

PHASE I & II GEO-ENVIRONMENTAL ASSESSMENT

HORSEPOOL GRANGE,
STANTON UNDER BARDON

MILNER ARABLE

DECEMBER 2025



SUMMARY TABLE: PHASE I & II GEO-ENVIRONMENTAL ASSESSMENT	
SITE:	Horsepool Grange, Stanton Under Bardon, Leics
CLIENT:	Milner Arable Ltd
DATE:	December 2025
REFERENCE:	LN.09.25
DEVELOPMENT PROPOSAL:	Outline planning application for the construction of new commercial units, with all matters reserved save for access
HUMAN HEALTH:	Negligible Risk
CONTROLLED WATERS:	Negligible Risk
GAS RISK:	Negligible Risk
RADON GAS:	No protection required
COMMENTS:	Upgraded Water Pipes potentially required by STW.
FOUNDATIONS:	Mini Pile Foundation solution recommended.
FLOOR SLABS:	Ring Beams to support floor slabs
CONCRETE:	AC – 1 & DS - 1
SOAKAWAYS:	Not suitable - Cohesive Strata
COMMENTS:	Structural Engineer to Confirm Pile Specification

Authorised:		Richard Sutton MRICS <i>Director</i>
Date:	20.04.26	
Version:	1.1	



CONTENTS

1.0	INTRODUCTION	1
2.0	DESK STUDY AND SITE OBSERVATIONS.....	2
3.0	PHASE I CONCEPTUAL MODEL	4
4.0	PHASE II FIELDWORK	6
5.0	GROUND CONDITIONS	7
6.0	GEOTECHNICAL ASSESSMENT	9
7.0	CONTAMINATION ASSESSMENT	10
8.0	PHASE II CONCEPTUAL SITE MODEL	11
9.0	RISK MANAGEMENT & REMEDIATION	13
10.0	RECOMMENDATIONS	14
11.0	CONCLUSIONS	14

APPENDICES

Appendix A
Appendix B
Appendix C
Appendix D
Appendix E
Appendix F

Figures
Historical OS Maps
Environmental Data
Exploratory Hole Logs
Chemical Laboratory Report
Generic Assessment Criteria

1.0 INTRODUCTION

1.1 PREAMBLE

This Phase I & II Geo-Environmental Assessment has been produced for Milner Arable Ltd to provide a pre-development contamination and geotechnical assessment of the site known as *Horsepool Grange, Stanton Under Bardon, Leicester*. The development proposal for the site is for *Commercial Units*.

1.2 SITE LOCATION

The site is located approximately 7km south-east of Leicester City centre. The National Grid Reference (NGR) for the approximate centre of the site is SK 471 100. The site location, development proposal and site layout are illustrated in Appendix A.

1.3 PROJECT BRIEF

The brief for the Phase I & II Geo-Environmental Assessment incorporates:

- A review and assessment of the site history, with reference to potentially contaminative uses.
- A review of regulatory authority and environmental data relating to the site and its environs.
- A site inspection.
- An appraisal of potential environmental risks.
- Development of a Phase I Conceptual Model.
- Provide a strategy for, and to implement, a Phase II Environmental and Geotechnical Assessment.
- Development of the Phase II Conceptual Model.
- To provide recommendations to mitigate against environmental risks.
- Provide geotechnical design for the proposed development.

1.4 DATA REFERENCES

- Environmental Search Data (Supplied by Emapsite Ltd).
- Historical Ordnance Survey (OS) Mapping (Supplied by Emapsite Ltd).
- British Geological Survey Online Geological Mapping.

1.5 LIMITATIONS

This report has been produced in accordance with industry best practice at the time of writing.

Ivy House Environmental Ltd has, in the production of this report, relied upon information provided by third parties. Ivy House Environmental Ltd does not warrant the accuracy of this information and will not be responsible for any opinions which Ivy House Environmental has expressed, or conclusions which it has drawn, in reliance upon information which is subsequently proven to be inaccurate.

All statements and opinions provided in this report have been reported in good faith and are based on the information gained during, and restrictions imposed by, site investigation techniques used at the time. Ivy House Environmental cannot be held responsible for conditions not revealed by the investigation.

This report has been prepared for the sole use of the client and shall not be relied upon or transferred to third parties without the express written consent of Ivy House Environmental. Unauthorised third parties rely upon the information contained within this report at their own risk.

2.0 DESK STUDY AND SITE OBSERVATIONS

2.1 HISTORICAL REVIEW: SITE DEVELOPMENT

Ordnance Survey maps have been reviewed for the years 1886 - 2003. The historical development of the site and the locality are detailed in the below table while the OS maps are contained in Appendix B.

DATE	ON – SITE	OFF - SITE
1884-88	The site is undeveloped and forms an agricultural field	Horsepool Grange (a Farm) is located 100m to the North – West of the site.
1904		Stanton By Bardon Village is located 500m to the West.
1914-17		Cliff Hill Quarry Located 500m to the north.
1938		School located 500m to the south.
1957-59		
1968		
1987		
1994		Cliff Hill Quarry disused.
2003		

2.1.1 SUMMARY

The site has not previously been developed. The area surrounding the site generally comprised agricultural fields with a neighbouring farm. Cliff Hill quarry to the north of the site has completed its working life during the years reviewed and is now closed.

2.2 DEVELOPMENT PROPOSAL

The development proposal comprises the outline planning application for the construction of new commercial units, with all matters reserved save for access

2.3 SITE DESCRIPTION

A site walkover completed during the fieldwork on the 21st of October 2025 confirmed that the site is down to pasture with significant tree planting covering the land. A tarmac road runs around the boundary to the commercial units to the rear (North).

2.4 ANTICIPATED GEOLOGY

The BGS geological mapping for this area illustrates solid strata of the Edwalton Mudstone, consisting of beds of mudstone, sandstone and siltstone and superficial strata comprising the Oadby Till, brown silty Clay with sand, gravel and silt.

2.5 HYDROGEOLOGY & HYDROLOGY

2.5.1 Hydrogeology

The Solid strata are classified as a *Secondary B* aquifer; the Superficial strata are classified as *Secondary Undifferentiated* Aquifer.

There are no licensed groundwater abstractions within 500m of the site; the site is not located within a groundwater Source Protection Zone (SPZ); no information on groundwater levels is available for the site.

2.5.2 Hydrology

There are 11 No surface Water features within 250m of the site.

There are no Flood Zones 2 & 3 within 250m of the site.

2.6 COAL FIELDS

The EMAP report confirms that the site is not located in an area where historical Coal Mining is likely to pose a risk to the site.

2.7 MINERAL RESOURCES

The site is situated in an area where there are a number of significant historical Granite quarries.

2.8 POTENTIALLY CONTAMINATIVE LAND USES

Environmental search data supplied by Emapsite Ltd (Appendix C) is summarised in the Table below:

		Summary of Findings (Number)			
Env Data	On Site	0 – 50m	50 – 250m	250 – 500m	500 – 2000m
Geology	Superficial/Bedrock				
Historical Land Use	0	0	8	16	-
Historical Tanks	0	0	1	14	-
Historical Garages	0	0	0	0	-
Historical Industrial Land Use	0	0	8	22	-
Historical Landfill Sites	0	0	0	0	-
Waste Exemptions	0	0	5	3	-
Recent Ind Land Use	0	0	5	0	-
Current Petrol Station	0	0	0	0	-
Licensed Pollutant Release	0	0	0	0	-
Groundwater Abstraction	0	0	0	0	7
Surface Water Abstraction	0	0	0	0	1
SW Features	0	2	9	0	-
Flood Zone 2	0	6	0	0	-
Flood Zone 3	0	0	-	-	-
Surface Ground Workings	0	0	1	-	-
Coal Mining Risk	0	-	-	-	-

- The site is not located within 250m of a landfill site.
- There are 2 discharge consents within 50m of the site.
- There are no hazardous substance or IPC consents located within 250m of the site.
- There are no fuel sites located within 500m of the site.

The site is pasture land and has always been in agricultural use therefore, a typical brownfield screening suite, as detailed below, is recommended for soil samples and made ground samples taken during the Phase II investigation.

- Metals, Speciated PAH, TPH, asbestos fibre screen.

2.9 ASBESTOS

No Asbestos containing materials are used or were observed on site or on neighbouring sites.

2.10 RADON GAS ASSESSMENT

The site is not located in an area where basic Radon protection is required.

3.0 PHASE I CONCEPTUAL MODEL

3.1 SOURCE-PATHWAY-RECEPTOR

The conceptual model for the site considers the development proposal for Commercial use and the preceding information.

The sites use as pasture land is considered in respect to the potential risk posed to end users of the proposed commercial units.

There are no landfill sites within 500m of the site.

Potential contaminants of concern for the end user include Heavy Metals, inorganics, and Polycyclic Aromatic Hydrocarbons (PAHs).

Pathways for the end user of the site include direct contact (dermal) with potentially contaminated soil dust; ingestion and inhalation of potentially contaminated soil dust; inhalation of potential ground gas.

The primary receptors for the site are construction workers and end users of the site (staff).

For the controlled waters environment the primary receptors are the Secondary B and the Secondary undifferentiated aquifers underlying the site. The local surface water courses are not considered to be at risk due to the distance to them.

Potential contaminants of concern for the controlled waters environment include Heavy Metals, inorganics, and Polycyclic Aromatic Hydrocarbons (PAHs).

The primary pathway for controlled waters is the leaching and vertical migration of potential contaminants through the vadose zone to the saturated zone.

The development of the conceptual model is illustrated on Figure 3.1.

Figure 3.1: Phase 1 Conceptual Site Model

HUMAN HEALTH			
SOURCE	PATHWAY	RECEPTOR	SOLUTION
Potentially contaminated made ground from historical pasture use (Potential contaminants of concern include Heavy Metals, PAHs, TPH).	Dermal contact with potentially contaminated soil dust; ingestion and inhalation of potentially contaminated soil dust.	Construction Workers	Basic PPE for all workers (overalls, gloves, dust mask if required) and wash facilities/personal hygiene
		End Users (e.g. residents)	Concrete hardstanding flooring/ foundation slab breaking pathway between contaminated made ground and receptors.
	Inhalation of potential ground gas.		
Potentially Contaminated made ground and natural strata	Leaching into water supply pipes	Water Supply/End Users	Aluminium sheathed or steel water pipes.
CONTROLLED WATERS			
Potentially contaminated made ground from historical pasture use (Potential contaminants of concern include Heavy Metals, PAHs, TPH)	Leaching and vertical migration through the vadose zone to the saturated zone	Secondary B & Secondary Undifferentiated Aquifers.	Edwalton Mudstone & Oadby Till Strata.

4.0 PHASE II FIELDWORK

4.1 INTRODUCTION

The Phase II intrusive investigation was undertaken on the 21st October 2025 under the supervision of a suitably qualified engineer and in general accordance with the Code of Practice for Site Investigations BS5930: 2015+A1: 2020.

The Phase II investigation incorporated the following:

- The advancing of 5No window sample boreholes to a maximum depth of 3.5mbgl.
- The analysis of 5No samples for a standard 'CLEA' screening suite and TPHCWG.

Window sample logs are contained in Appendix D.

4.2 RATIONALE

The Phase II investigation has been designed to facilitate an assessment of the general ground conditions across the site, including contaminant sources, pathways and receptors. The investigation has also been designed in consideration of the current site layout and access restrictions, the development proposal and health and safety issues, the rationale behind the location of each exploratory hole is detailed in table 4.1 below:

Table 4.1: Phase II Rationale

Hole ID	Location	Notes
WS1 - 5	General grid	CLEA Suite/TPH

4.3 LABORATORY ANALYSIS & TESTING

Selected soil samples were analysed at specialist environmental and geotechnical laboratories or by field monitoring equipment as detailed in the following sections.

4.3.1 Chemical Analysis

A total of 5No samples of TOPSOIL were sent for analysis at a UKAS/MCERTS accredited laboratory. The scheduled parameters are detailed in table 4.2.

Table 4.2: Soil Analysis

Sample ID	Depth (mbgl)	Strata	Suite
WS1 - 5	0.2 – 0.3	Topsoil	CLEA Suite/TPH

The soil analysis results are contained in Appendix E.

5.0 GROUND CONDITIONS

The intrusive investigation has revealed that TOPSOIL across the site overlies solid deposits of Weathered Edwalton Mudstone. The site specific observations are detailed in the following sections.

5.1 MADE GROUND

Made ground materials were present in borehole WS4 at a depth range of 0.5 – 2.0mbgl. Made ground generally consisted of Stiff brown silty CLAY with large concrete cobbles.

5.2 SUPERFICIAL STRATA

Superficial strata were not encountered on site.

5.3 SOLID STRATA

Weathered Solid strata of the Edwalton Mudstone group were present at depths to a maximum of 3.5mbgl (refusal). This strata generally consisted of:

- Stiff brown CLAY with fine to coarse gravel of Diorite.
- Orange brown firm gravelly CLAY, fine gravel of Diorite.
- Stiff dark grey CLAY.
- Stiff dark grey becoming orange CLAY with gravel of Diorite

5.4 FIELD OBSERVATIONS

Table 5.1 illustrates the pertinent geological and contamination observations made during the intrusive investigation.

Table 5.1: Fieldwork Observations

Location	Depth/Strata	Observation
WS1 - 5	GL – 3.5mbgl	No potential contamination observed.

5.5 GROUNDWATER

Groundwater strikes were not encountered in any of the exploratory holes.

NOTE: Groundwater levels are subject to seasonal variations and may be affected by local abstraction rates.

5.6 FIELD TESTS

Standard Penetration Tests (SPT) were undertaken during drilling of all windowless sampler boreholes. Figure 5.1 show SPT 'N' Values vs Depth (m bgl) for tests within the superficial deposits (Edwalton Mudstone) and weathered solid geology (Grantham Formation). Figure 5.2 illustrates the individual SPT 'N' Value profile for each borehole.

5.6.1 SPT PROFILE

Standard Penetration Tests (SPT's) were undertaken at approximately 1.0m intervals in each borehole to assess soil strength/relative density. Figures 5.1 and 5.2, overleaf, show SPT 'N' Values vs separate geology and each borehole, respectively.

Figure 5.1: SPT 'N' Value vs Depth for Edwalton Mudstone.

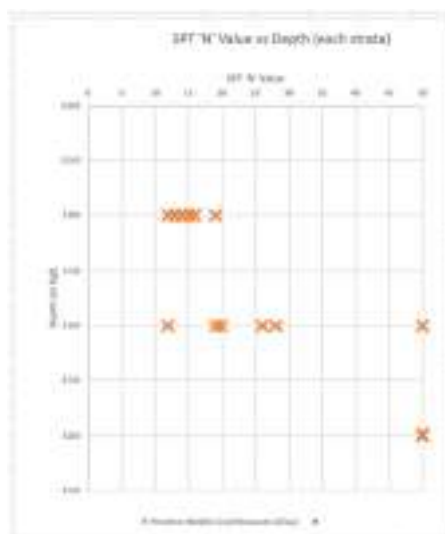


Figure 5.2: SPT 'N' Value vs Depth for Individual Borehole Profiles

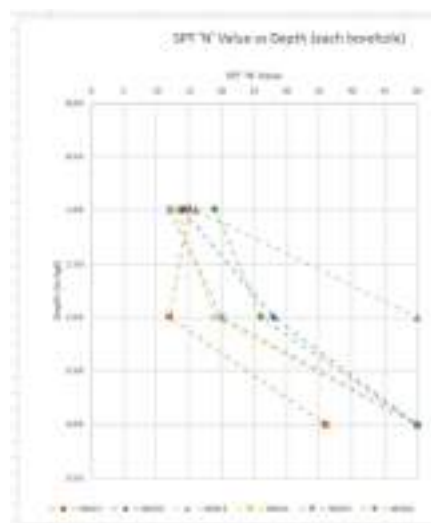


Figure 5.1 illustrates a gradual increase of SPT 'N' Values with depth (m bgl) recorded in Edwalton Mudstone deposits.

Figure 5.2 shows that the SPT 'N' Value increases with depth overall for all of the boreholes. Refusals for borehole WS3 occurs at 2.0mbgl and all others at 3.0mbgl.

All windowless sampler borehole logs are included in Appendix D and include a full record of SPT 'N' Values.

6.0 GEOTECHNICAL ASSESSMENT

The geotechnical assessment considers the development proposal for outline planning application for the construction of new commercial units, with all matters reserved save for access.

6.1 GEOTECHNICAL LABORATORY TESTING

Geotechnical testing was not scheduled for this project.

6.2 FOUNDATION DESIGN & FLOOR SLABS

The development proposal illustrates the construction of commercial units with associated hardstanding, parking and soft landscaping.

Due to the depth of made ground encountered across the site, inconsistent SPT values, the prevalence of semi – mature trees across the site and mature trees (potential for excessive deepening due to tree influence) to the north, a piled foundation solution is recommended for the project.

It should be noted that:

- ☐ Piling rigs can core through obstructions to found on solid strata beneath.
- ☐ Ring beams can provide a stable base for the floor slabs and support loads for the proposed development.

6.2.1 Piled Foundations

A copy of this report should be sent to an experienced piling contractor for review; to provide a specification and scope of works for the groundworks for the approved commercial units.

6.3 EXCAVATION & GROUNDWATER CONDITIONS

Excavation to provide support for ring beams can be achieved using conventional mechanical plant. Significant groundwater flows were not encountered on site and is not considered to be a problem during construction.

6.4 HIGHWAYS CONSTRUCTION

CBR testing of the shallow strata to the front and back of the proposed property is recommended to inform construction of the car parking.

6.3 BURIED CONCRETE

Based on the recorded water-soluble sulphate concentrations and pH values it is considered appropriate to adopt a basic Design Sulphate Class of DS-1, together with an Aggressive Chemical Environment of Concrete (ACEC) AC-1.

7.0 CONTAMINATION ASSESSMENT

7.1 HUMAN HEALTH

With regards to the soil risk assessment, Ivy House Environmental observe the following hierarchy:

- Category 4 Screening Levels (C4SLs)
- LQM Suitable 4 Use Levels (S4uls)

Where no C4SLs have been generated Ivy House will use the LQM S4ULs. Similar assumptions and land uses to C4SLs have been used. However, toxicological information has been based on minimal risk' as per previous guidelines and assumptions.

7.2 HUMAN HEALTH

A review of the enclosed chemical laboratory report (Appendix E) illustrates that concentrations of all contaminants of concern are within their Commercial GAC (Appendix F).

7.2.1 Hydrocarbon Contamination

None of the TPH data exceeded their respective GAC for the carbon bands reported.

7.2.2 Ground Gas and Soil Vapours

As there were no putrescible materials present in the boreholes (predominantly CLAY) and the clay strata would act to restrict the migration of any landfill gas from the former quarry site, monitoring pipe was not installed in any of the boreholes.

7.2.3 Asbestos Contamination

Asbestos fibres were not detected in any of the soil samples.

7.3 CONTROLLED WATERS

As no groundwater was encountered or significant soil contamination has been identified, the risk posed to controlled waters is considered to be negligible.

8.0 PHASE II CONCEPTUAL SITE MODEL

The conceptual model for the site considers the development proposal for commercial units and the information gathered during the Phase I and II assessments.

The site's former use as a pasture field is considered in light of the commercial development proposal.

The phase 2 investigation did not reveal any putrescible materials within the made ground. Clay strata across the site is likely to restrict the sub – surface migration of potential ground gas from neighbouring land.

Due to elevated Arsenic concentrations, upgraded water pipes will be required for the development.

Contamination in excess of the commercial GAC was not reported. Therefore, remediation is not required for the site.

The primary receptors for the site are construction workers and end users of the site (Occupants of the completed commercial units). The risk posed to human health receptors is considered negligible, therefore remediation will not be required.

For the environment (controlled waters) the primary receptors are the Secondary B and the Secondary undifferentiated aquifers underlying the site.

None of the reported contaminants of concern are likely to pose a risk to Controlled Waters.

The risk posed to controlled waters (Sec B/Sec Undifferentiated) by the reported contaminant concentrations made ground and natural strata is considered to be negligible.

The development of the conceptual model is illustrated on Figure 8.1.

Figure 8.1: Phase II Conceptual Site Model

HUMAN HEALTH			
SOURCE	PATHWAY	RECEPTOR	SOLUTION
No contamination reported. No ground gas risk.	Ingestion of soil, direct contact (dermal) with soil and soil dust. Leaching into water supply pipes.	Construction Workers	Basic PPE for all workers (overalls, gloves, dust mask if required) and wash facilities/personal hygiene
		End Users (Staff)	Potential Requirement for upgraded water pipes, e.g. aluminium sheathed or steel pipes.
CONTROLLED WATERS			
No contamination reported.	Leaching and vertical migration through the vadose zone to the saturated zone	Sec B/Sec Undifferentiated Aquifers	Negligible permeability. No local abstractions or surface water receptors. Negligible risk.

9.0 RISK MANAGEMENT & REMEDIATION

Previous sections have quantified the risk posed to identified receptors which, in some instances, require remediation to protect or reduce levels of risk. The following section details measures and recommendations for dealing with risks associated with soil, gas and groundwater contamination in respect to the development proposal of commercial units.

9.1 REMEDIATION TO PROTECT END USERS

Upgraded water supply pipes could be required for the development – consultation with STW is recommended for confirmation.

9.2 REMEDIATION TO PROTECT CONTROLLED WATERS

No remediation is required to protect this receptor.

9.3 CONSTRUCTION WORKERS

No remediation is required to protect this receptor.

9.4 REMEDIATION TO PROTECT THIRD PARTIES

No remediation is required to protect this receptor.

9.5 REMEDIATION TO PROTECT CONSTRUCTION MATERIALS

Concrete specification has been provided.

9.6 WASTE MANAGEMENT

A review of the chemical analysis report contained in Appendix E illustrates that the majority of the waste soils generated during construction will be acceptable for restoration use at a neighbouring waste site. A copy of the lab data should be provided to the site operator for assessment.

10.0 RECOMMENDATIONS

Recommendations for further assessment of the site include:

- A copy of this report and the appendices should be provided to a piling contractor for review and design.
- Additional deep boreholes may be required to finalise the pile specification.

11.0 CONCLUSIONS

The Phase I Assessment and the recommendations contained within has illustrated that the proposed development of the site for industrial/commercial use does not pose a risk to end users of the site or the environment.

However, due to the presence of variable made ground across the site and the prevalence of trees across the development platform, a piled foundation solution (mini piles) is recommended for the project.

As there is no reported contamination, off site disposal of construction waste should not attract a premium for disposal or recycling.

Upgraded water pipes are likely to be required by Severn Trent.

