Date: July 2024


Client: Mr Alan Davies

APPENDIX E

Drawings



LEGEND

 SITE LOCATION

REV	DESCRIPTION	DATE	BY



B&K
 GEO-ENVIRONMENTAL CONSULTING
 No 2 Landwick Court, Metcalf Drive, Altham Business Park, Lancashire
 Tel: 01254 377622 Mob: 07906753583
 Email: mbuckley@bekenviron.co.uk
 Web: www.bekenviron.co.uk

CLIENT.
 MR ALAN DAVIES

JOB TITLE.
 LAND AT PINFOLD FARM,
 RIBCHESTER

DRAWING TITLE.
 SITE LOCATION PLAN


SCALE © A3. NTS	DRAWN BY. D.E.	APPROVED BY. M.B.	DATE. 09/07/24
--------------------	-------------------	----------------------	-------------------

DRAWING No. 24080-1	REV. -
------------------------	-----------



Map data © 2024

LEGEND

 SITE FOOTPRINT

REV	DESCRIPTION	DATE	BY



GEO-ENVIRONMENTAL CONSULTING
No 2 Landwick Court, Metcalf Drive, Altham Business Park, Lancashire, BB5 5GY
Tel: 01254 377622 Mob: 07906753583
Email: mbuckley@bekenviro.co.uk
Web: www.bekenviro.co.uk

CLIENT.

MR ALAN DAVIES

JOB TITLE.

LAND AT PINFOLD FARM,
RIBCHESTER

DRAWING TITLE.

SITE LAYOUT PLAN

SCALE © A3. N'TS	DRAWN BY. D.E.	APPROVED BY. M.B.	DATE. 09/07/24
---------------------	-------------------	----------------------	-------------------

DRAWING No. 24080-2	REV. -
------------------------	-----------

IMPORTANT NOTES

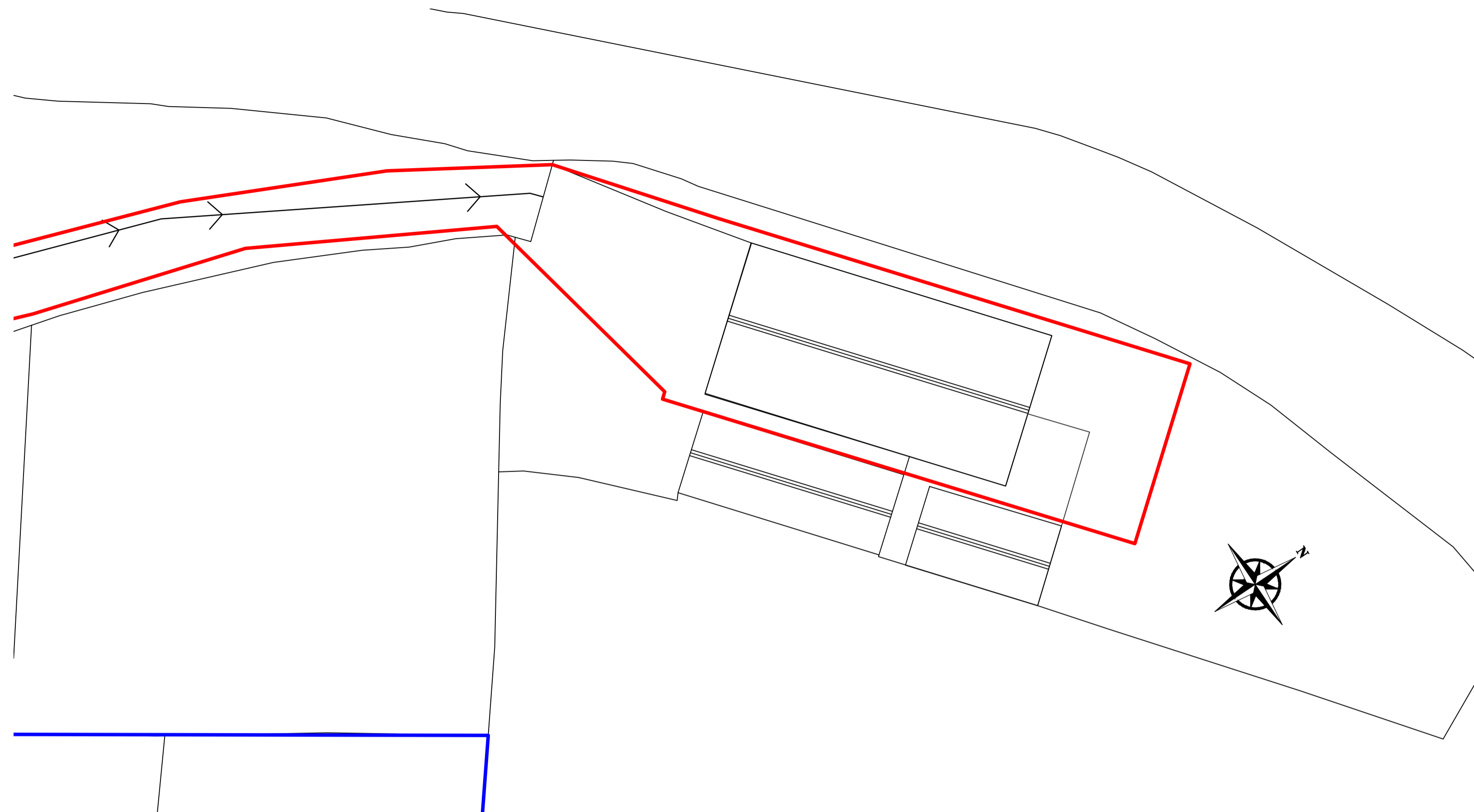
ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE BUILDING REGULATION, ALL RELEVANT BRITISH STANDARD SPECIFICATION, CODES OF PRACTICE, LOCAL AUTHORITY BYLAWS AND IN COMPLIANCE WITH THE LOCAL AUTHORITY APPROVALS. CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK OR MAKING ANY SHOP DRAWINGS. WHERE WRITTEN DIMENSIONS ARE PROVIDED THESE SHOULD BE TAKEN IN PREFERENCE TO SCALED OFF MEASUREMENTS BUT THEY MUST BE STILL CHECKED ON SITE OR BY REFERENCE TO THE AGENT.

THE PARTY WALL ACT CAN APPLY TO CERTAIN KINDS OF DEVELOPMENT WHERE YOU ARE BUILDING EXTENSIONS OR ALTERING BUILDINGS CLOSE TO YOUR NEIGHBOUR'S PROPERTY.