APPENDIX A





KEY:

- Approximate Site Location
LE67 9TW



Linden
Environmental Ltd

07717155102

linden@new@outlook.com

Linden, Potter Street, Spondon,
Derby DE21 7UH

TITLE:

Site Location Plan

PROJECT:

Land at Elliot's Lane, Stanton Under Bardon

PROJECT No:

LN.09.25

DATE:

10.2025

SCALE:

NTS

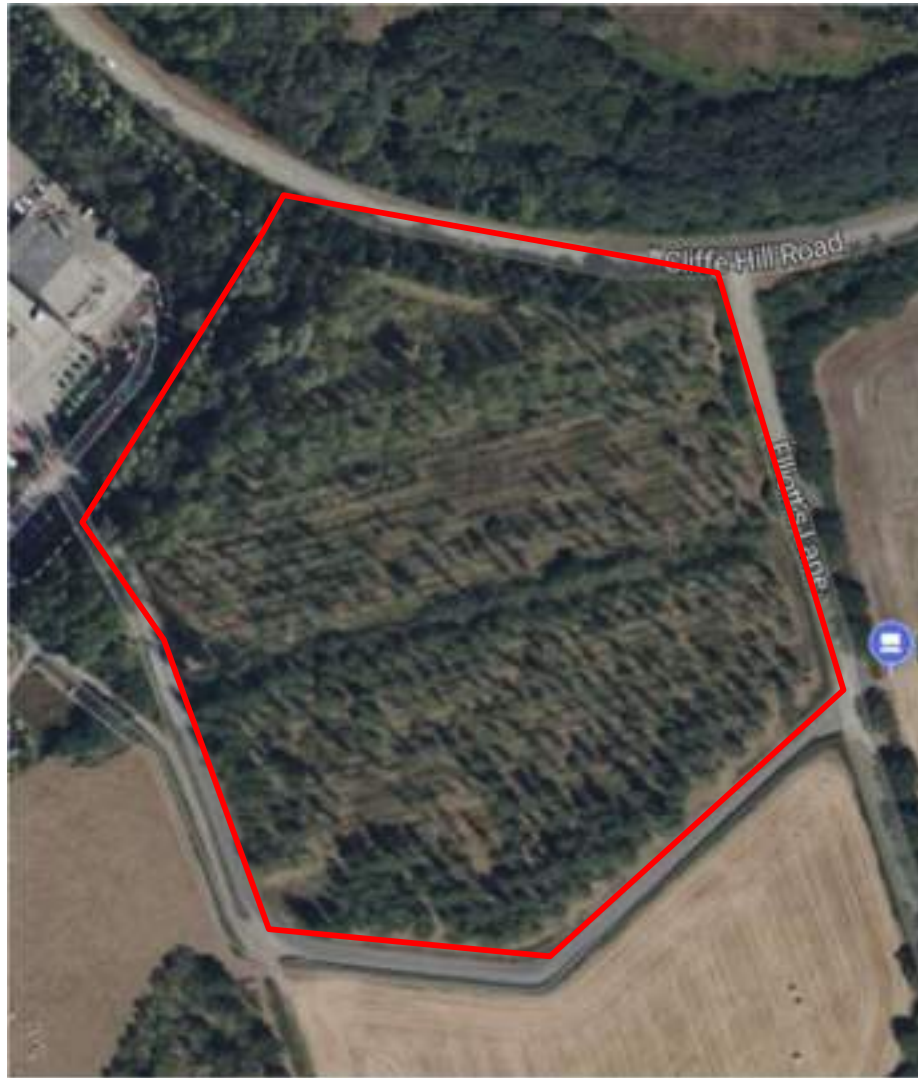
DRAWN:

RPS

DWG No:

Figure 1

DO NOT SCALE



KEY:



Approximate Site Location
Approximate Site Boundary

DO NOT SCALE



Linden
Environmental Ltd

07717155102

linden@nsw@outlook.com

Linden, Potter Street, Spondon,
Derby DE21 7UH

TITLE:

Site Area

PROJECT:

Land at Elliot's Lane, Stanton Under Bardon

PROJECT No:

LN.09.25

DATE:

10.2025

SCALE:

NTS

DRAWN:

RPS

DWG No:

Figure 2



KEY:



WS Borehole

DO NOT SCALE



Linden
Environmental Ltd

07717155102

linden@zenix@aol.com

Linden, Potter Street, Spondon,
Derby DE21 7UH

TITLE:

Proposed Borehole Location Plan

PROJECT:

Land at Elliot's Lane, Stanton Under Bardon

PROJECT No:

LN.09.25

DATE:

10.2025

SCALE:

NTS

DRAWN:

RPS

DWG No:

Figure 3



KEY:

DO NOT SCALE



Linden
Environmental Ltd

07717155102

linden@zenix@outlook.com

Linden, Potter Street, Spondon,
Derby DE21 7UH

TITLE:

Development Proposal

PROJECT:

Land at Elliot's Lane, Stanton Under Bardon

PROJECT No:

LN.09.25

DATE:

10.2025

SCALE:

NTS

DRAWN:

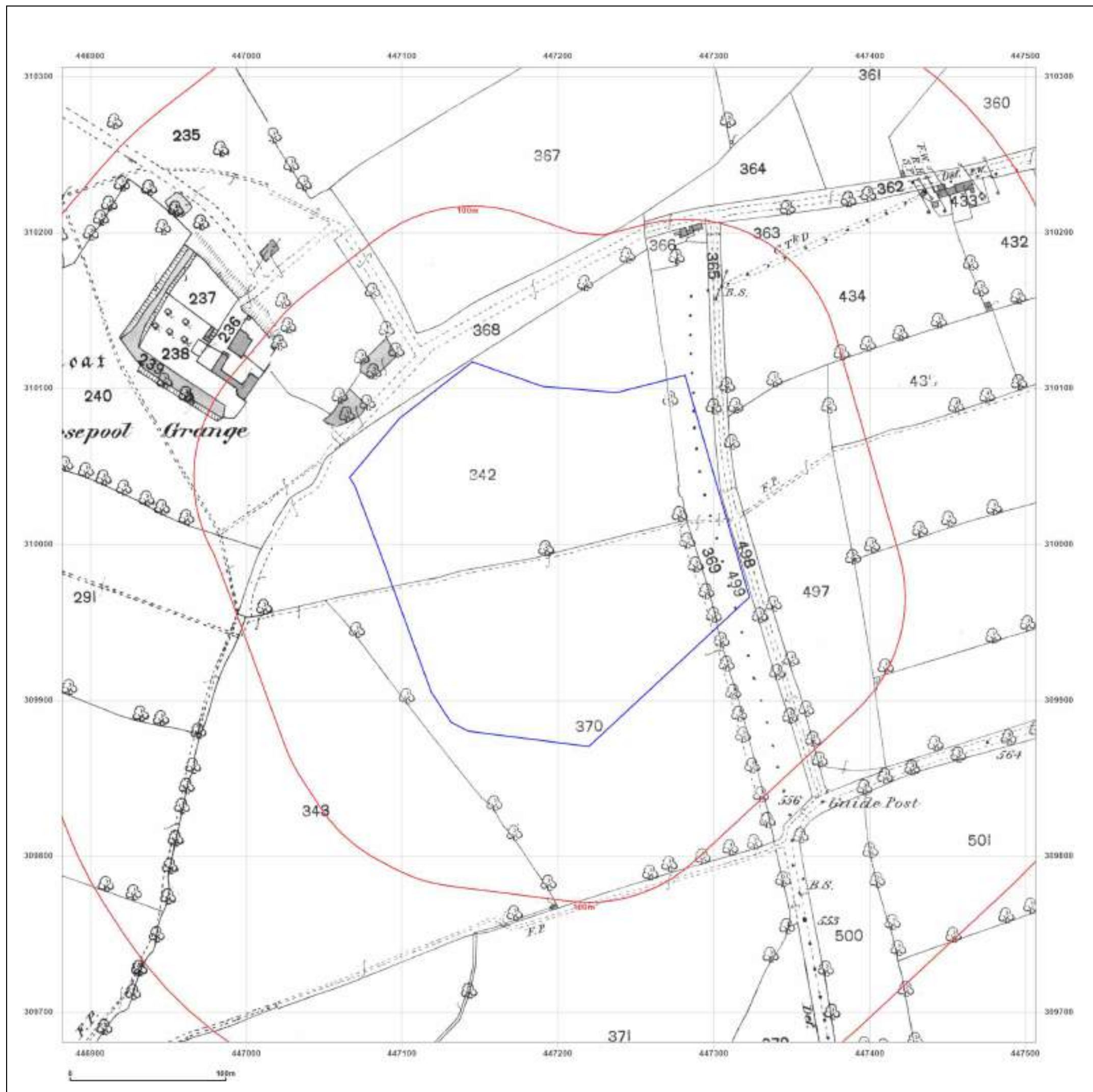
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DWG No:

Figure 4

APPENDIX B





Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: County Series

Map date: 1884

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1884
Revised 1884
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1884
Revised 1884
Edition N/A
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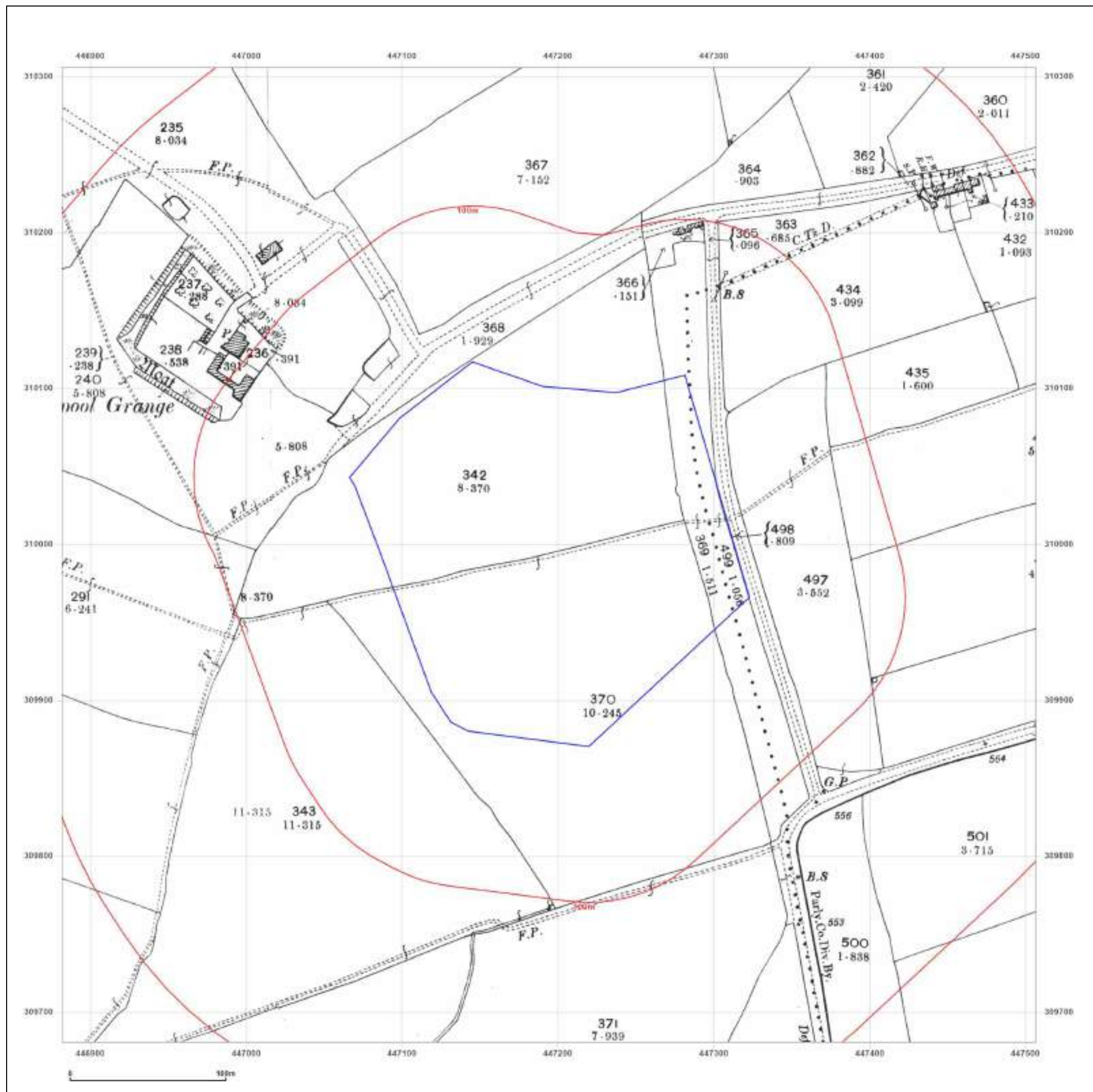


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Production date: 27 October 2025

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



Site Details:
unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: County Series
Map date: 1903
Scale: 1:2,500
Printed at: 1:2,500



Surveyed 1903
Revised 1903
Edition N/A
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Surveyed 1903
Revised 1903
Edition N/A
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Production date: 27 October 2025

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



Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: County Series

Map date: 1929

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1929
Revised 1929
Edition N/A
Copyright N/A
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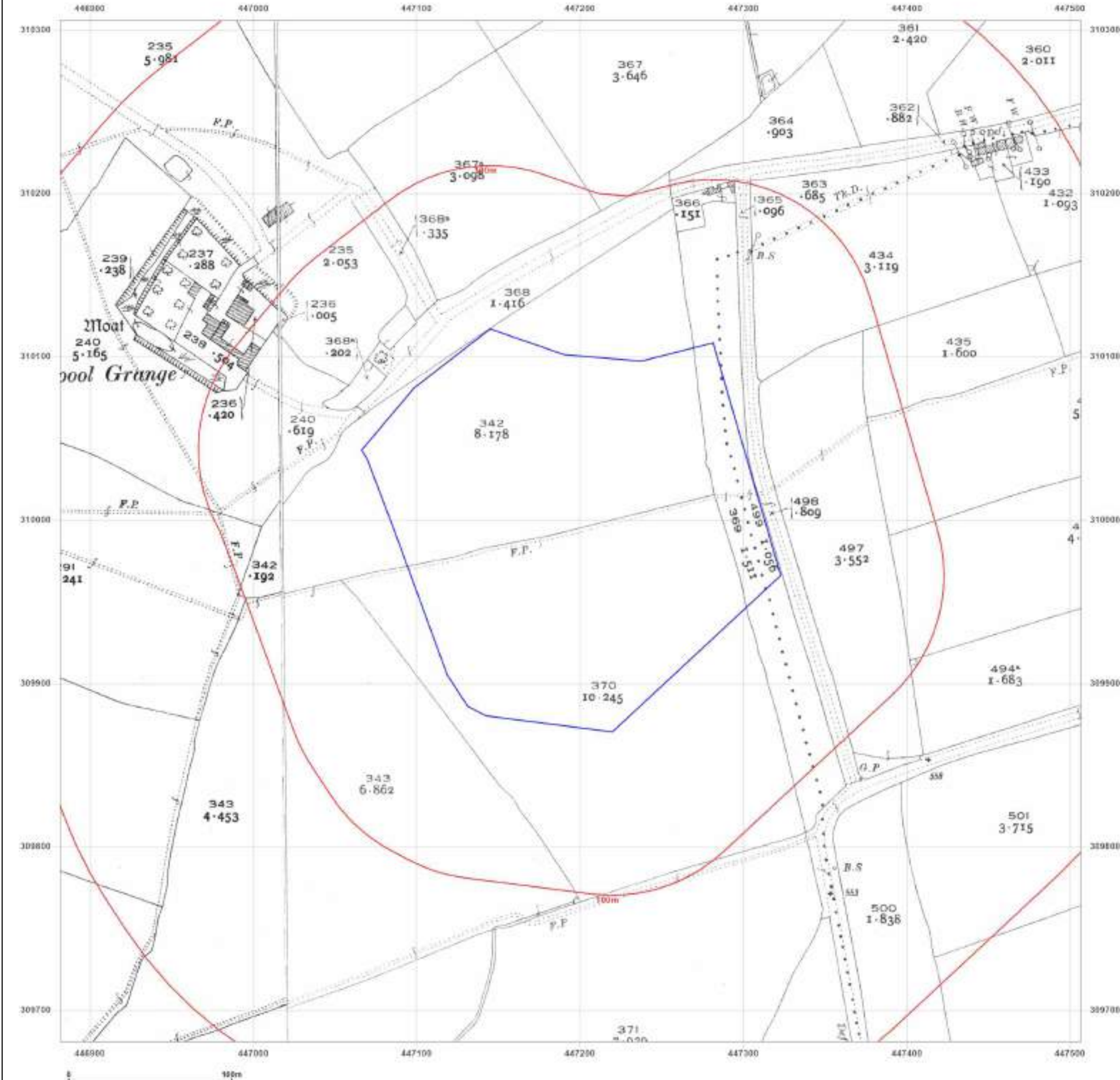


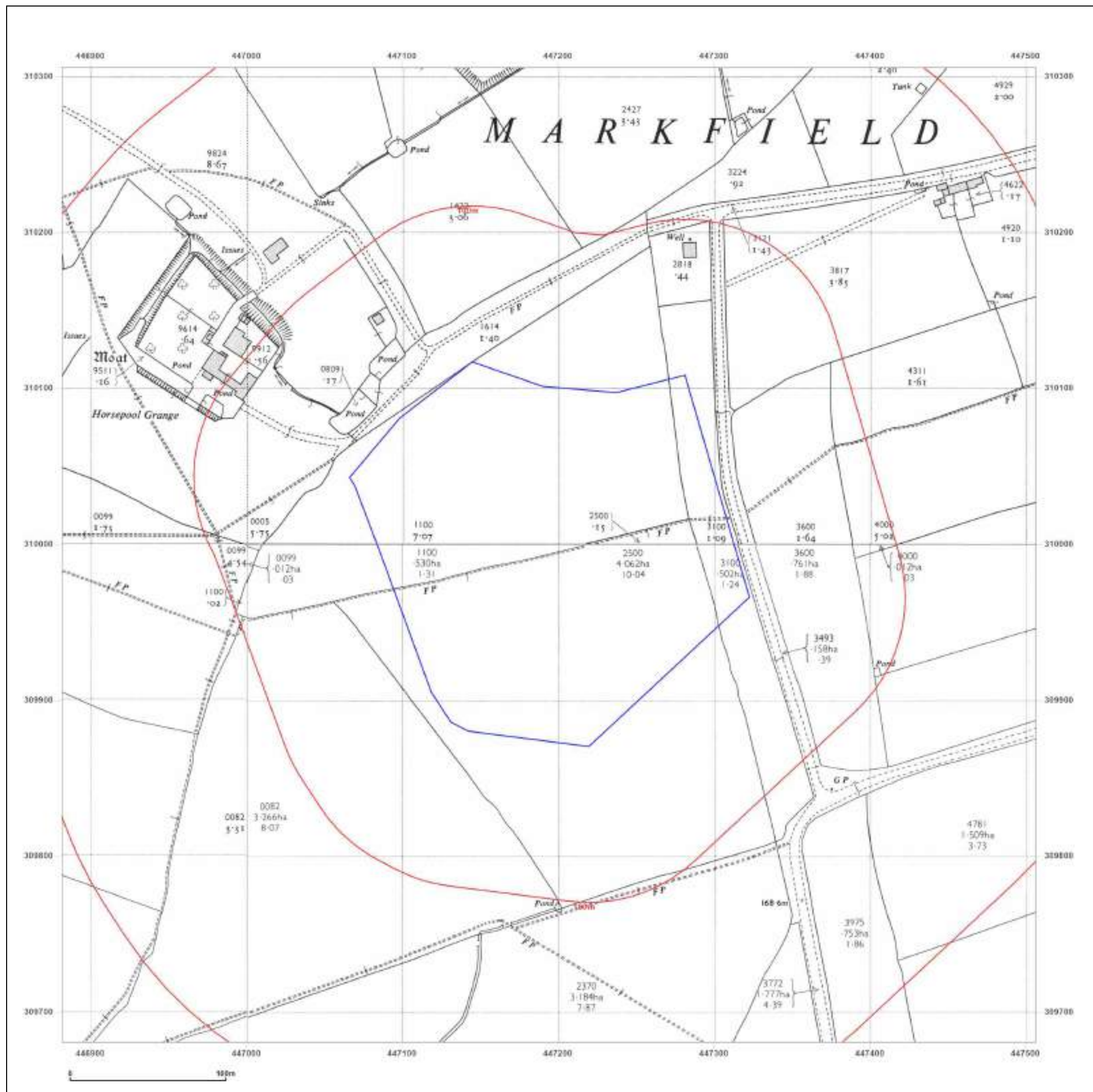
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Production date: 27 October 2025

Map legend available at:
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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: National Grid

Map date: 1959

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1958
Edition N/A
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Levelled 1928



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Revised 1958
Edition N/A
Copyright 1959
Levelled 1928

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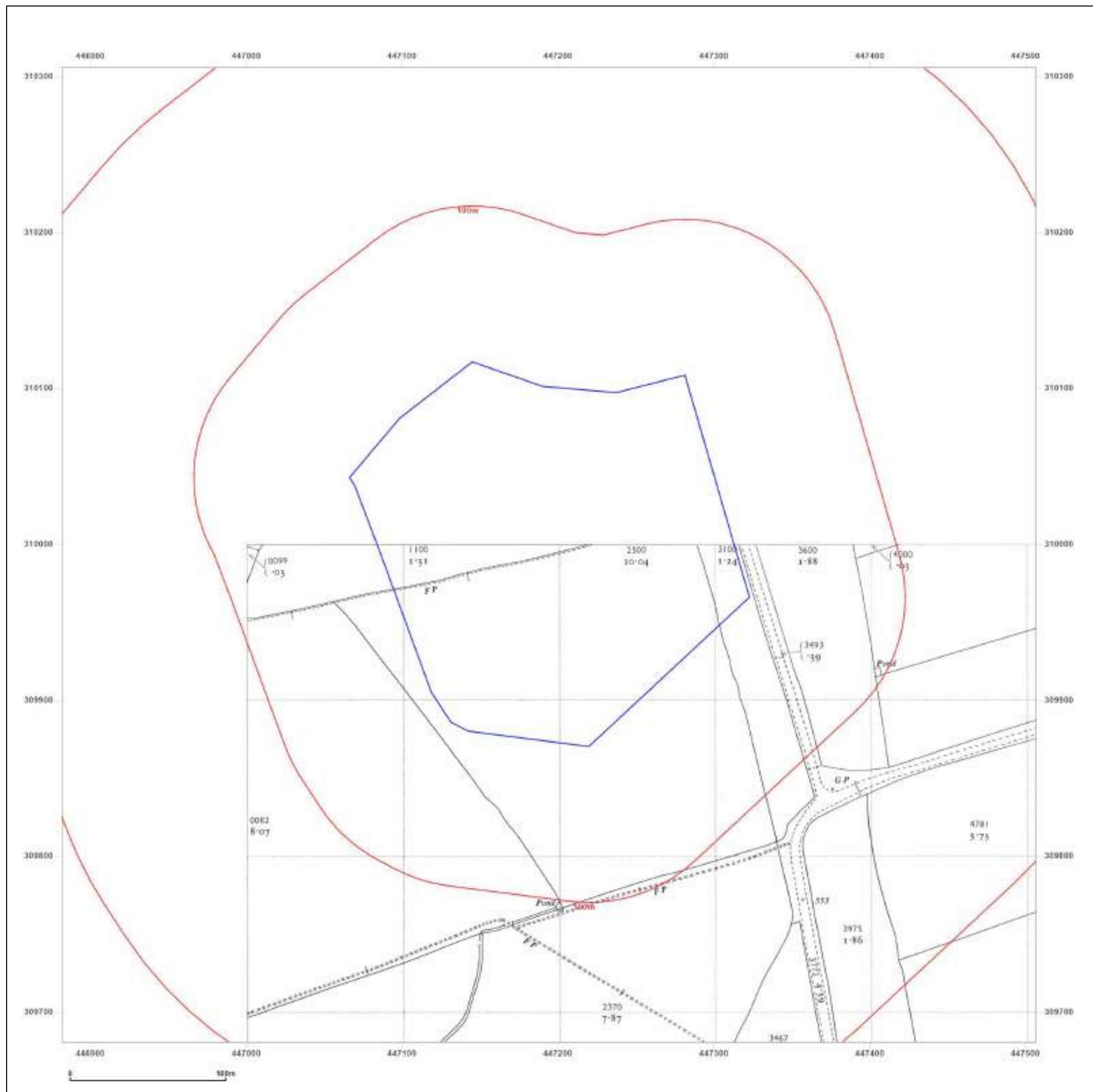


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Production date: 27 October 2025