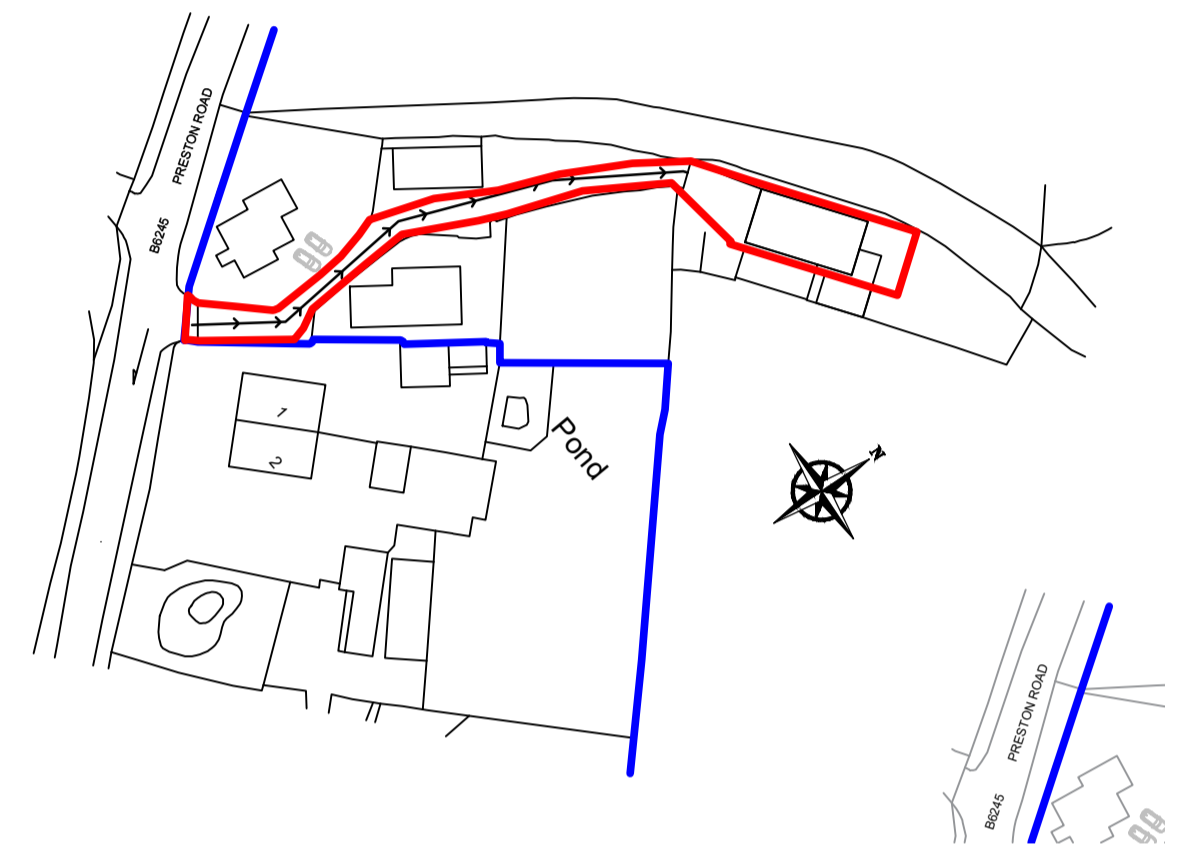
PLEASE NOTE THAT IN CERTAIN SITUATIONS YOU WILL NEED TO ENGAGE A PARTY WALL SURVEYOR. FOR FURTHER INFORMATION AS TO WHETHER THE PARTY WALL ACT WOULD APPLY TO THE WORKS DESCRIBED ON THESE PLANS YOU CAN VISIT THE OFFICE OF THE DEPUTY PRIME MINISTER WEBSITE AT: WWW.COPM.GOV.UK

PLEASE NOTE THAT THIS LEGISLATION IS NOT ENFORCED BY THE LOCAL AUTHORITY AND/OR THE BUILDING INSPECTOR AND UNLESS SEPARATELY INSTRUCTED, WE DO NOT GET INVOLVED WITH PARTY WALL MATTERS.