Map legend available at:
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Site Details:
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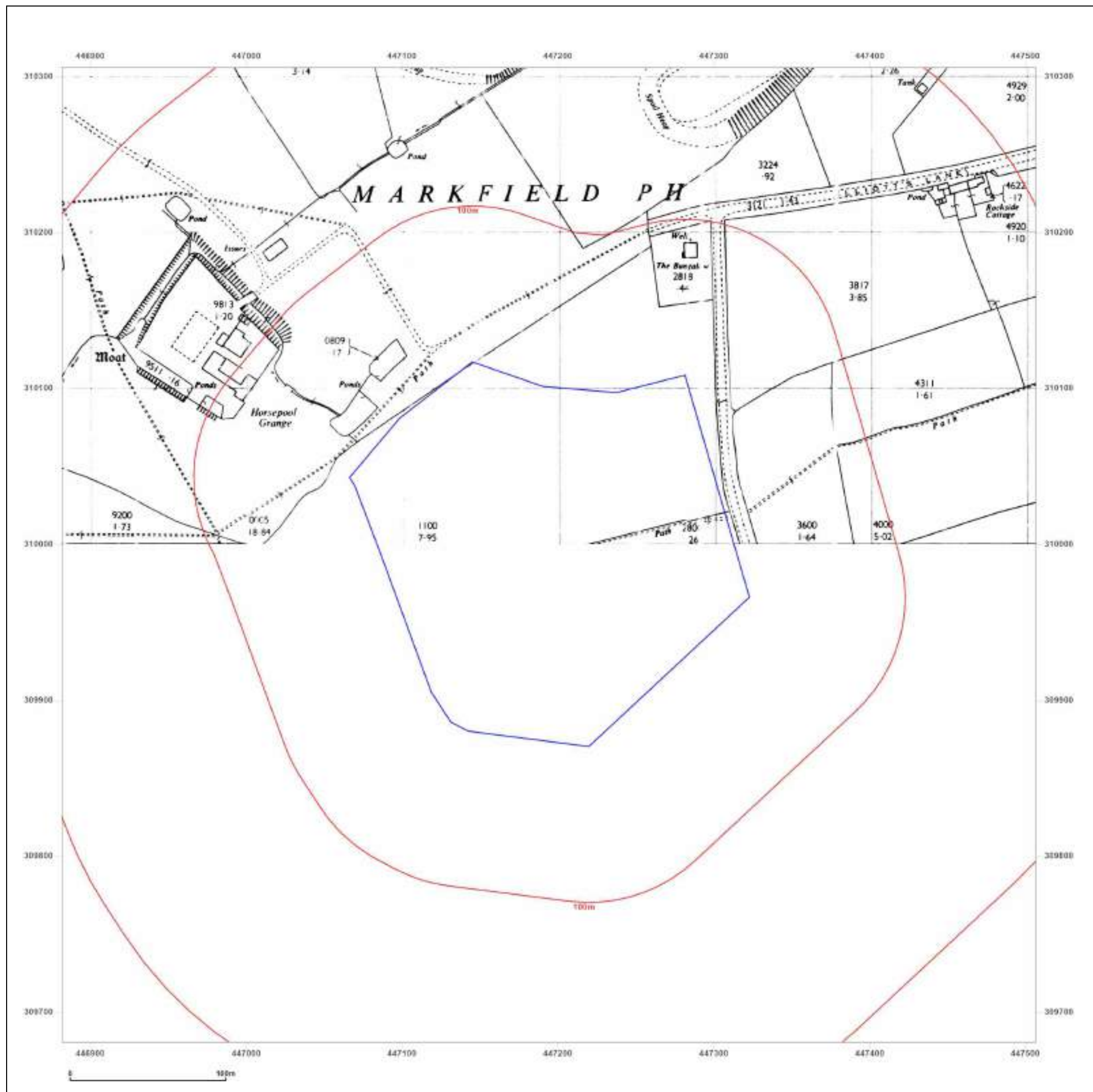
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Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: National Grid
Map date: 1959
Scale: 1:2,500
Printed at: 1:2,500

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Revised 1958
Edition N/A
Copyright 1959
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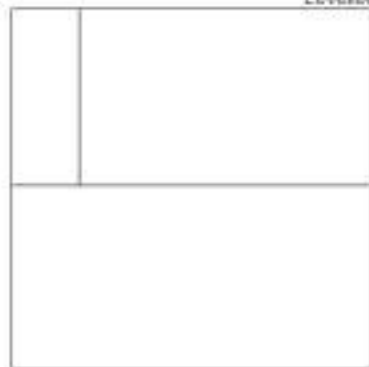
Site Details:
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Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

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



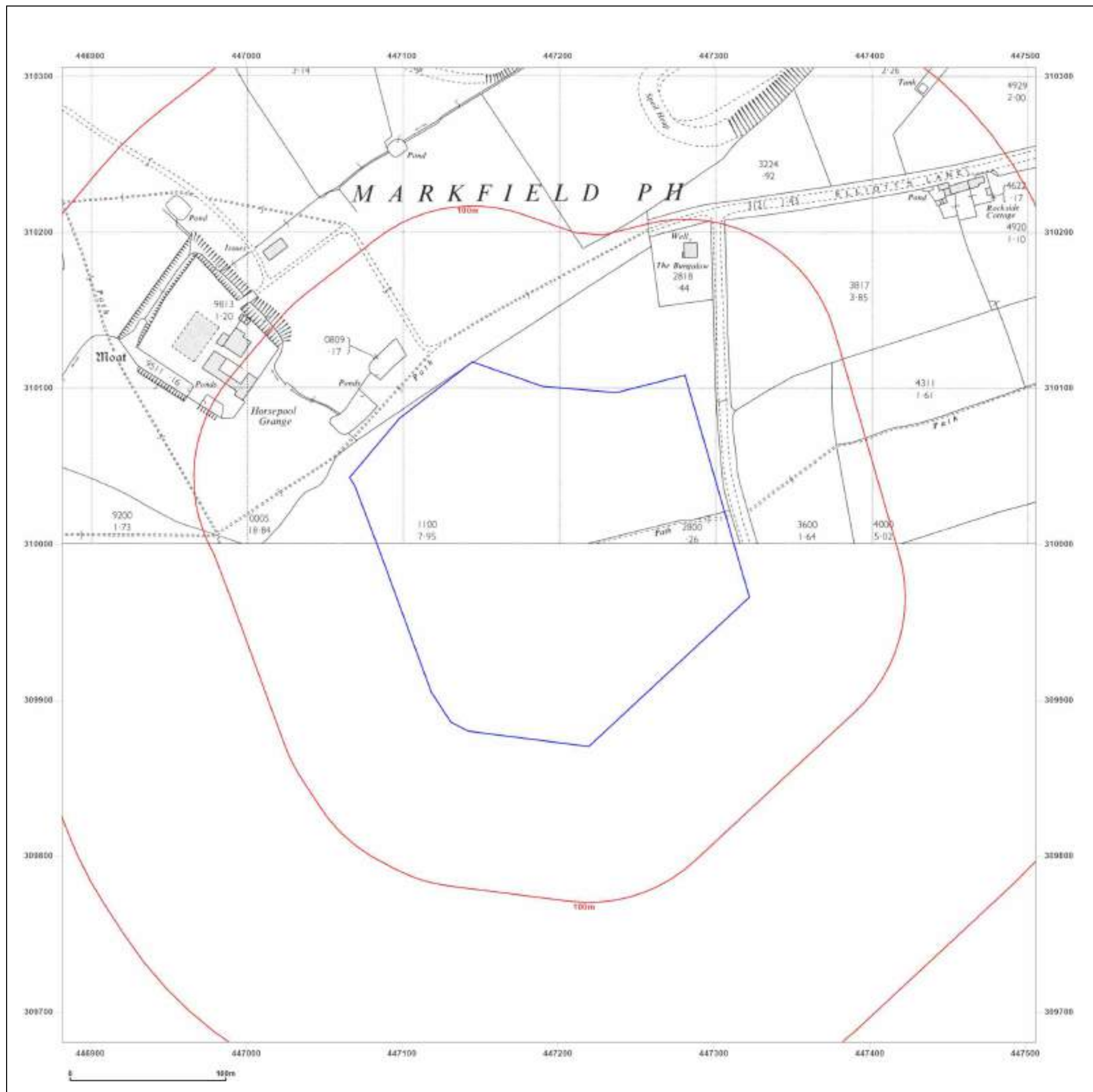
Surveyed N/A
Revised 1965
Edition 1967
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Site Details:

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Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: National Grid

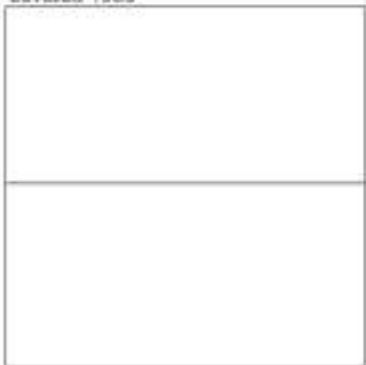
Map date: 1967

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1985
Revised 1965
Edition N/A
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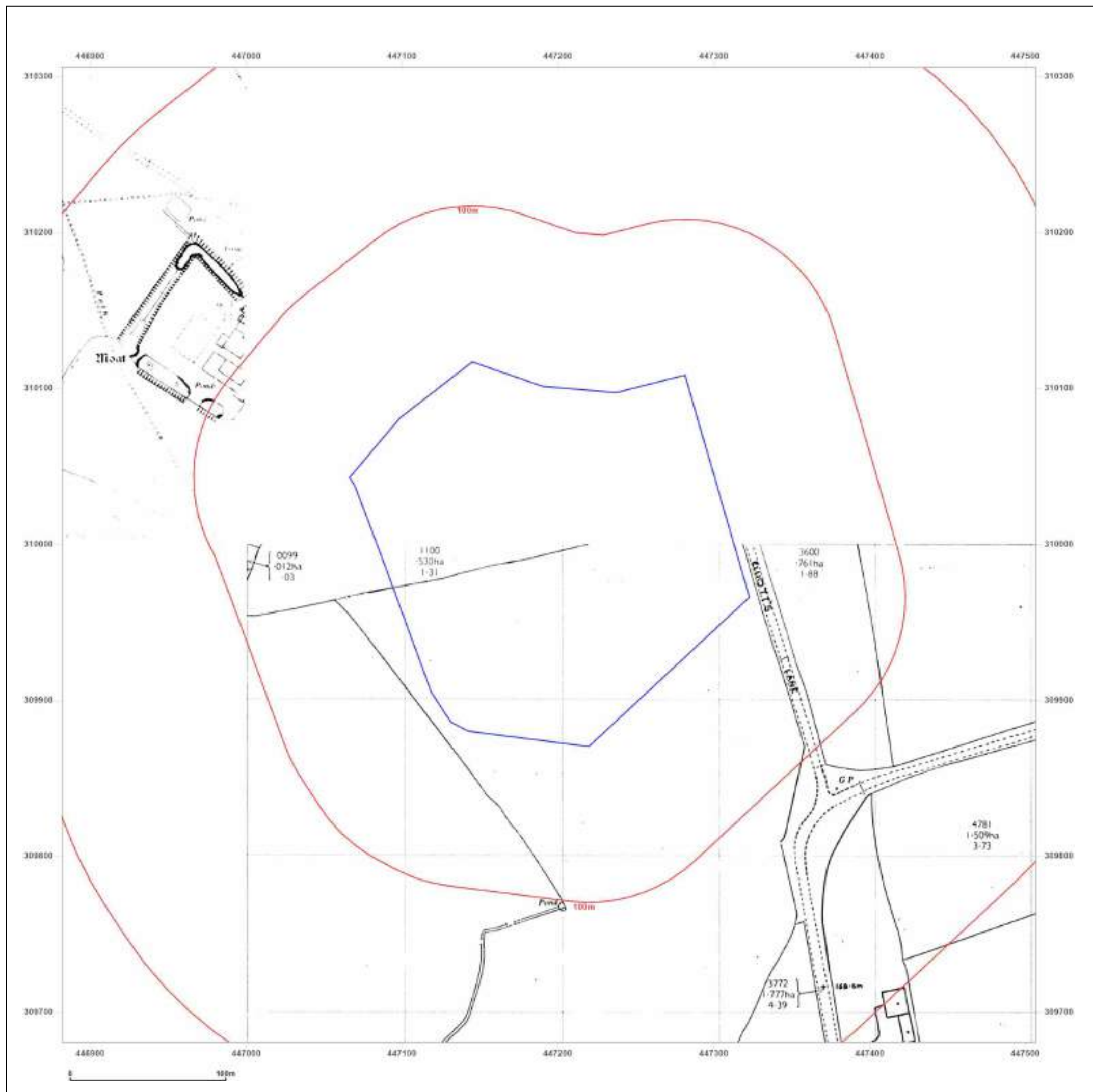


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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: National Grid

Map date: 1977-1981

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
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Surveyed 1958
Revised 1981
Edition N/A
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Site Details:
unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: National Grid
Map date: 1989
Scale: 1:2,500
Printed at: 1:2,500

Surveyed 1988
Revised 1988
Edition N/A
Copyright 1989
Levelled 1963

Surveyed 1983
Revised 1989
Edition N/A
Copyright 1989
Levelled 1963



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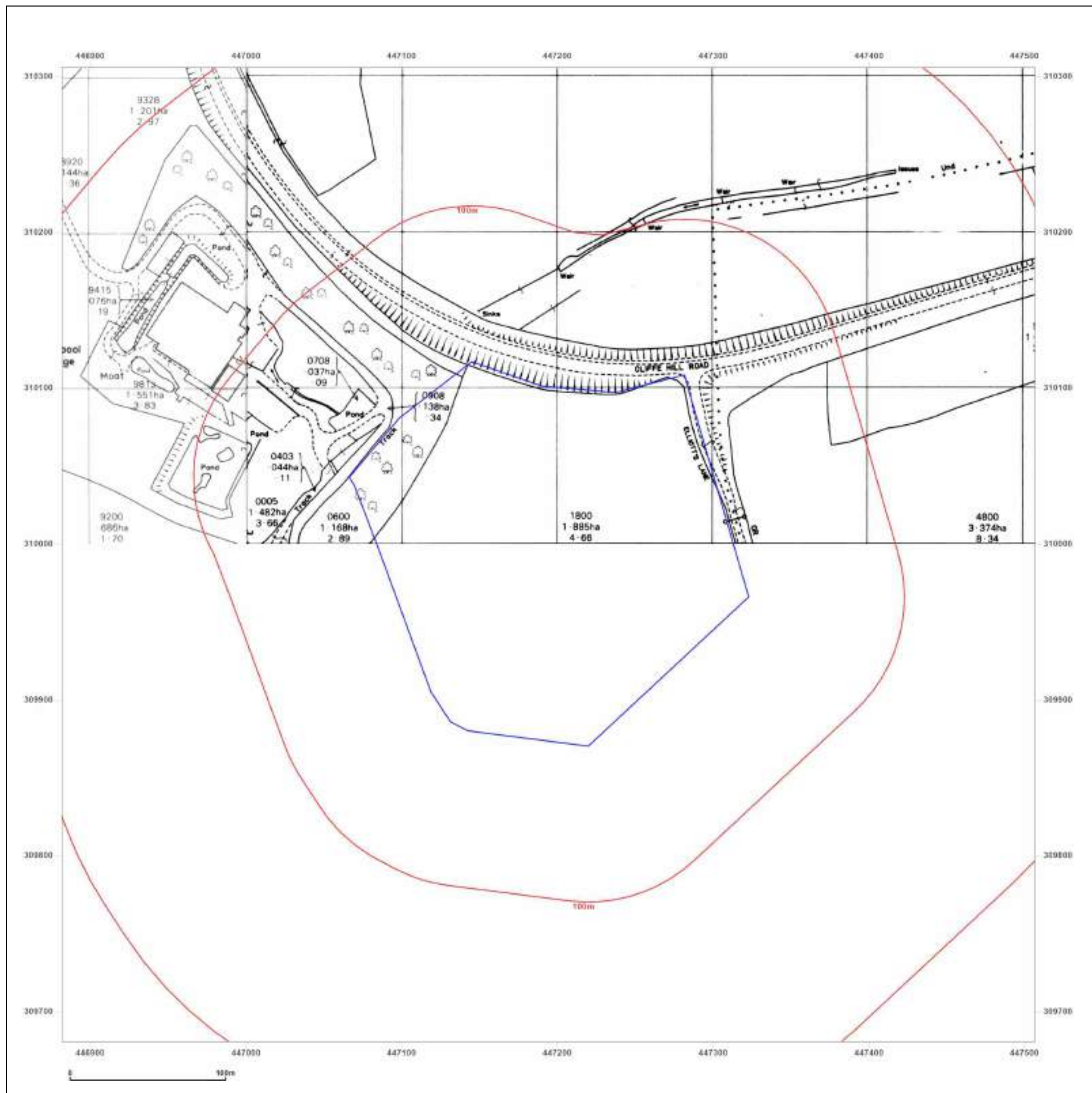


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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: National Grid

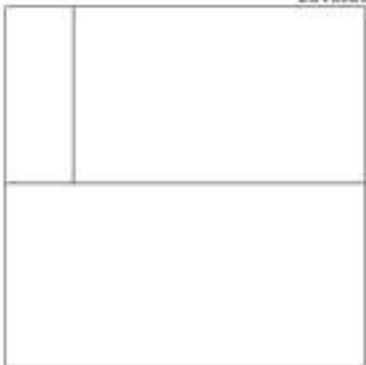
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Scale: 1:2,500

Printed at: 1:2,500



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Revised 1993
Edition N/A
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Levelled 1983



Surveyed 1958
Revised 1991
Edition N/A
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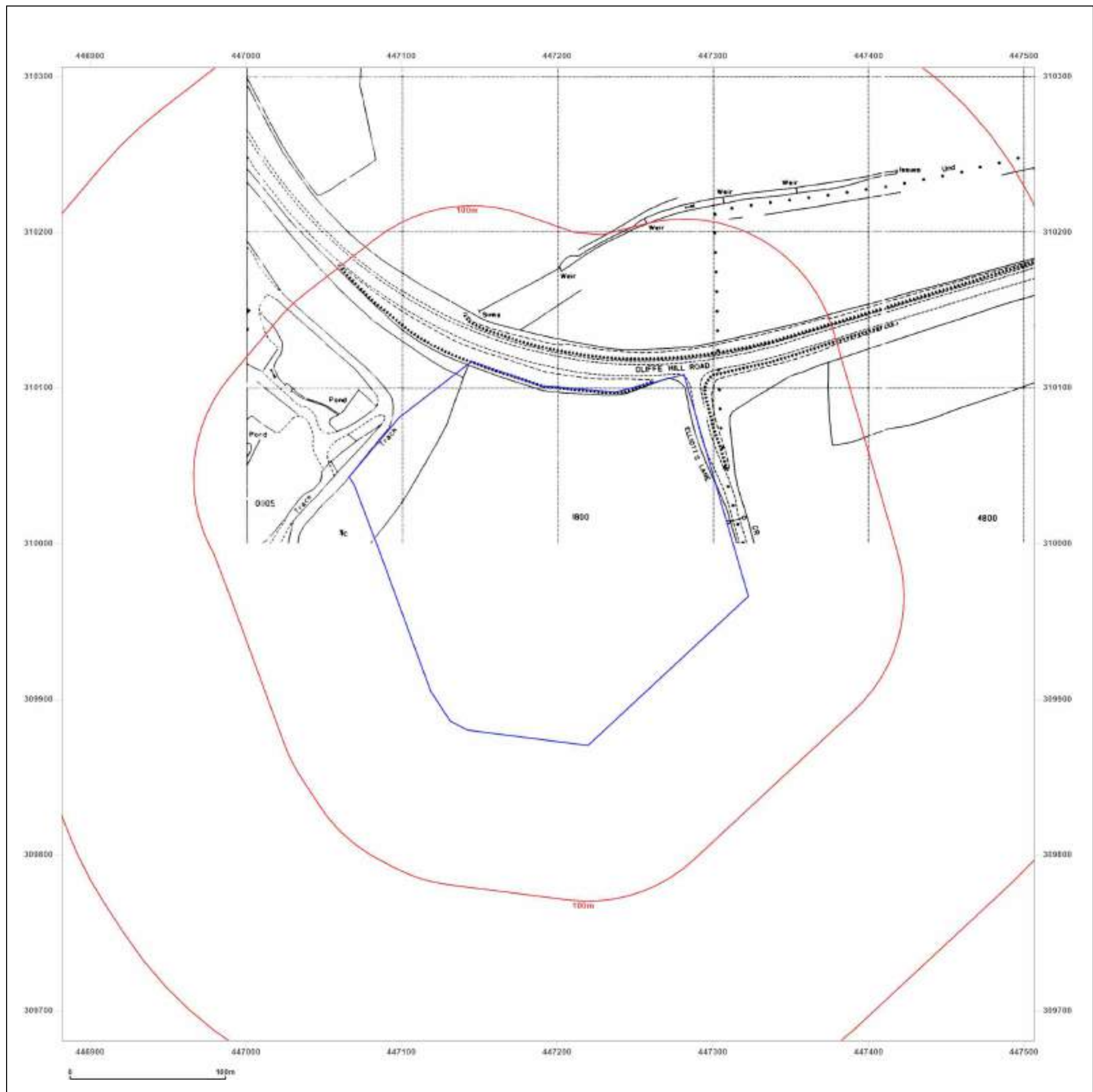


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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: National Grid

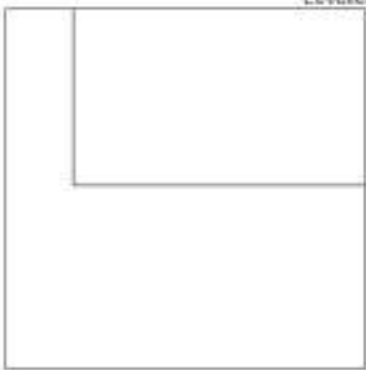
Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



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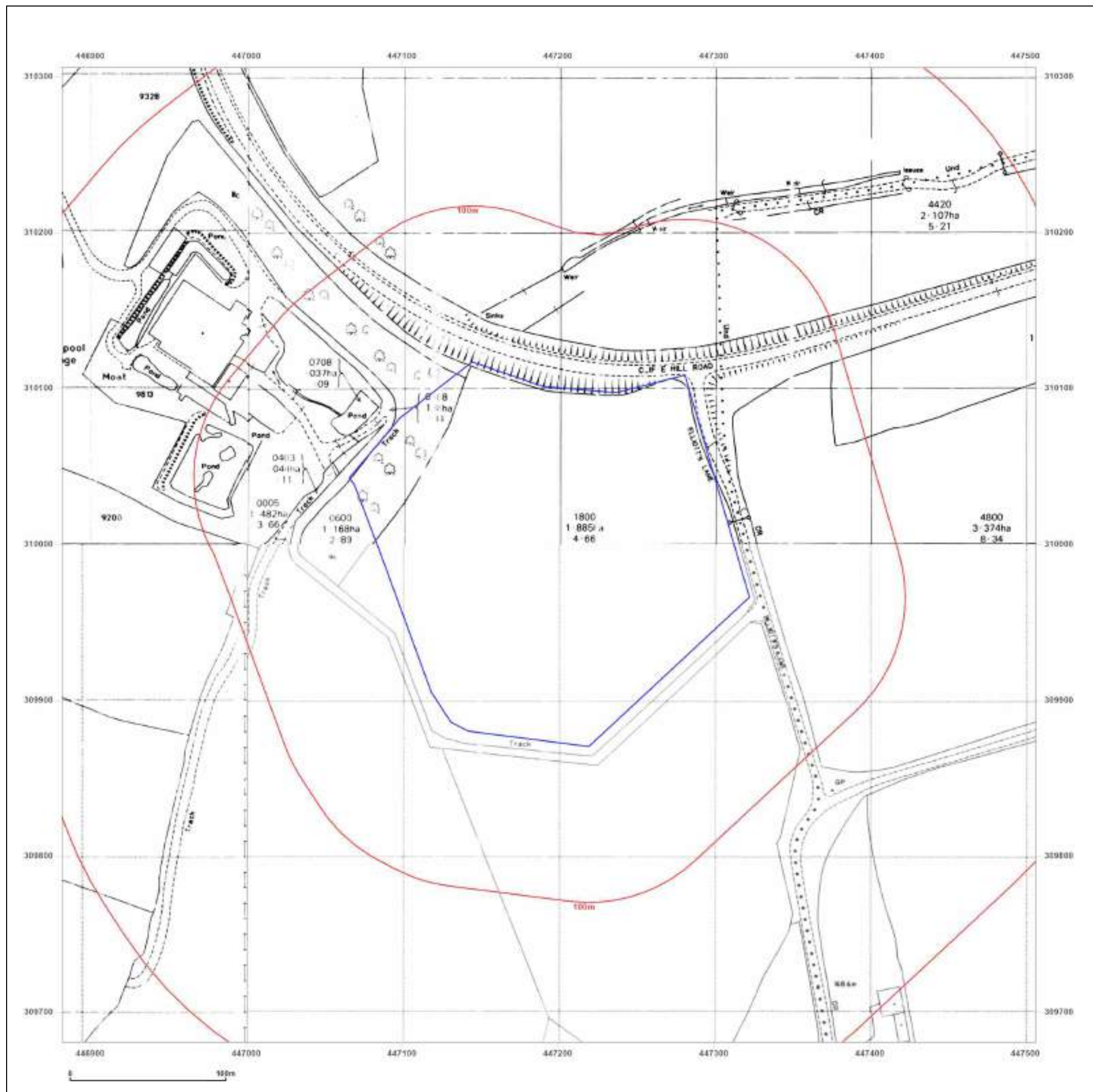


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Site Details:
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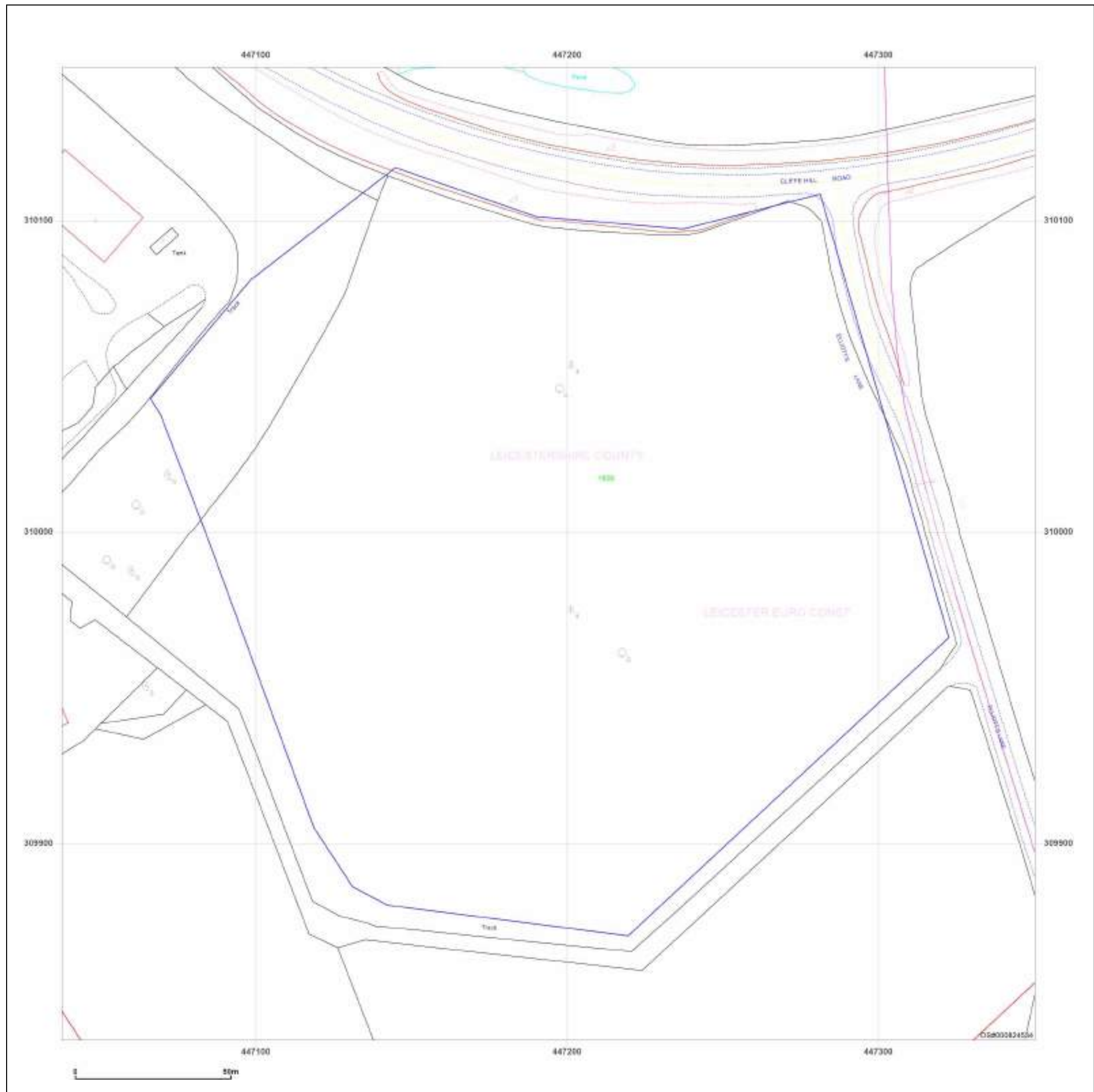
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Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: National Grid
Map date: 1989-1994
Scale: 1:2,500
Printed at: 1:2,500

Surveyed N/A Revised N/A Edition N/A Copyright 1993 Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright N/A Levelled N/A
Surveyed N/A Revised N/A Edition N/A Copyright 1994 Levelled N/A	Surveyed 1994 Revised 1994 Edition N/A Copyright N/A Levelled N/A

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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: County Series

Map date: 1883-1885

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1883
Revised 1883
Edition N/A
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Levelled N/A

Surveyed 1885
Revised 1885
Edition N/A
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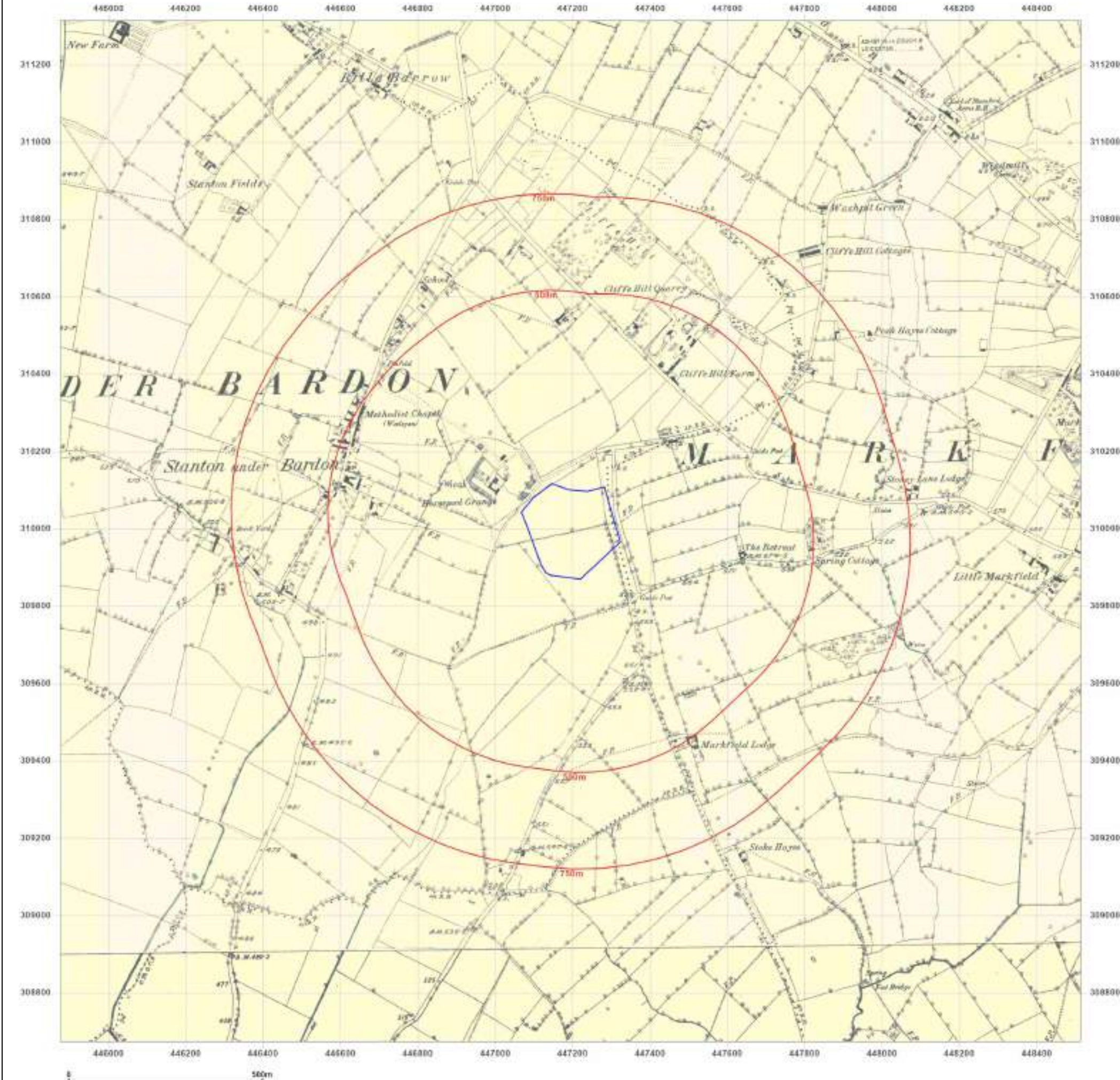


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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: County Series

Map date: 1901

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1883
Revised 1901
Edition N/A
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Surveyed 1885
Revised 1901
Edition N/A
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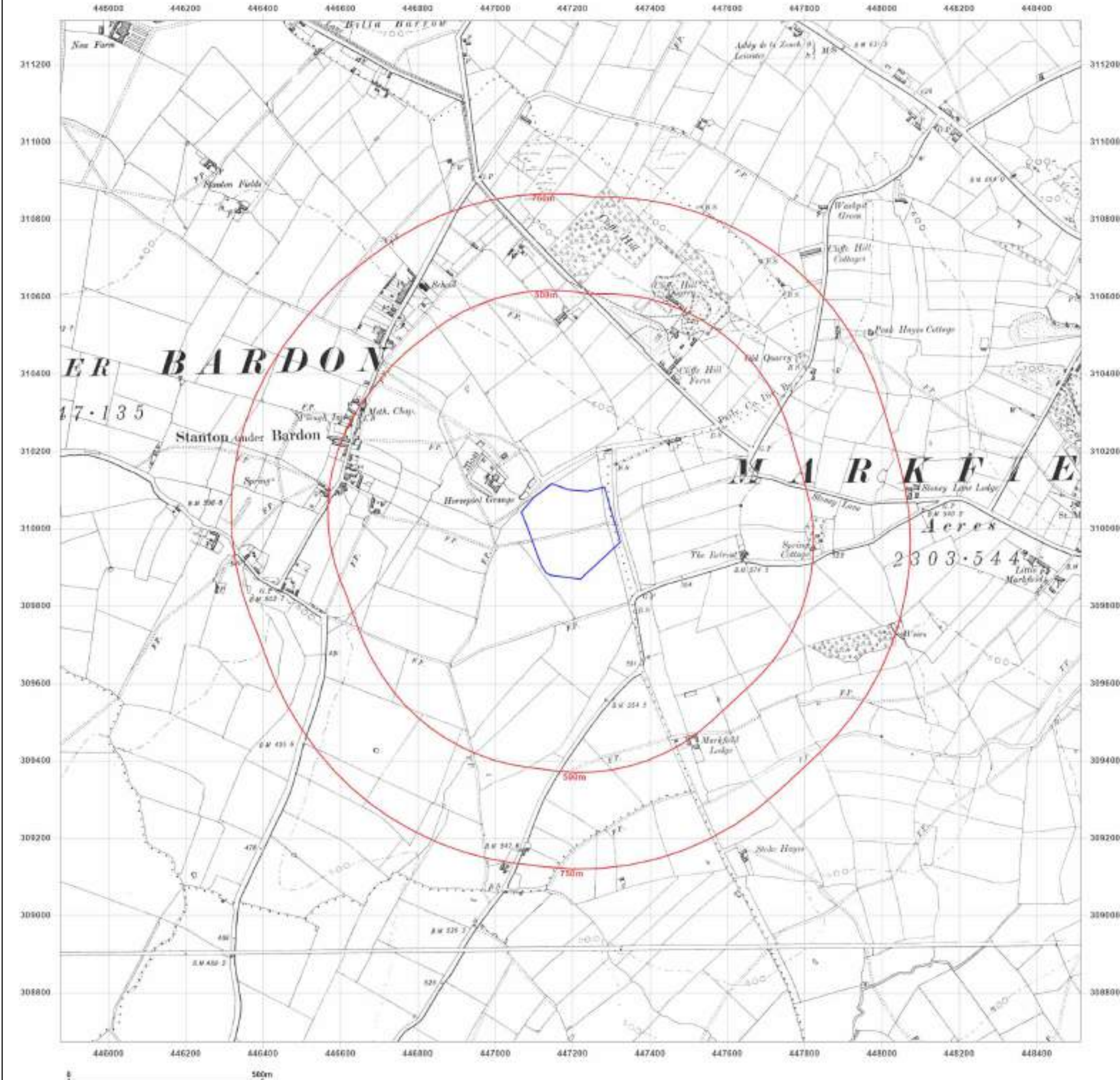


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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: County Series

Map date: 1930

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1883
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Edition N/A
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Surveyed 1884
Revised 1930
Edition N/A
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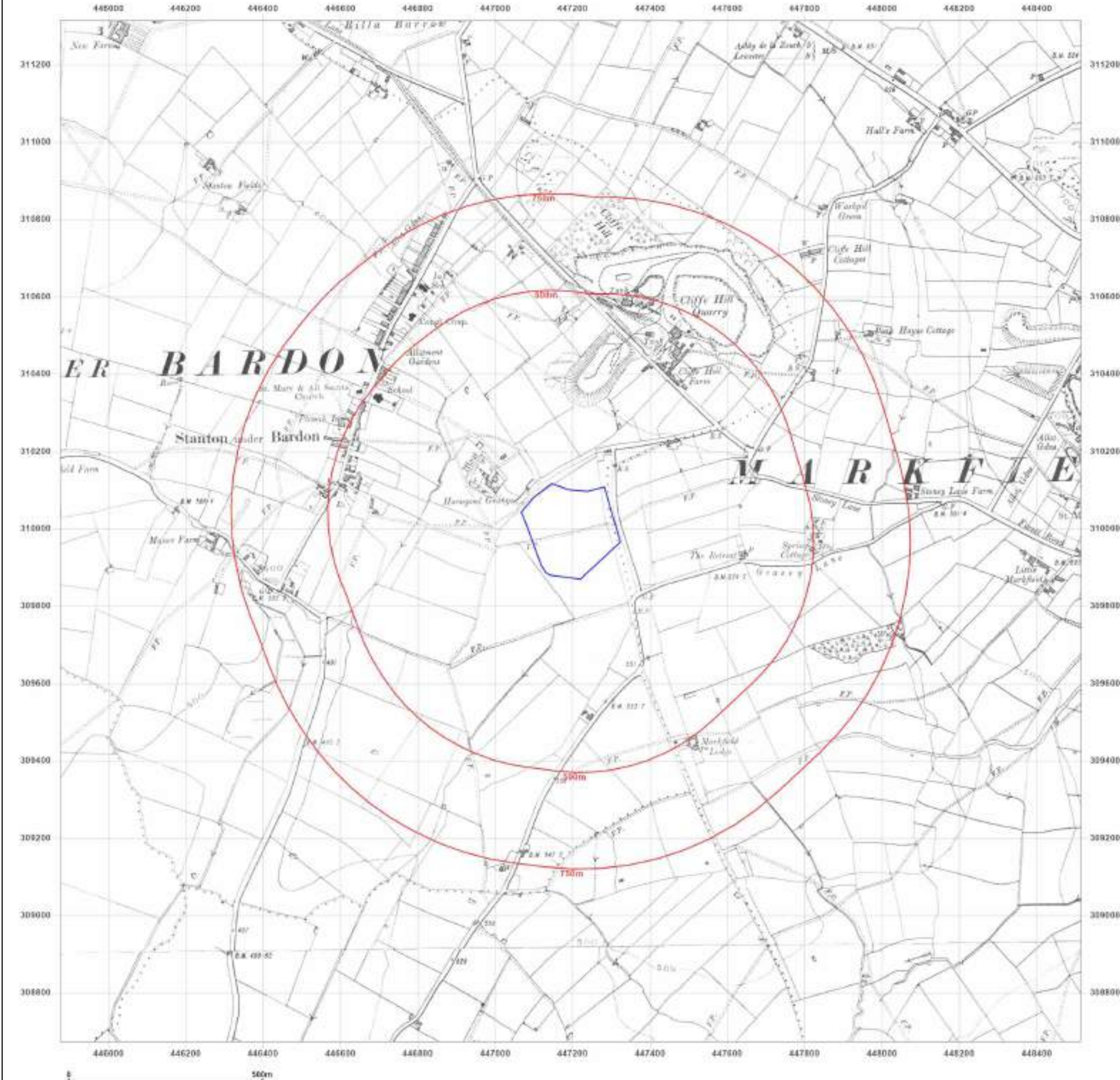


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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: Provisional

Map date: 1950-1955

Scale: 1:10,560

Printed at: 1:10,560



Surveyed N/A
Revised 1955
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Surveyed 1950
Revised 1950
Edition N/A
Copyright N/A
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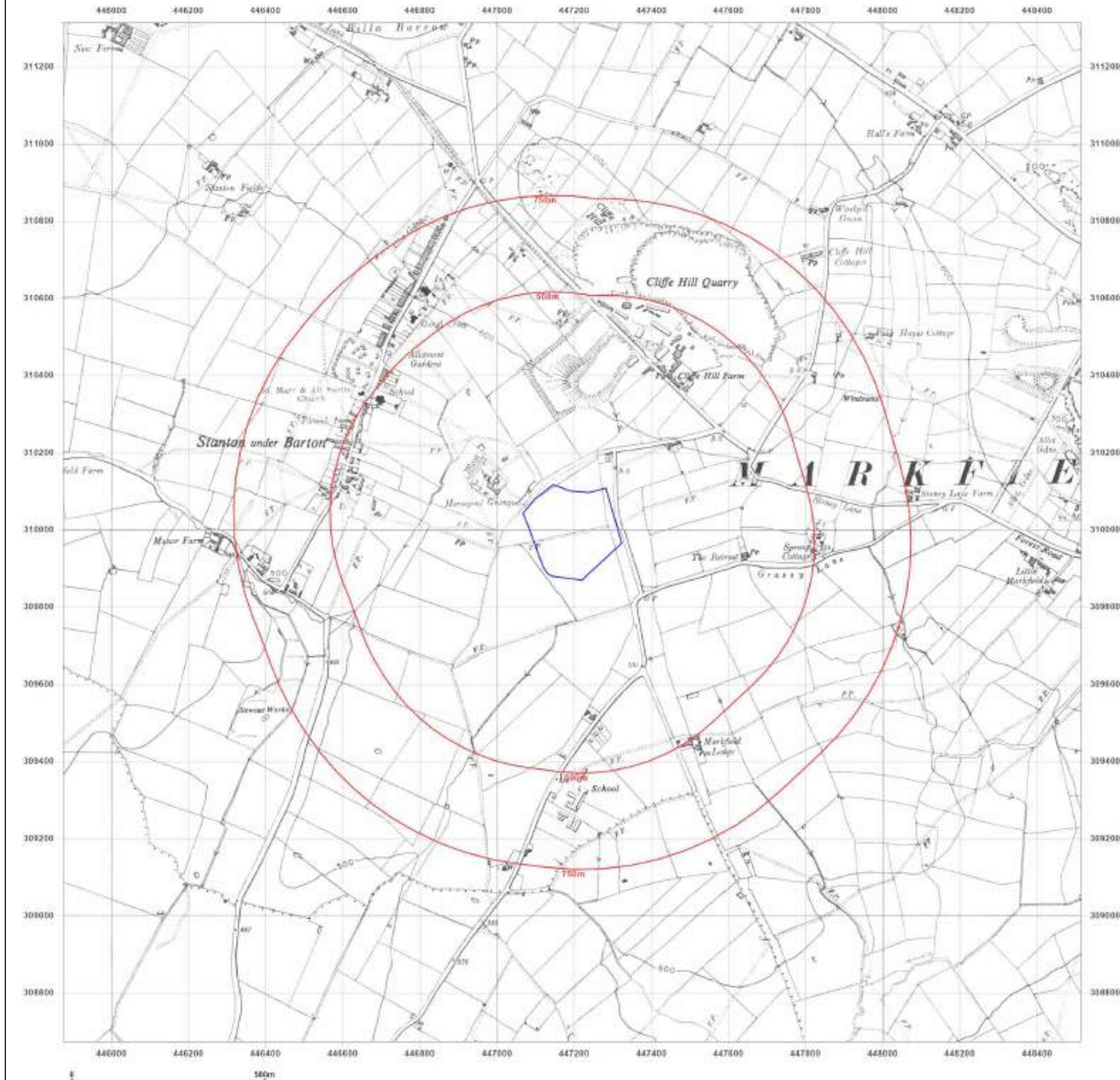