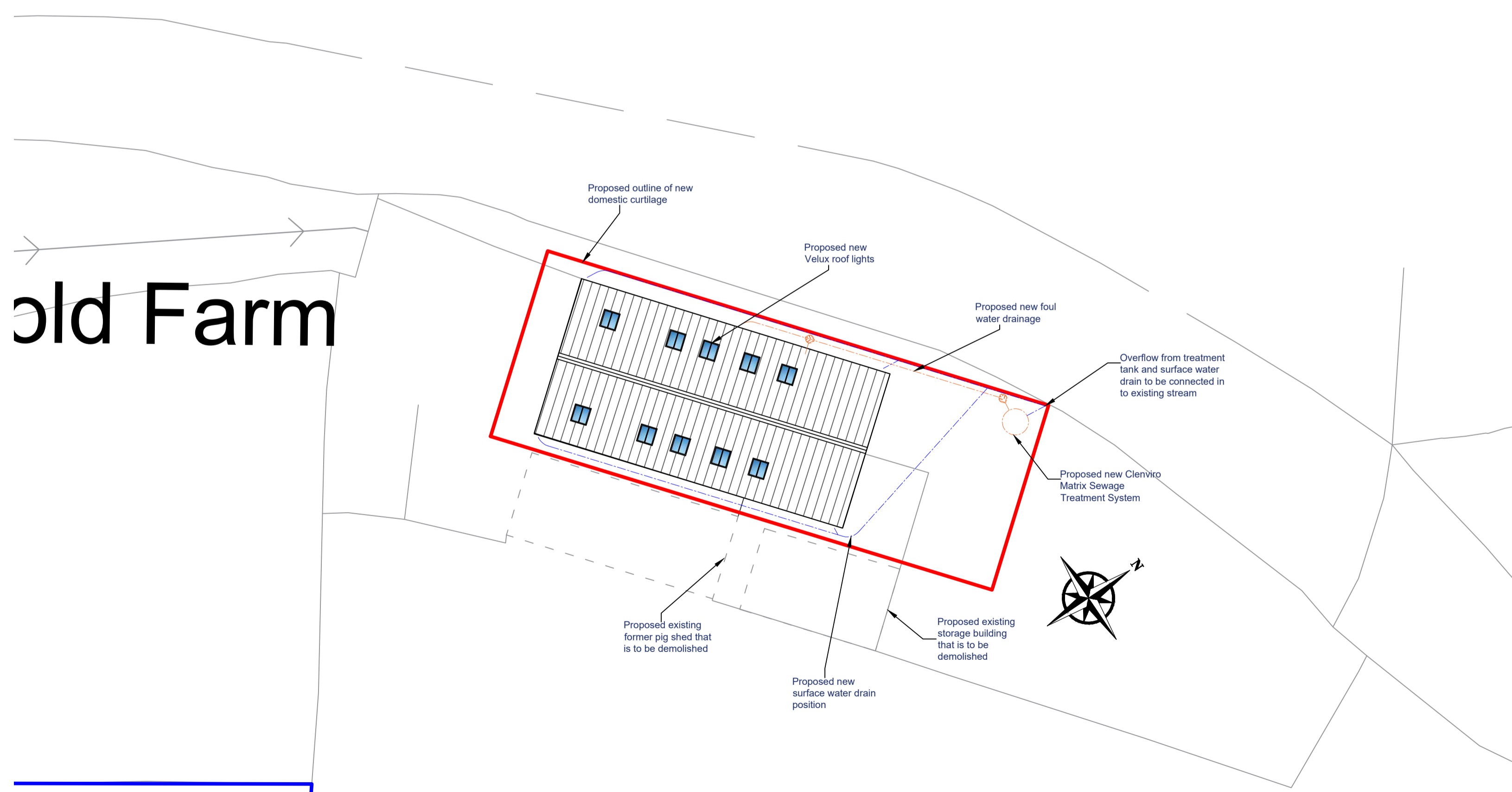
IF THE PROPOSED WORKS ARE TO BE CARRIED OUT BY MORE THAN ONE CONTRACTOR THEN THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015 WILL APPLY. FOR FURTHER INFORMATION PLEASE SPEAK TO THE AGENT OR LOOK ON www.hse.gov.uk



Existing Site Plan
Scale (1:200)



Location Plan
Scale (1:1250)



Proposed Site Plan
Scale (1:200)

Revision	Date



83 Blackburn Road, Rishton, BB1 4ER
 Email: james@holdenlancs.com
 Web: www.holdenlancs.com
 Mob: 07738162396

Drawing Title:
Change of Use Agricultural Building to Domestic Dwelling

Site Location:
Pinfold Farm, Ribchester

Drawing Status:
Site Plans

Date: 28/05/2024
Drawn by: JHolden

Scale: 1:1250/1:200 @ A1
Ref: 018
Revision: -

Client:
Mr. Davies