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Site Details:

unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

Map Name: Provisional

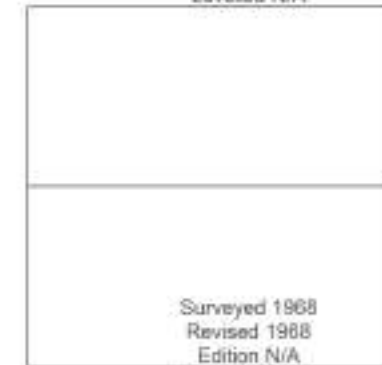
Map date: 1968

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1968
Revised 1968
Edition N/A
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Surveyed 1968
Revised 1968
Edition N/A
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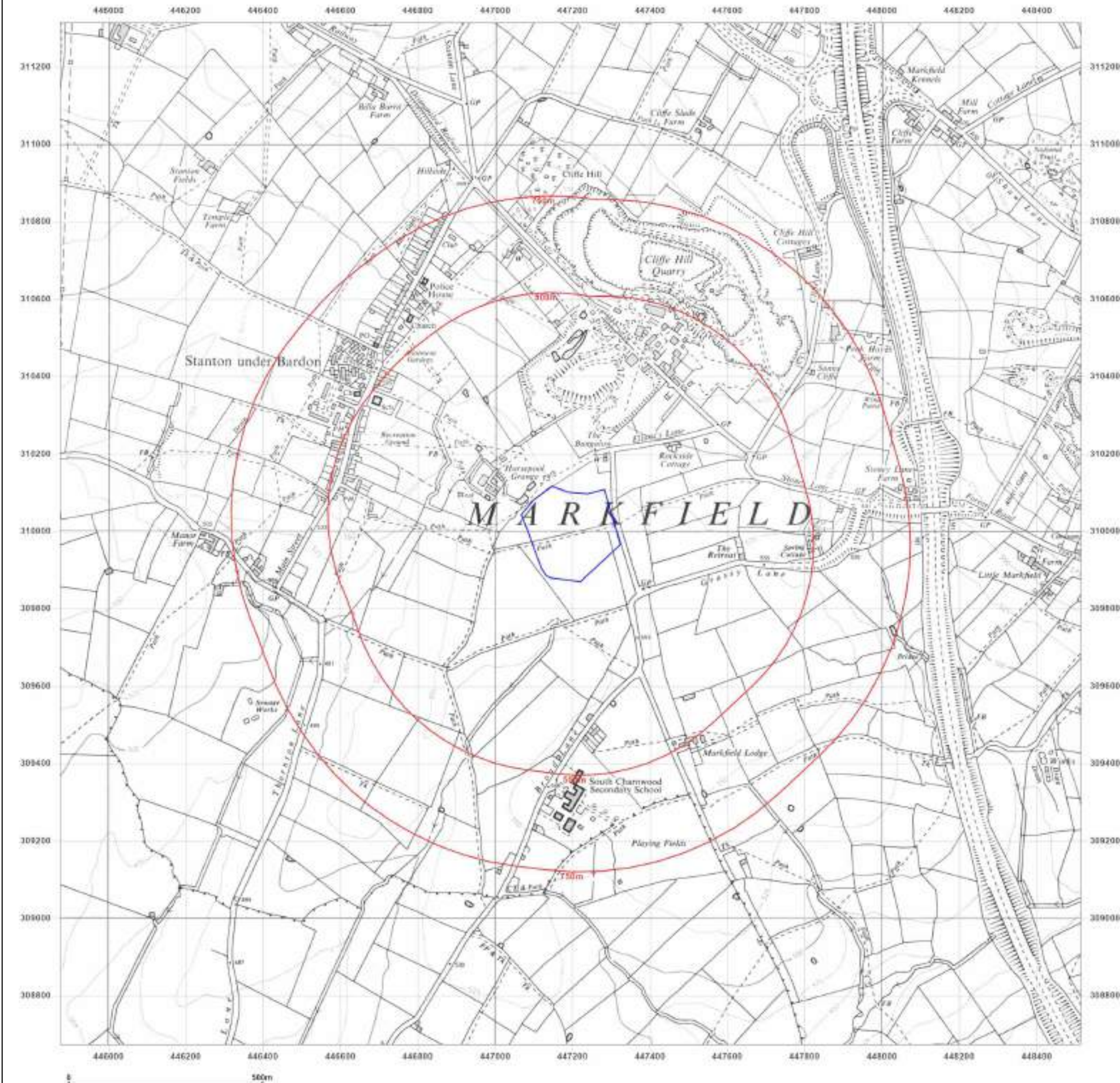


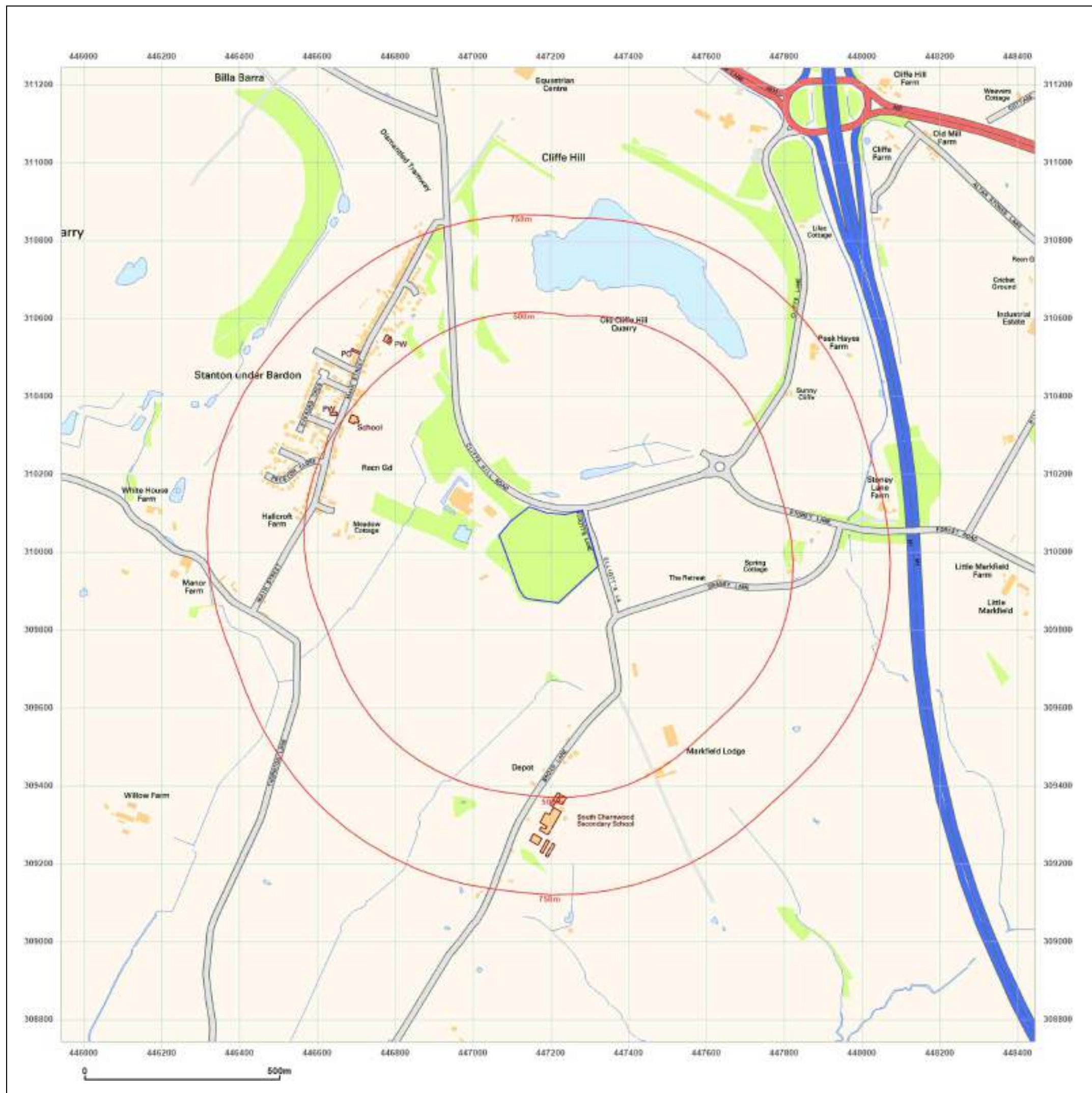
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Production date: 27 October 2025

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Site Details:
unspecified

Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

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



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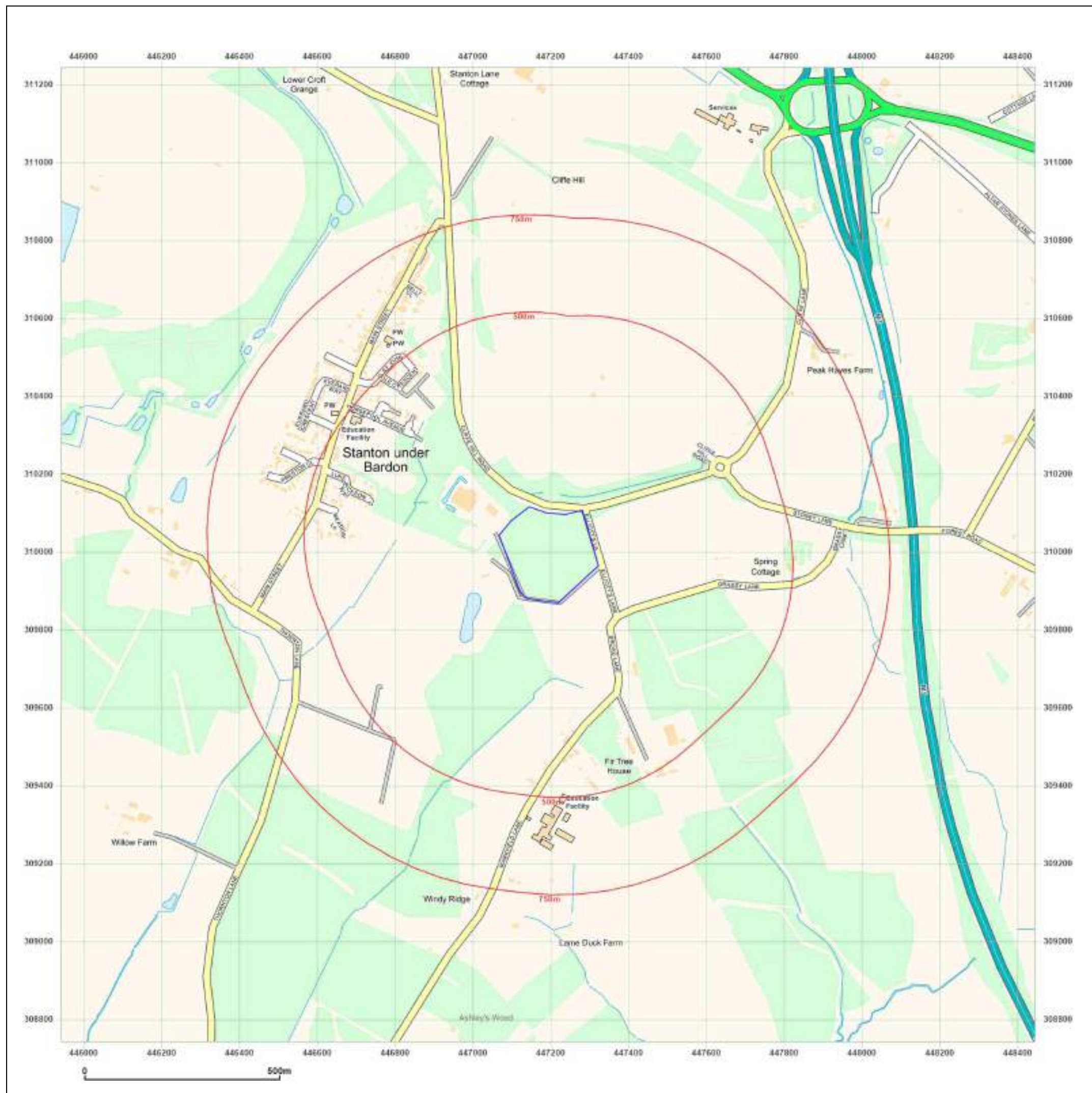


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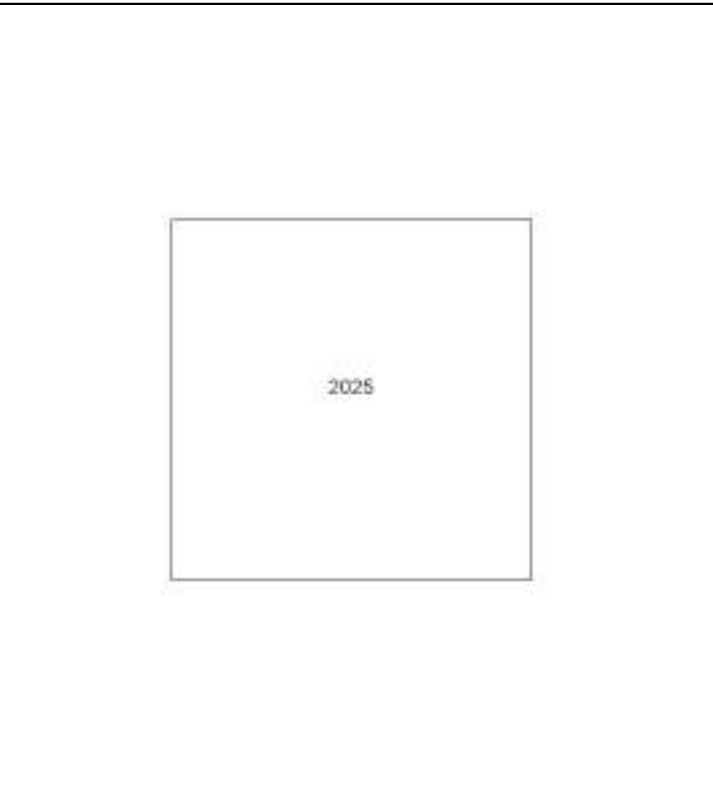
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Site Details:
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Client Ref: EMS_1059403_1326269
Report Ref: EMS-1059403_1334609
Grid Ref: 447194, 309993

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



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APPENDIX C



unspecified

Order Details

Date: 27/10/2025
Your ref: EMS_1059403_1326269
Our Ref: EMS-1059403_1334610

Site Details

Location: 447194 309997
Area: 4.43 ha
Authority: [Hinckley and Bosworth 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	8	16	-
17 >	1.2 >	Historical tanks >	0	0	1	14	-
17 >	1.3 >	Historical energy features >	0	0	0	1	-
18	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	8	22	-
21 >	2.2 >	Historical tanks >	0	0	2	16	-
22 >	2.3 >	Historical energy features >	0	0	0	1	-
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	0	5	3	-
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	5	-	-
27	4.2	National Geographic Database (NGD) - Current or recent tanks	0	0	0	-	-
27	4.3	Current or recent petrol stations	0	0	0	0	-
27	4.4	Electricity cables	0	0	0	0	-
27	4.5	Gas pipelines	0	0	0	0	-



28	4.6	Sites determined as Contaminated Land	0	0	0	0	-
28	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
28	4.8	Regulated explosive sites	0	0	0	0	-
28	4.9	Hazardous substance storage/usage	0	0	0	0	-
28	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
29	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
29 >	4.12 >	<u>Licensed pollutant release (Part A(2)/B) ></u>	0	0	0	2	-
29	4.13	Radioactive Substance Authorisations	0	0	0	0	-
29 >	4.14 >	<u>Licensed Discharges to controlled waters ></u>	0	2	0	1	-
30	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
30	4.16	Pollutant release to public sewer	0	0	0	0	-
30	4.17	List 1 Dangerous Substances	0	0	0	0	-
31	4.18	List 2 Dangerous Substances	0	0	0	0	-
31	4.19	Pollution Incidents (EA/NRW)	0	0	0	0	-
31	4.20	Pollution inventory substances	0	0	0	0	-
31	4.21	Pollution inventory waste transfers	0	0	0	0	-
31	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
32 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
34 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
36 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
37	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
37	5.5	Groundwater vulnerability- local information	None (within 0m)				
38 >	5.6 >	<u>Groundwater abstractions ></u>	0	0	0	0	3
39	5.7	Surface water abstractions	0	0	0	0	0
40	5.8	Potable abstractions	0	0	0	0	0
40	5.9	Source Protection Zones	0	0	0	0	-
40	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m



41 >	6.1 >	Water Network (OS MasterMap) >	0	4	10	-	-
43 >	6.2 >	Surface water features >	0	2	9	-	-
43 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
43 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
44 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
45	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
45	7.2	Historical Flood Events	0	0	0	-	-
45	7.3	Flood Defences	0	0	0	-	-
46	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
46	7.5	Flood Storage Areas	0	0	0	-	-
47	7.6	Flood Zone 2	None (within 50m)				
47	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
48 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
50 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
51 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	1
52	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
52	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
52	10.4	Special Protection Areas (SPA)	0	0	0	0	0
52	10.5	National Nature Reserves (NNR)	0	0	0	0	0
53 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
53 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	1
53	10.8	Biosphere Reserves	0	0	0	0	0
54	10.9	Forest Parks	0	0	0	0	0
54	10.10	Marine Conservation Zones	0	0	0	0	0
54	10.11	Green Belt	0	0	0	0	0



54	10.12	Proposed Ramsar sites	0	0	0	0	0
54	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
55	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
55	10.15	Nitrate Sensitive Areas	0	0	0	0	0
55 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	3
56	10.17	SSSI Impact Risk Zones	0	-	-	-	-
57 >	10.18 >	SSSI Units >	0	0	0	0	1
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
58	11.1	World Heritage Sites	0	0	0	-	-
58	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
58	11.3	National Parks	0	0	0	-	-
58	11.4	Listed Buildings	0	0	0	-	-
59	11.5	Conservation Areas	0	0	0	-	-
59	11.6	Scheduled Ancient Monuments	0	0	0	-	-
59	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
60 >	12.1 >	Agricultural Land Classification >	Grade 3 (within 250m)				
61	12.2	Open Access Land	0	0	0	-	-
61 >	12.3 >	Tree Felling Licences >	2	0	2	-	-
61	12.4	Environmental Stewardship Schemes	0	0	0	-	-
62 >	12.5 >	Countryside Stewardship Schemes >	1	2	3	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
63 >	13.1 >	Priority Habitat Inventory >	3	5	5	-	-
64	13.2	Habitat Networks	0	0	0	-	-
64	13.3	Open Mosaic Habitat	0	0	0	-	-
64	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
66 >	14.1 >	10k Availability >	Identified (within 500m)				
67 >	14.2 >	Artificial and made ground (10k) >	0	1	0	2	-

68 >	14.3 >	Superficial geology (10k) >	2	0	2	3	-
69	14.4	Landslip (10k)	0	0	0	0	-
70 >	14.5 >	Bedrock geology (10k) >	2	0	0	3	-
71	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
72 >	15.1 >	50k Availability >	Identified (within 500m)				
73 >	15.2 >	Artificial and made ground (50k) >	0	1	0	1	-
74 >	15.3 >	Artificial ground permeability (50k) >	0	1	-	-	-
75 >	15.4 >	Superficial geology (50k) >	1	0	2	1	-
76 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
76	15.6	Landslip (50k)	0	0	0	0	-
76	15.7	Landslip permeability (50k)	None (within 50m)				
77 >	15.8 >	Bedrock geology (50k) >	1	0	0	2	-
78 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
78	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
79	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence >					
80 >	17.1 >	Shrink swell clays >	Low (within 50m)				
81 >	17.2 >	Running sands >	Very low (within 50m)				
82 >	17.3 >	Compressible deposits >	Very low (within 50m)				
84 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
85 >	17.5 >	Landslides >	Low (within 50m)				
87 >	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
89 >	18.1 >	BritPits >	0	0	0	1	-
90 >	18.2 >	Surface ground workings >	0	6	9	-	-
91	18.3	Underground workings	0	0	0	0	0
91	18.4	Underground mining extents	0	0	0	0	-



91 >	18.5 >	Historical Mineral Planning Areas >	0	0	1	1	-
91	18.6	Non-coal mining	0	0	0	0	0
92 >	18.7 >	JPB mining areas >	Identified (within 0m)				
92	18.8	The Coal Authority non-coal mining	0	0	0	0	-
92	18.9	Researched mining	0	0	0	0	-
93	18.10	Mining record office plans	0	0	0	0	-
93	18.11	BGS mine plans	0	0	0	0	-
93	18.12	Coal mining	None (within 0m)				
93	18.13	Brine areas	None (within 0m)				
93	18.14	Gypsum areas	None (within 0m)				
94	18.15	Tin mining	None (within 0m)				
94	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
95	19.1	Natural cavities	0	0	0	0	-
95	19.2	Mining cavities	0	0	0	0	0
95	19.3	Reported recent incidents	0	0	0	0	-
95	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
97 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
99 >	21.1 >	BGS Estimated Background Soil Chemistry >	2	0	-	-	-
99	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
99	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
100	22.1	Underground railways (London)	0	0	0	-	-
100	22.2	Underground railways (Non-London)	0	0	0	-	-
100	22.3	Railway tunnels	0	0	0	-	-
100	22.4	Historical railway and tunnel features	0	0	0	-	-
100	22.5	Royal Mail tunnels	0	0	0	-	-



101	22.6	Historical railways	0	0	0	-	-
101	22.7	Railways	0	0	0	-	-
101	22.8	Crossrail 2	0	0	0	0	-
101	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 10/07/2022

Site Area: 4.43ha



Recent site history - 2019 aerial photograph



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Capture Date: 20/04/2019

Site Area: 4.43ha



Recent site history - 2011 aerial photograph



Capture Date: 09/10/2011

Site Area: 4.43ha



Recent site history - 2000 aerial photograph



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Capture Date: 17/06/2000

Site Area: 4.43ha



Recent site history - 1999 aerial photograph



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Capture Date: 11/07/1999

Site Area: 4.43ha



OS MasterMap site plan

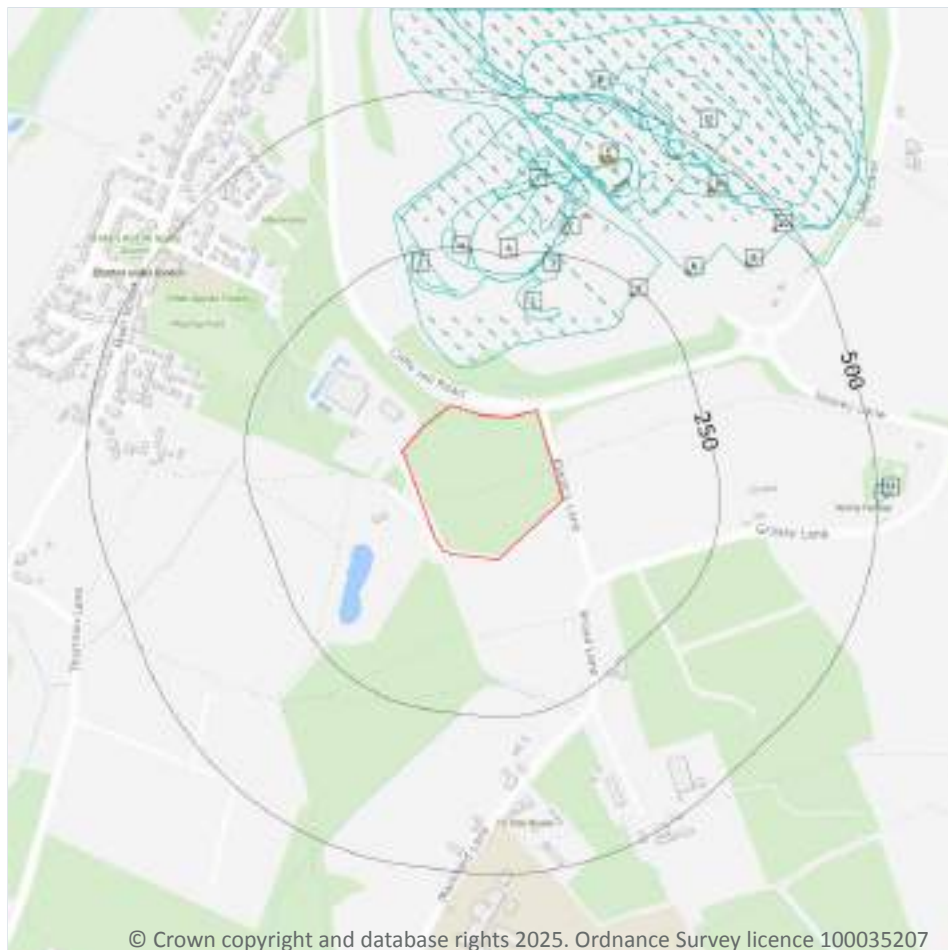


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Site Area: 4.43ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

24

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	61m N	Refuse Heap	1980	1699127



ID	Location	Land use	Dates present	Group ID
1	146m N	Refuse Heap	1968	1653518
A	171m N	Unspecified Heaps	1955	1615521
2	176m N	Refuse Heap	1968	1656674
3	204m N	Unspecified Pit	1968	1606763
A	210m N	Unspecified Heap	1930	1752835
A	218m N	Unspecified Heap	1968	1761566
4	220m N	Refuse Heap	1968	1726288
B	275m N	Railway Sidings	1901 - 1930	1704292
D	323m NE	Unspecified Commercial/Industrial	1968 - 1980	1742531
7	334m N	Refuse Heap	1968	1735144
D	343m NE	Unspecified Quarry	1930 - 1955	1649960
E	360m N	Refuse Heap	1901	1587592
E	369m N	Unspecified Tank	1930 - 1955	1770649
E	369m N	Unspecified Heap	1955	1621401
E	385m NE	Unspecified Heap	1883	1621400
E	454m NE	Unspecified Ground Workings	1883	1592833
D	455m NE	Unspecified Quarry	1883 - 1901	1660605
D	455m NE	Unspecified Quarry	1968	1670115
D	455m NE	Unspecified Quarry	1980	1686492
B	461m N	Unspecified Heap	1901	1621399
D	463m N	Unspecified Disused Quarry	1992	1614830
B	490m N	Unspecified Tank	1930 - 1955	1733812
11	494m E	Unspecified Quarry	1950	1617819

This data is sourced from Ordnance Survey / Groundsure.



1.2 Historical tanks

Records within 500m

15

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

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

ID	Location	Land use	Dates present	Group ID
5	236m NE	Unspecified Tank	1959 - 1967	279324
C	284m N	Unspecified Tank	1989	270935
C	298m N	Unspecified Tank	1989	270934
C	305m N	Unspecified Tank	1989	270937
C	311m N	Unspecified Tank	1989	270936
6	322m NE	Tanks	1989 - 1991	292787
E	371m N	Unspecified Tank	1929	270949
E	377m N	Unspecified Tank	1989	270932
8	405m NE	Tanks	1989 - 1991	289787
E	407m N	Unspecified Tank	1929	270950
E	422m NE	Unspecified Tank	1929	270948
E	442m NE	Unspecified Tank	1959	270931
9	443m NE	Tanks	1989	264018
E	457m NE	Unspecified Tank	1989	270933
10	471m NE	Unspecified Tank	1989	270929

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

1

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or



succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original 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
C	316m N	Electricity Substation	1989	164667

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

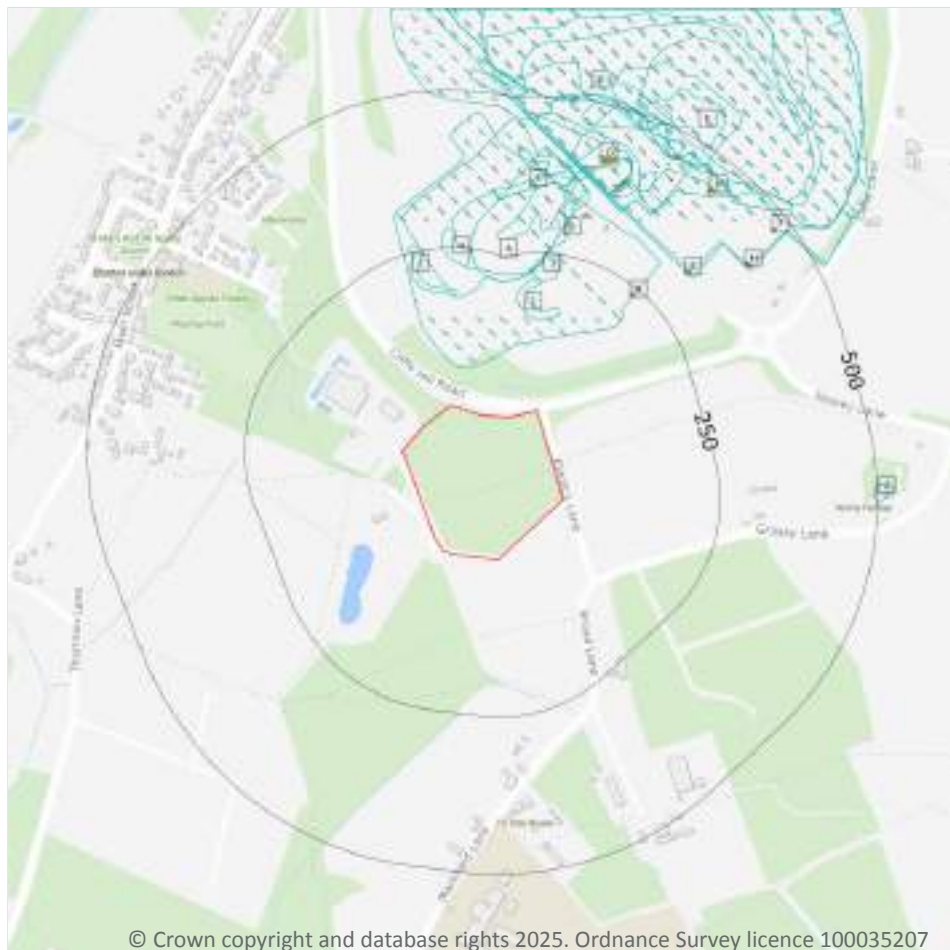
0

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

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



2 Past land use - un-grouped



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

2.1 Historical industrial land uses

Records within 500m

30

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	61m N	Refuse Heap	1980	1699127
1	146m N	Refuse Heap	1968	1653518
A	171m N	Unspecified Heaps	1955	1615521



ID	Location	Land Use	Date	Group ID
2	176m N	Refuse Heap	1968	1656674
3	204m N	Unspecified Pit	1968	1606763
A	210m N	Unspecified Heap	1930	1752835
A	218m N	Unspecified Heap	1968	1761566
4	220m N	Refuse Heap	1968	1726288
C	275m N	Railway Sidings	1930	1704292
F	323m NE	Unspecified Commercial/Industrial	1968	1742531
F	329m NE	Unspecified Commercial/Industrial	1980	1742531
5	334m N	Refuse Heap	1968	1735144
F	343m NE	Unspecified Quarry	1930	1649960
G	360m N	Refuse Heap	1901	1587592
G	365m NE	Railway Sidings	1901	1704292
G	369m N	Unspecified Tank	1955	1770649
G	369m N	Unspecified Heap	1955	1621401
G	372m N	Unspecified Tank	1930	1770649
G	385m NE	Unspecified Heap	1883	1621400
G	454m NE	Unspecified Ground Workings	1883	1592833
F	455m NE	Unspecified Quarry	1901	1660605
F	455m NE	Unspecified Quarry	1968	1670115
F	455m NE	Unspecified Quarry	1980	1686492
F	458m NE	Unspecified Quarry	1955	1649960
C	461m N	Unspecified Heap	1901	1621399
F	463m N	Unspecified Disused Quarry	1992	1614830
F	489m N	Unspecified Quarry	1883	1660605
C	490m N	Unspecified Tank	1955	1733812
C	493m N	Unspecified Tank	1930	1733812
8	494m E	Unspecified Quarry	1950	1617819

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

18

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

Features are displayed on the Past land use - un-grouped map on [page 19](#) >

ID	Location	Land Use	Date	Group ID
B	236m NE	Unspecified Tank	1959	279324
B	236m NE	Unspecified Tank	1967	279324
D	284m N	Unspecified Tank	1989	270935
D	298m N	Unspecified Tank	1989	270934
D	305m N	Unspecified Tank	1989	270937
D	311m N	Unspecified Tank	1989	270936
E	322m NE	Tanks	1991	292787
E	324m NE	Tanks	1989	292787
G	371m N	Unspecified Tank	1929	270949
G	377m N	Unspecified Tank	1989	270932
H	405m NE	Tanks	1991	289787
H	407m NE	Tanks	1989	289787
G	407m N	Unspecified Tank	1929	270950
G	422m NE	Unspecified Tank	1929	270948
G	442m NE	Unspecified Tank	1959	270931
6	443m NE	Tanks	1989	264018
G	457m NE	Unspecified Tank	1989	270933
7	471m NE	Unspecified Tank	1989	270929

This data is sourced from Ordnance Survey / Groundsure.



2.3 Historical energy features

Records within 500m

1

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

Features are displayed on the Past land use - un-grouped map on [page 19](#) >

ID	Location	Land Use	Date	Group ID
D	316m N	Electricity Substation	1989	164667

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



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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**8**

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.

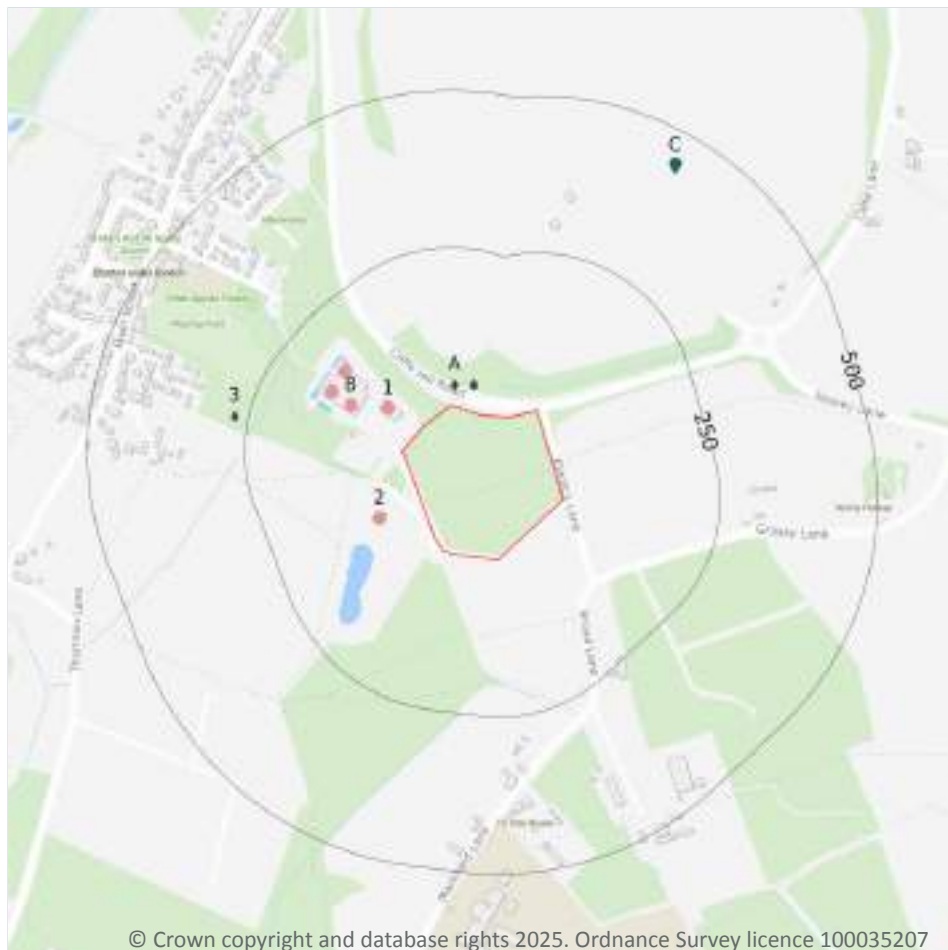
Features are displayed on the Waste and landfill map on [page 23](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
A	72m W	Horsepool Grange Farm, Elliotts Lane, Stanton Under Bardon, Markfield, Le67 9tw	WEX058689	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	72m W	Horsepool Grange Farm, Elliotts Lane, Stanton Under Bardon, Markfield, Le67 9tw	WEX205713	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	72m W	Horsepool Grange Farm, Elliotts Lane, Stanton Under Bardon, Markfield, Le67 9tw	WEX330566	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	110m NW	Horsepool Grange Farm, Elliotts Lane, Stanton Under Bardon, Markfield, Le67 9tw	WEX459334	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	134m NW	Unit 1 Horsepool Grange Elliotts Lane Markfield Leicestershire Le67 9tw	EPR/DF0739CJ /A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place
1	350m W	5 Meadow Lane Markfield Leicestershire Le67 9tl	EPR/XF0404FS /A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction
2	388m S	Lodge Farm, Broad Lane, Markfield, Le67 9tb	WEX423446	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
3	496m SE	Lodge Farm Bungalow, Broad Lane, Markfield, Le67 9tb	WEX154456	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m

5

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	61m NW	Cooks Midlands Ltd	Unit 10 Horsepool Grange, Elliotts Lane, Stanton-under-Bardon, Leicestershire, LE67 9TW	Agricultural Machinery and Goods	Industrial Products
2	72m W	Outwoods Engineering Ltd	Horsepool Grange, Elliotts Lane, Stanton-under-Bardon, Leicestershire, LE67 9TW	Lifting and Handling Equipment	Industrial Products



ID	Location	Company	Address	Activity	Category
B	110m NW	Homebrook Ltd	Unit 8 Horsepool Grange, Elliots Lane, Stanton-under-Bardon, Leicestershire, LE67 9TW	Office and Shop Equipment	Industrial Products
B	146m NW	Roda UK Ltd	Unit 5 Horsepool Grange, Elliots Lane, Stanton-under-Bardon, Leicestershire, LE67 9TW	Vehicle Repair, Testing and Servicing	Repair and Servicing
B	151m NW	Silo	Leicestershire, LE67	Hoppers and Silos	Farming

This data is sourced from Ordnance Survey.

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

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

Current or recent tanks identified from the Ordnance Survey NGD.

This data is sourced from Ordnance Survey.

4.3 Current or recent petrol stations

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

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

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

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

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

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 Sites determined as Contaminated Land

Records within 500m**0**

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

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m**0**

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

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m**0**

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

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m**0**

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

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m**0**

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

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

4.11 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

2

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

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

ID	Location	Address	Details	
C	447m NE	Tarmac Quarry Products, Battleflat Lane, Coalville, LE67 1FA	Process: Quarry Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
C	447m NE	Tarmac Topmix, Battleflat Lane, Ellistown, LE67 1FA	Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.14 Licensed Discharges to controlled waters

Records within 500m

3

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

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



ID	Location	Address	Details	
A	33m N	OLDE CLIFFE HILL QUARRY, CLIFFE HILL LANE, STANTON UNDER BARDON, LEICESTERSHIRE	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/56/45614/T Permit Version: 1 Receiving Water: UNNAMED TRIB ROTHLEY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 01/07/2002 Effective Date: 01/07/2002 Revocation Date: 24/02/2003
A	43m N	OLDE CLIFFE HILL QUARRY, CLIFFE HILL LANE, STANTON UNDER BARDON, LEICESTERSHIRE	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/56/45614/T Permit Version: 2 Receiving Water: UNNAMED TRIB OF ROTHLEY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 25/02/2003 Effective Date: 25/02/2003 Revocation Date: -
3	272m W	NEW CLIFFE HILL QUARRY, BATTLEFLAT LANE, ELLISTOWN, LEICESTERSHIRE, LE6 1FA	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: T/56/02709/T Permit Version: 1 Receiving Water: TRIB OF ROTHLEY BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 07/04/1970 Effective Date: 07/04/1970 Revocation Date: 07/08/2002

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

4.15 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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

4.16 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

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

4.17 List 1 Dangerous Substances

Records within 500m

0

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

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



4.18 List 2 Dangerous Substances

Records within 500m

0

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

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

4.19 Pollution Incidents (EA/NRW)

Records within 500m

0

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

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

4.20 Pollution inventory substances

Records within 500m

0

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

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

4.21 Pollution inventory waste transfers

Records within 500m

0

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

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

4.22 Pollution inventory radioactive waste

Records within 500m

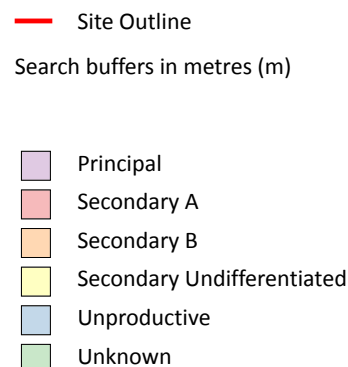
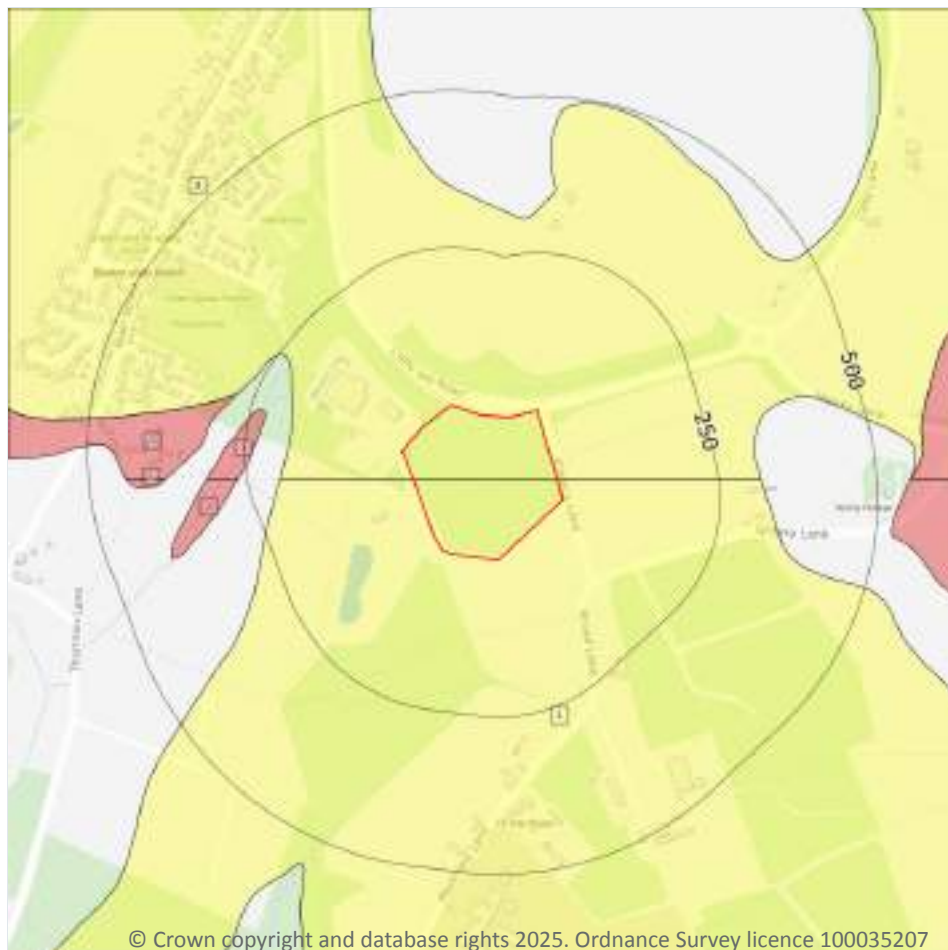
0

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

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



5 Hydrogeology - Superficial aquifer



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5.1 Superficial aquifer

Records within 500m

6

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 32](#) >

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	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

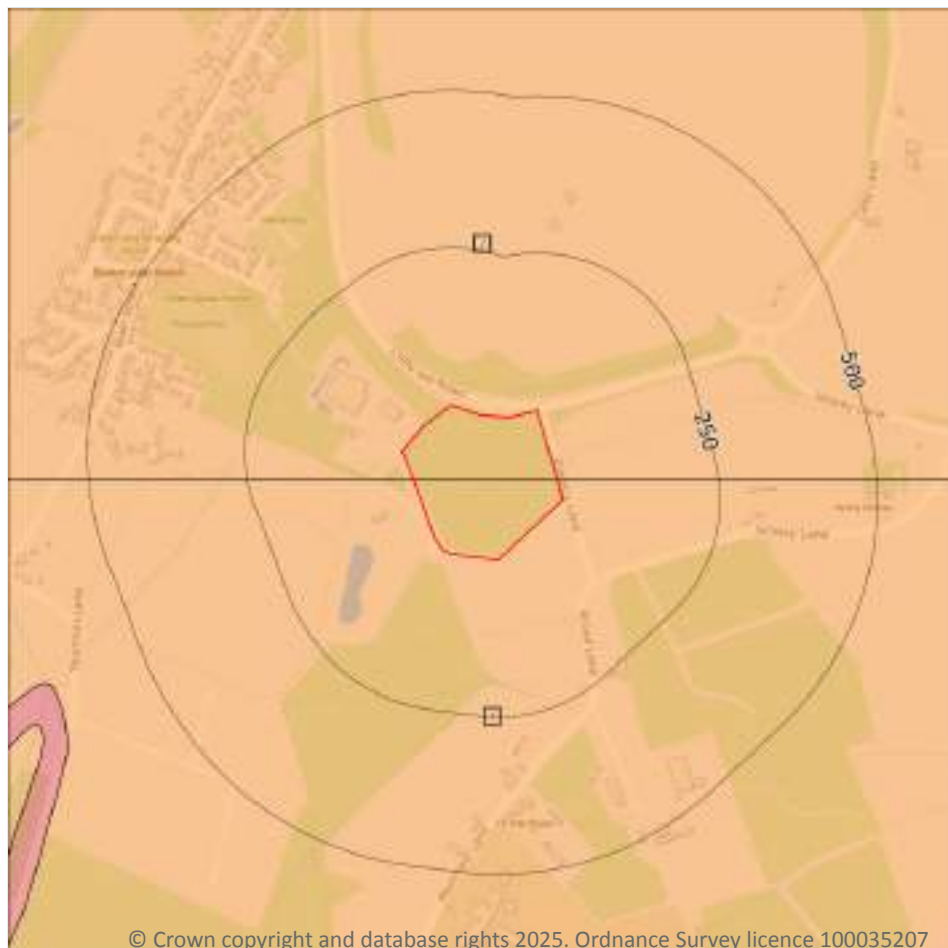


ID	Location	Designation	Description
3	224m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	264m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	277m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
6	377m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 34](#) >

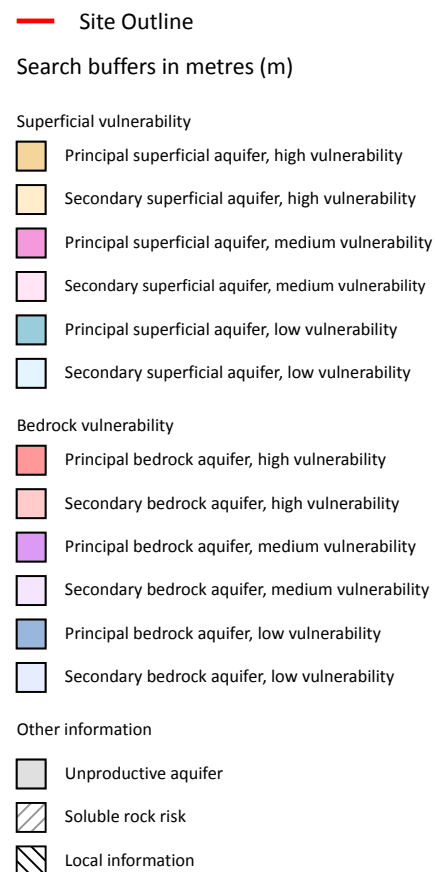
ID	Location	Designation	Description
1	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers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



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

2

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

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

Features are displayed on the Groundwater vulnerability map on [page 36](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
2	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: 300-550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: No Data	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.

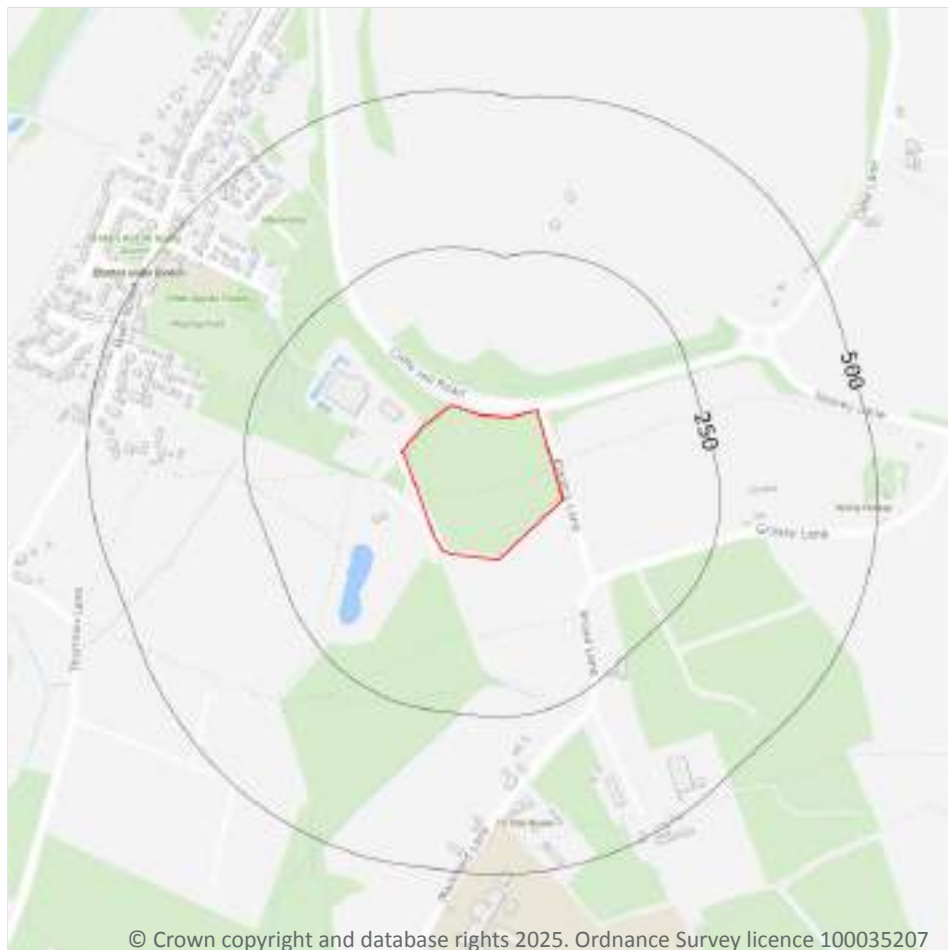
5.5 Groundwater vulnerability- local information

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



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Point features
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

3

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 38](#) >

ID	Location	Details	
-	779m S	Status: Historical Licence No: 03/28/56/0015 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: GLEBE FARM - WELL (1) Data Type: Point Name: JOHNSON Easting: 447100 Northing: 309100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
-	878m W	Status: Historical Licence No: 03/28/56/0014 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: MANOR FARM - WELL Data Type: Point Name: WRIGHT Easting: 446200 Northing: 309900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 03/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
-	991m S	Status: Historical Licence No: 03/28/56/0015 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: GLEBE FARM - WELL (2) Data Type: Point Name: JOHNSON Easting: 447000 Northing: 308900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

0

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

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



5.8 Potable abstractions

Records within 2000m

0

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

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

5.9 Source Protection Zones

Records within 500m

0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

0

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

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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

14

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 41](#) >

ID	Location	Type of water feature	Ground level	Permanence	Name
B	33m N	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
C	34m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	45m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	47m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	167m NW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	169m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	170m NW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	190m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	196m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	196m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	202m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	226m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	231m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	246m W	Lake, loch or reservoir.	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

11

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 41 >](#)

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 41 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River	Rothley Brook Catchment (trib of Soar)	GB104028046730	Soar River	Soar

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 41 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1781m W	River	Rothley Brook Catchment (trib of Soar)	GB104028046730 ↗	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 41 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Soar - Secondary Combined	GB40402G990600 ↗	Good	Good	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

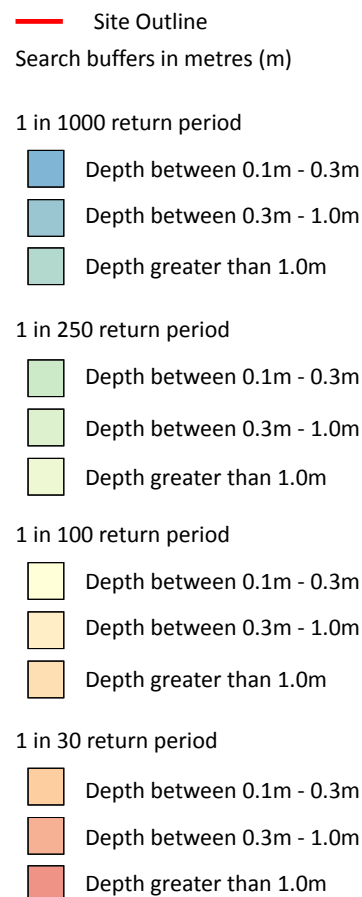
0

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, 0.3m - 1.0m

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

Features are displayed on the Surface water flooding map on [page 48 >](#)

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.

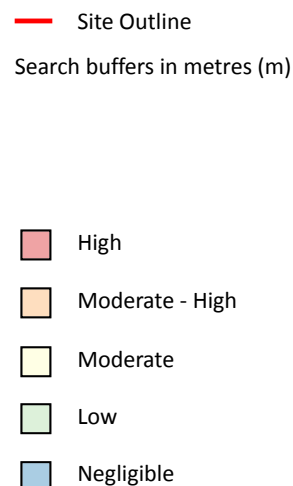
The table below shows the maximum flood depths for a range of return periods for the site.

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 Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

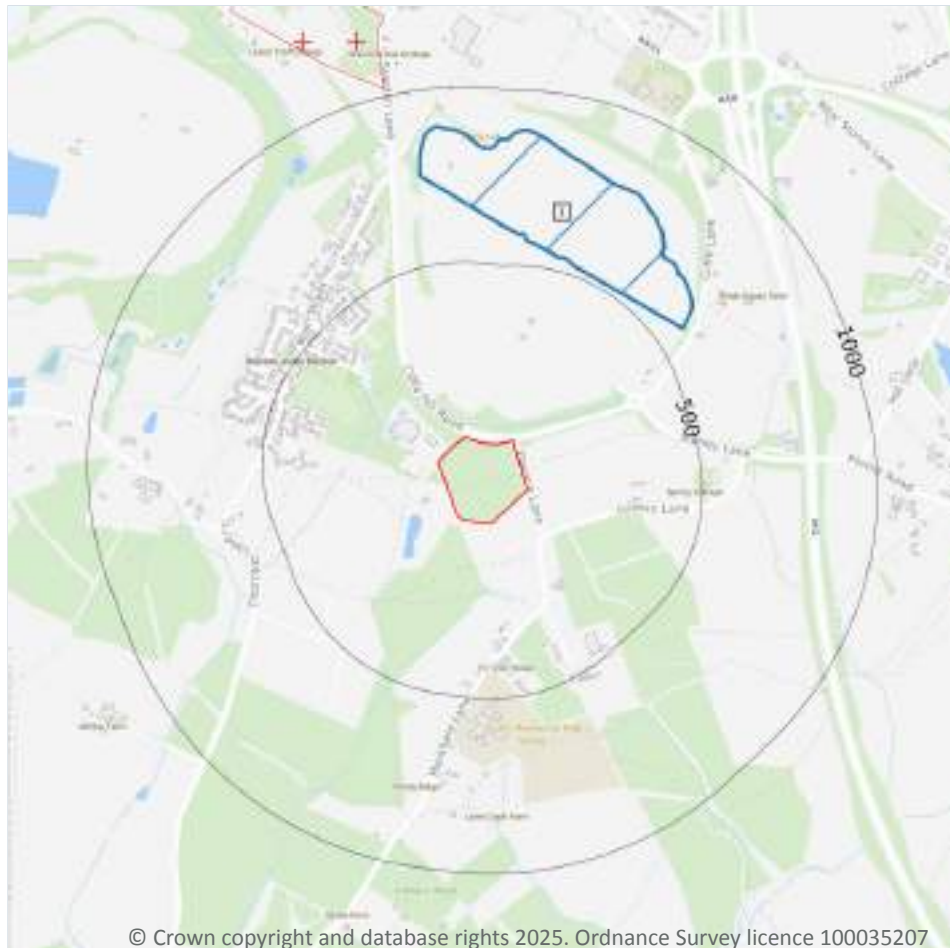
Low

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 50 >](#)

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



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

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

1

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

Features are displayed on the Environmental designations map on [page 51](#) >

ID	Location	Name	Data source
1	519m NE	Cliffe Hill Quarry SSSI	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m

0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m

0

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

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



10.6 Local Nature Reserves (LNR)

Records within 2000m

1

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

Features are displayed on the Environmental designations map on [page 51 >](#)

ID	Location	Name	Data source
2	1022m N	Billa Barra Hill Nature Reserve	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m

1

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 51 >](#)

ID	Location	Name	Woodland Type
-	1819m NE	Ulverscroft Wood	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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



10.9 Forest Parks

Records within 2000m**0**

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m**0**

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

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

10.11 Green Belt

Records within 2000m**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**4**

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

Location	Name	Type	NVZ ID	Status
On site	SOAR R NVZ	Surface Water	309	Existing
1060m N	River Trent (source to confluence with Derwent)	Surface Water	308	Existing
1381m NE	Cropston & Swithland Reservoirs Eutrophic lake NVZ	Eutrophic Water	144	Existing
1873m SE	Grobby Pool Eutrophic lake NVZ	Eutrophic Water	102	Existing

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



SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

0

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.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m

1

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

Features are displayed on the SSSI Impact Zones and Units map on [page 56 >](#)

ID: 1
Location: 519m NE
SSSI name: Cliffe Hill Quarry
Unit name: 1
Broad habitat: Earth Heritage
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
EA - Precambrian of England and Wales	Favourable	11/01/2023

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



11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

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

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

11.3 National Parks

Records within 250m

0

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

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

11.4 Listed Buildings

Records within 250m

0

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



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

11.5 Conservation Areas

Records within 250m

0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

Records within 250m

0

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

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



12 Agricultural designations



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

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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 60](#) >

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.



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**4**

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

Features are displayed on the Agricultural designations map on [page 60](#) >

ID	Location	Description	Reference	Application date
A	On site	Selective Fell/Thin (Unconditional)	014/52/10-11	09/09/2010
A	On site	Selective Fell/Thin (Unconditional)	014/36/08-09	04/08/2008
B	109m W	Selective Fell/Thin (Unconditional)	014/52/10-11	09/09/2010
B	109m W	Selective Fell/Thin (Unconditional)	014/36/08-09	04/08/2008

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m**0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.



12.5 Countryside Stewardship Schemes

Records within 250m

6

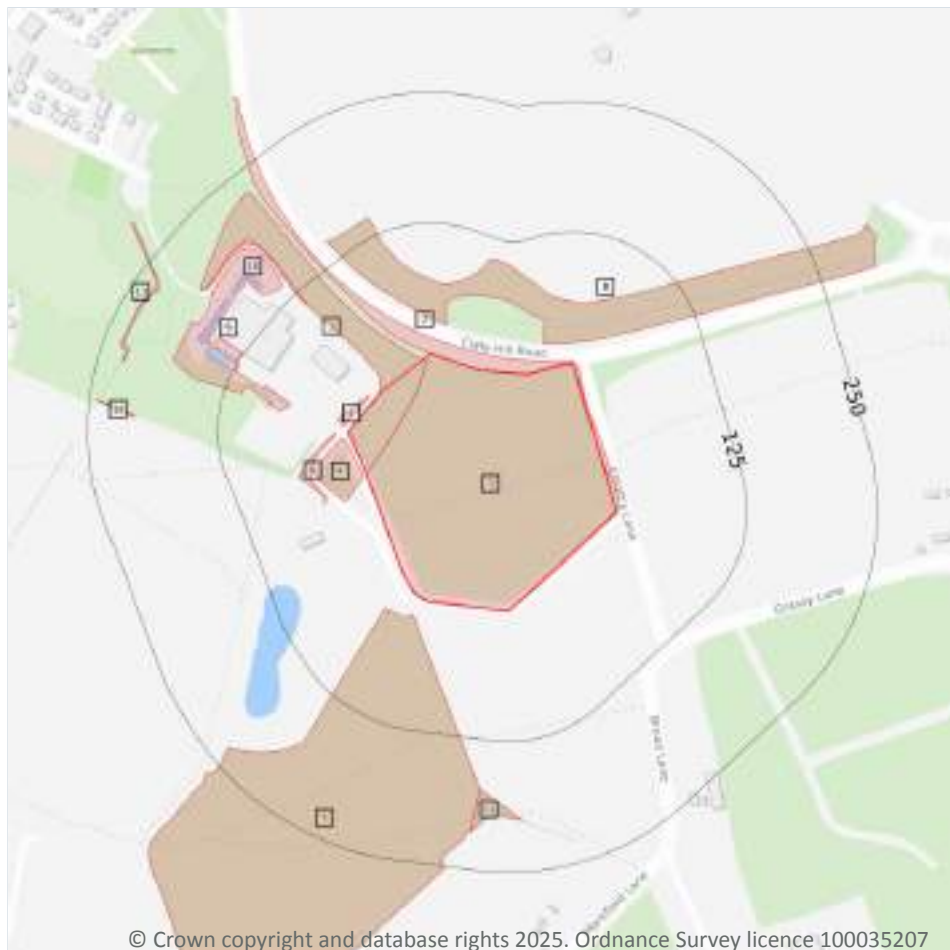
Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
On site	1282739	Woodland Management Plan	01/05/2022	30/04/2024
13m W	1064923	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025
18m SW	1282739	Woodland Management Plan	01/05/2022	30/04/2024
109m W	1282739	Woodland Management Plan	01/05/2022	30/04/2024
142m SE	1484302	Tree Health Restoration	01/04/2023	31/03/2025
142m SE	1282739	Woodland Management Plan	01/05/2022	30/04/2024

This data is sourced from Natural England.



13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

13

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 63](#) >

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	3m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
5	6m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	13m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	18m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	19m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	61m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	110m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	172m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	205m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	224m W	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

2

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

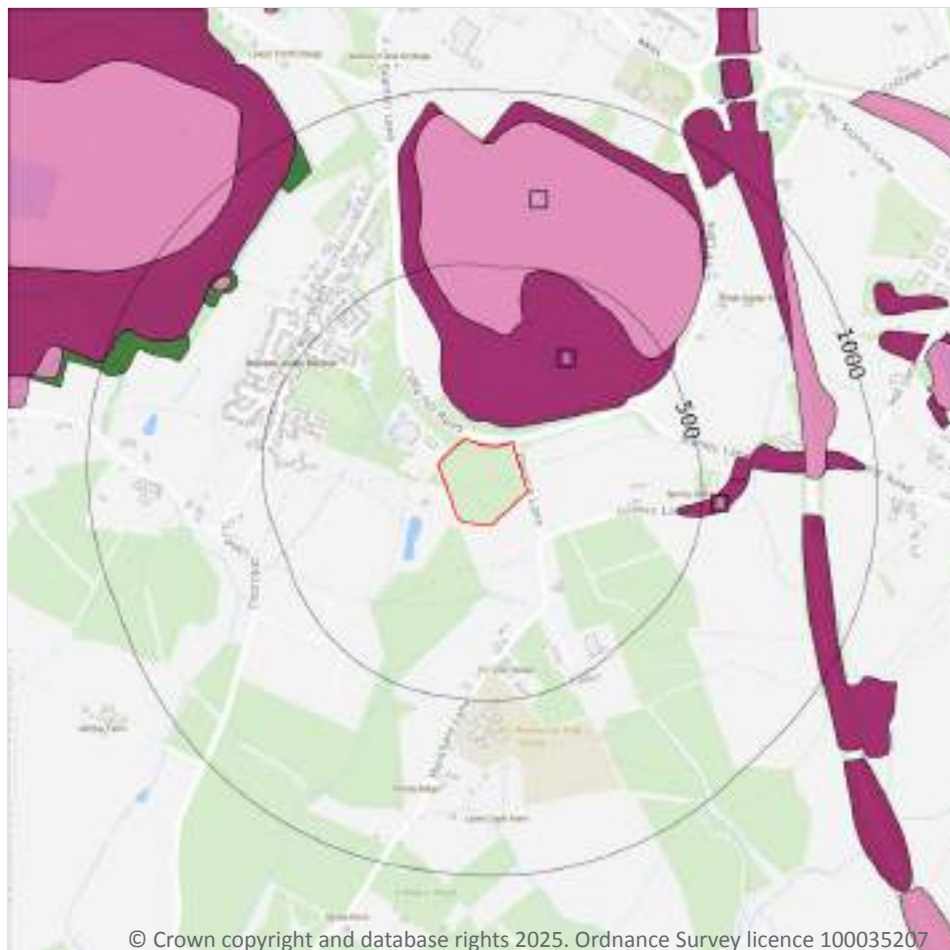
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 66](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SK41SE
2	On site	Full	Full	Full	No coverage	SK40NE

This data is sourced from the British Geological Survey.



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



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- Site Outline
- Search buffers in metres (m)
- Reclaimed ground
 - Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

3

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

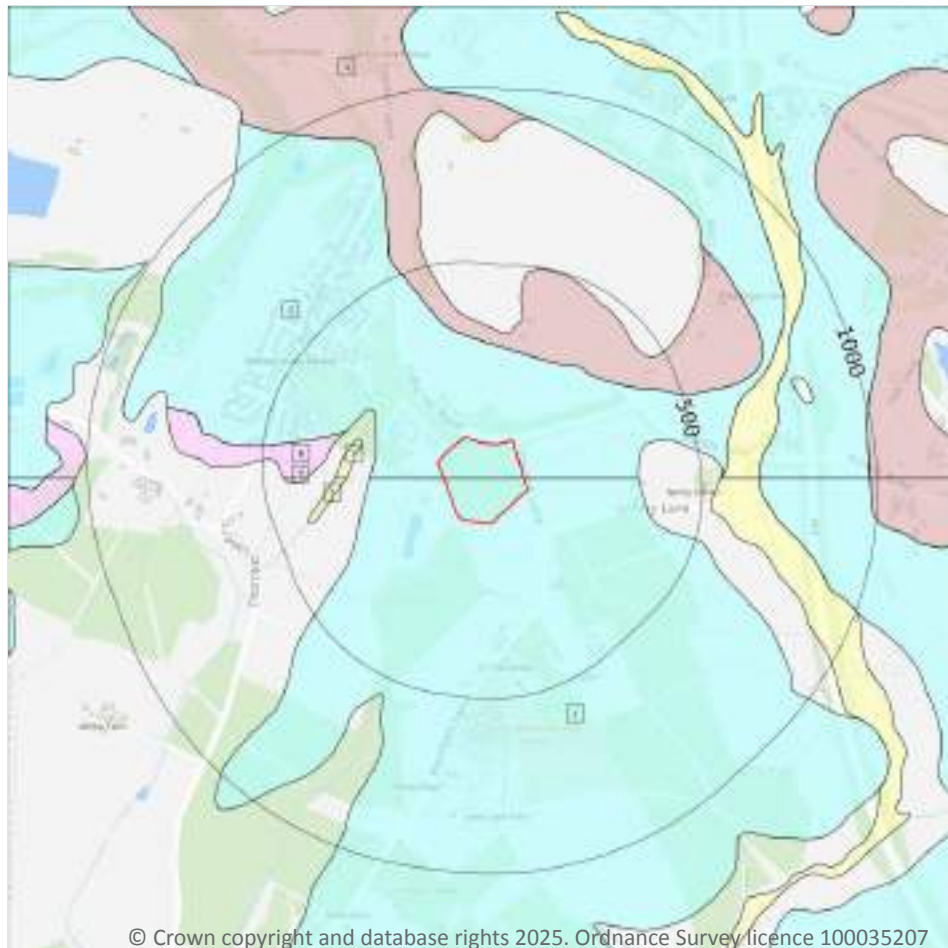
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 67](#) >

ID	Location	LEX Code	Description	Rock description
1	42m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	305m N	WGR-VOID	Worked Ground (Undivided)	Void
3	433m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

7

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 68](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	ODT-DMTN	Oadby Member - Diamicton	Diamicton
2	On site	ODT-DMTN	Oadby Member - Diamicton	Diamicton
3	224m W	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

ID	Location	LEX Code	Description	Rock description
4	245m N	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
5	263m W	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
6	277m W	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel
7	377m W	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m

5

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

ID	Location	LEX Code	Description	Rock age
1	On site	EDW-MDST	Edwalton Member - Mudstone	Carnian Age
2	On site	EDW-MDST	Edwalton Member - Mudstone	Carnian Age
3	311m E	SCHD-DI	South Charnwood Diorites - Diorite	Ediacaran Period
4	373m NE	SCHD-DI	South Charnwood Diorites - Diorite	Ediacaran Period



ID	Location	LEX Code	Description	Rock age
5	406m E	SCHD-DI	South Charnwood Diorites - Diorite	Ediacaran Period

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.

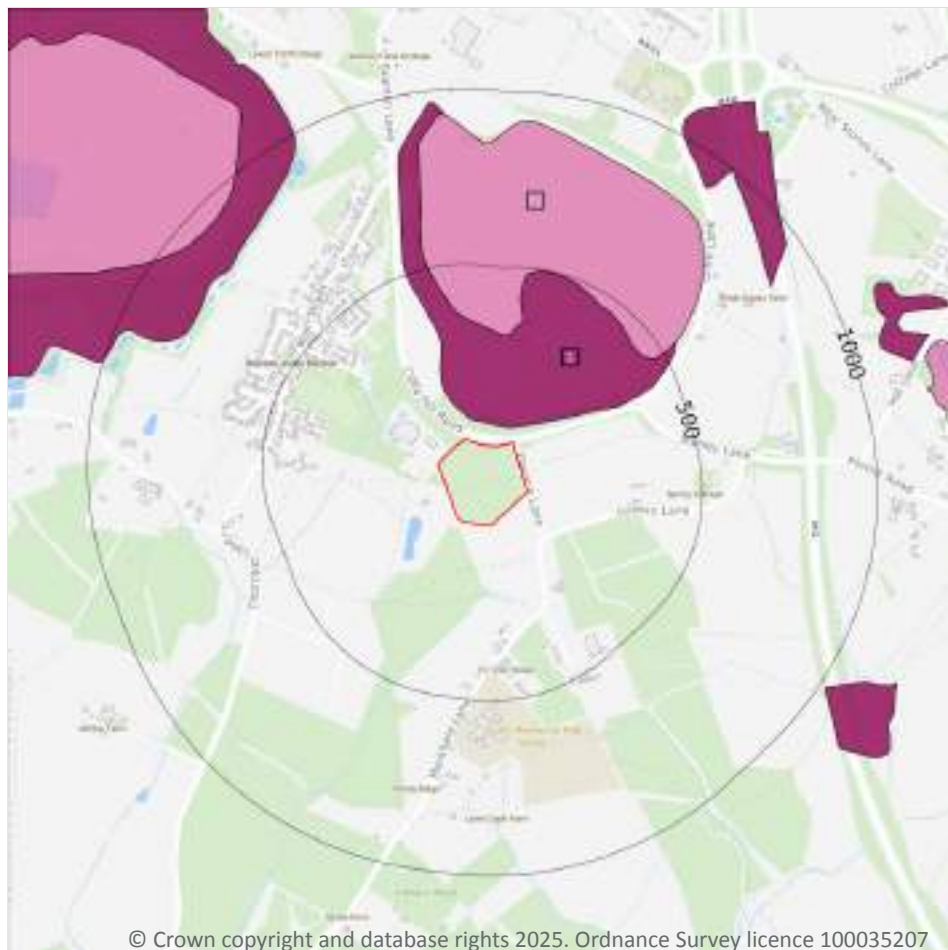
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 72](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW155_coalville_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

2

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 73](#) >

ID	Location	LEX Code	Description	Rock description
1	42m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	305m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.



15.3 Artificial ground permeability (50k)

Records within 50m

1

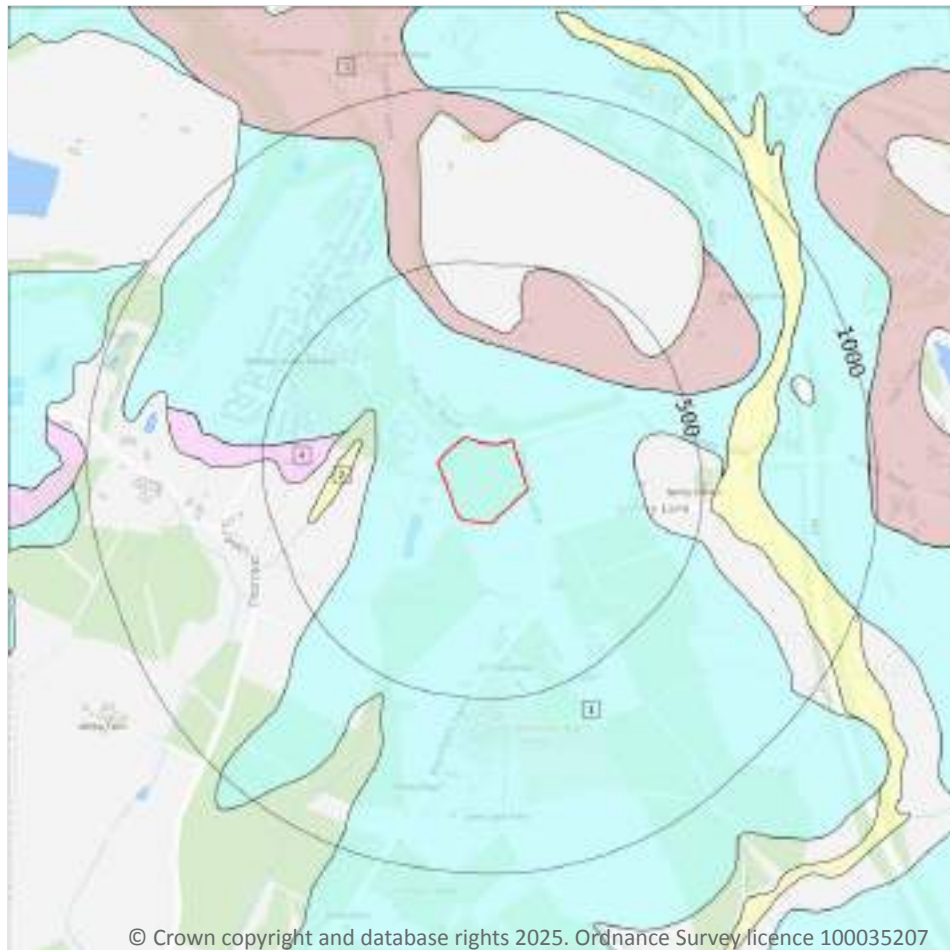
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
41m N	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



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

15.4 Superficial geology (50k)

Records within 500m

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 75 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	ODT-DMTN	OADBY MEMBER	DIAMICTON
2	224m W	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
3	245m N	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL



ID	Location	LEX Code	Description	Rock description
4	277m W	GFDMP-XSV	GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1
---------------------------	----------

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Moderate	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

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

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

This data is sourced from the British Geological Survey.

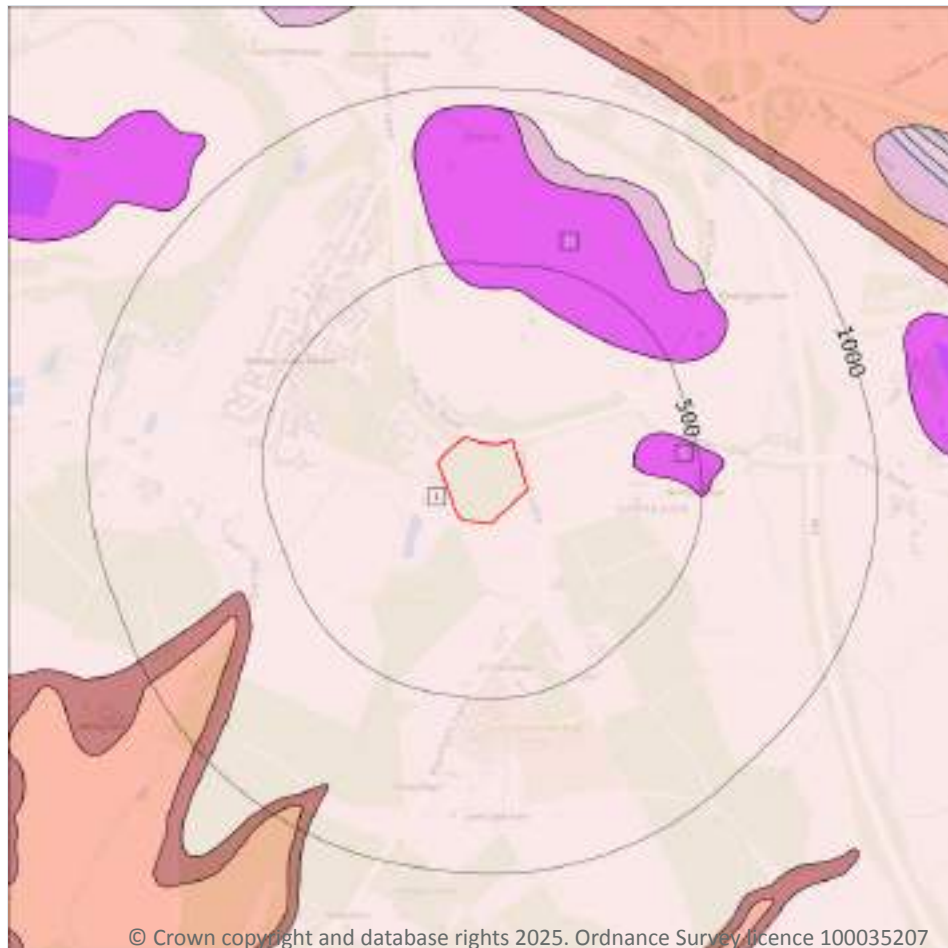
15.7 Landslip permeability (50k)

Records within 50m	0
---------------------------	----------

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m

3

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 77 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	EDW-MDST	EDWALTON MEMBER - MUDSTONE	CARNIAN
2	312m E	SCHD-DI	SOUTH CHARNWOOD DIORITES - DIORITE	-
3	373m NE	SCHD-DI	SOUTH CHARNWOOD DIORITES - DIORITE	-

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

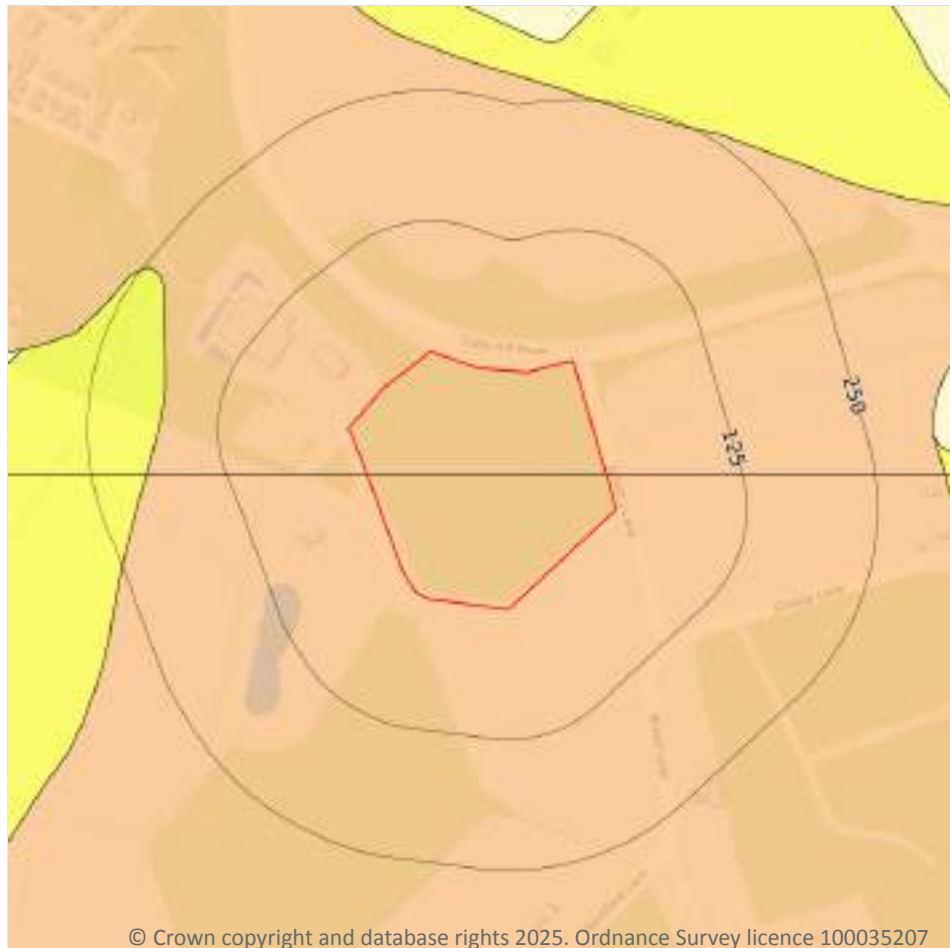
0

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 80](#) >

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

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.

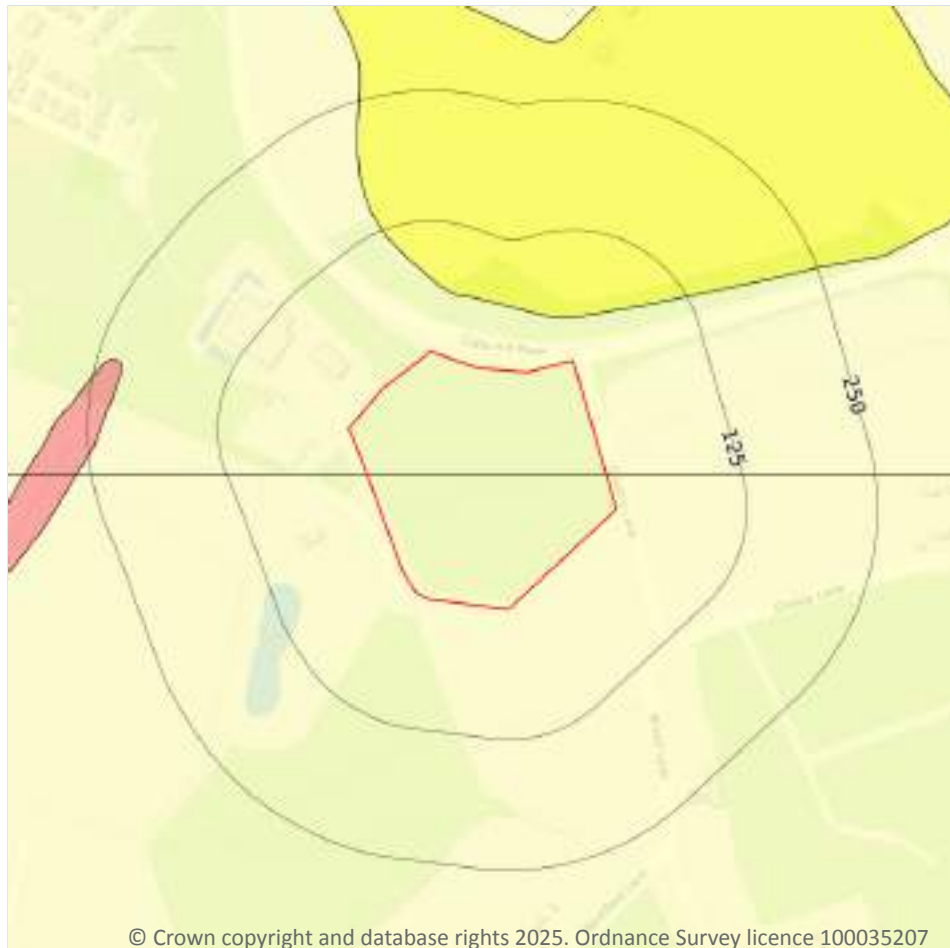
Features are displayed on the Natural ground subsidence - Running sands map on [page 81](#) >

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



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- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

2

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

Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 82 >](#)

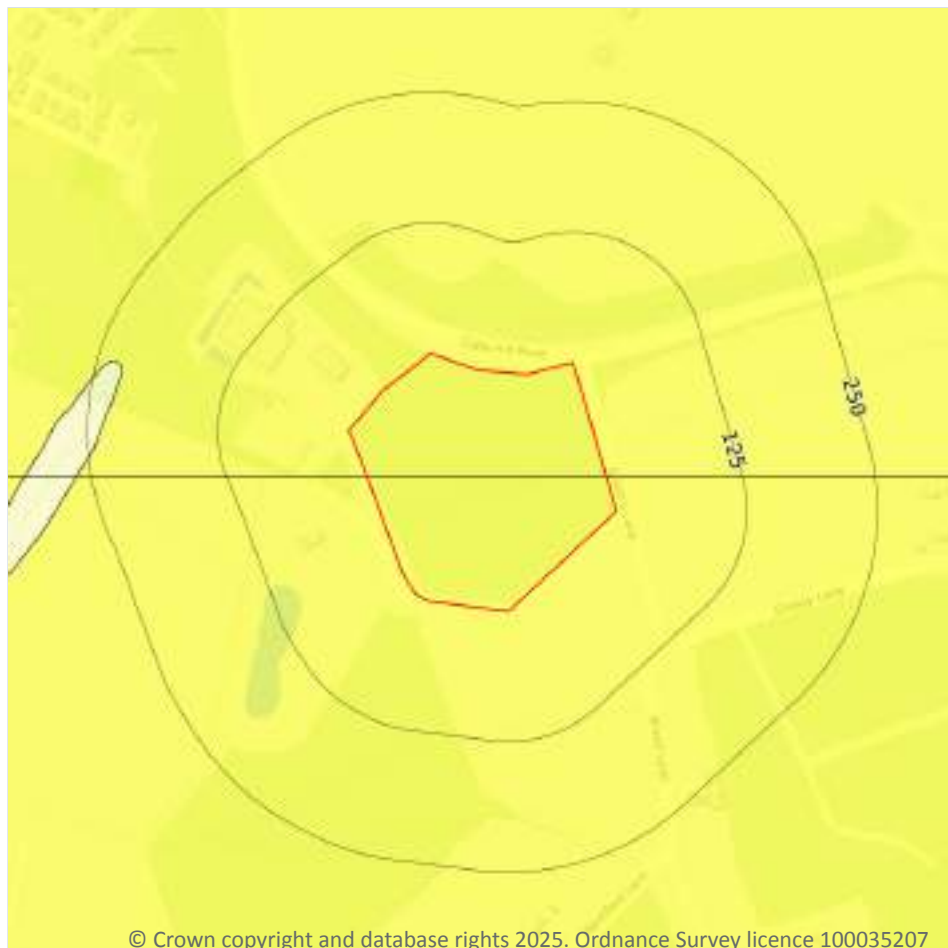
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
42m N	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.



This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 84](#) >

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

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17.5 Landslides

Records within 50m

3

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

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

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



Location	Hazard rating	Details
On site	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
27m N	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.6 Ground dissolution of soluble rocks

Records within 50m

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 87](#) >

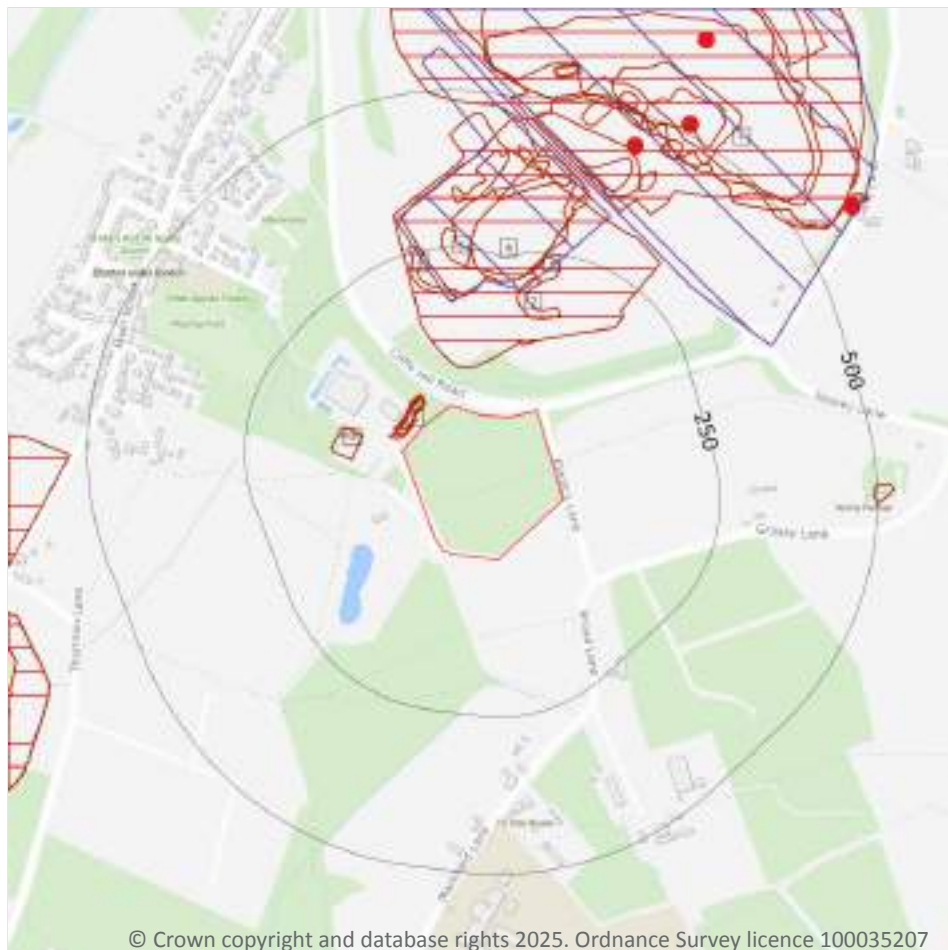
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m

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 89](#) >

ID	Location	Details	Description
8	449m N	Name: Old Cliffe Hill Quarry Address: West Lane, Ellistown, LEICESTER, Leicestershire, LE67 1FA Commodity: Igneous & Metamorphic Rock Status: Active	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which is actively extracting a mineral, or in the case of wharfs and rail depots, is actively handling minerals

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	15
----------------------------	-----------

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 89](#) >

ID	Location	Land Use	Year of mapping	Mapping scale
A	12m NW	Ponds	1955	1:10560
A	14m NW	Ponds	1968	1:10560
A	14m NW	Ponds	1980	1:10000
A	17m NW	Ponds	1901	1:10560
A	17m NW	Ponds	1883	1:10560
A	17m NW	Ponds	1930	1:10560
B	61m N	Refuse Heap	1980	1:10000
1	67m W	Pond	1992	1:10000
2	146m N	Refuse Heap	1968	1:10560
B	171m N	Unspecified Heaps	1955	1:10560
3	176m N	Refuse Heap	1968	1:10560
4	204m N	Unspecified Pit	1968	1:10560
B	210m N	Unspecified Heap	1930	1:10560
B	218m N	Unspecified Heap	1968	1:10560
5	220m N	Refuse Heap	1968	1:10560

This data is sourced from Ordnance Survey/Groundsure.



18.3 Underground workings

Records within 1000m**0**

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

This 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**2**

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

Features are displayed on the Mining and ground workings map on [page 89 >](#)

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
B	165m N	Cliffe Hill Granite	Igneous rock	Surface mineral working	Valid	5/8/47
C	313m NE	Cliffe Hill Granite	Igneous rock	Surface mineral working	Valid	5/8/47

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m**0**

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



This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site

1

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

Location	Details
On site	Whilst outside of an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) may have information such as mining plans and maps held within their archive that have occurred within 1km of this property. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk ↗.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m

0

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m

0

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

This data is sourced from Groundsure.



18.10 Mining record office plans

Records within 500m**0**

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m**0**

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site**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
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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.

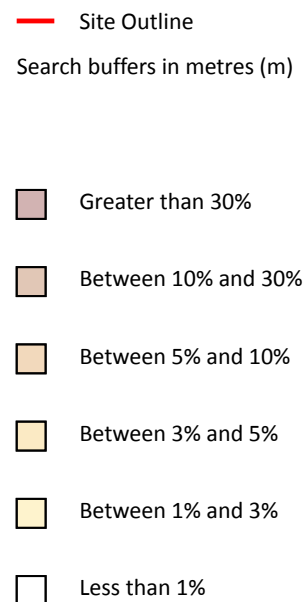
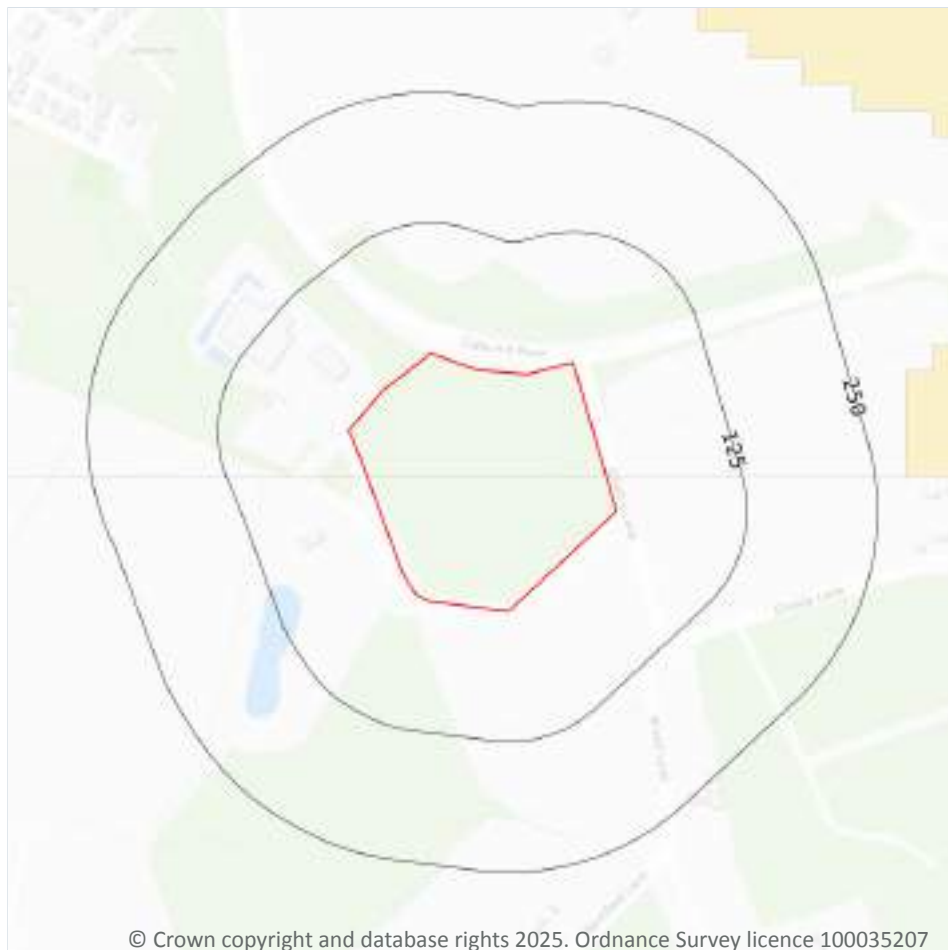
Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

1

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

Features are displayed on the Radon map on [page 97](#) >

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



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



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

2

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 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	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects

22.1 Underground railways (London)

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

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

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

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

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

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

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

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

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

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



This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m

0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.

Data providers

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

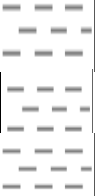
Terms and conditions

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



APPENDIX D



LINDEN ENVIRONMENTAL LTD				Date: 21st October 2025												BOREHOLE NO.		
CLIENT Milner Arable Ltd				Ground Level:												WSI		
				Orientation:												Sheet No. 1 of 1		
SITE LOCATION				Coordinates:												Job No.		
Elliot's Lane, Horsepool Grange, Stanton under Bardon, Leics				Plant: Window Sampling Rig												LN.09.25		
Description of Strata				Reduced level (m)	Legend	Depth (Thickness) m	SAMPLES/TESTS			SPT Results						N Value	Installation	Test Sample Details
							Depth	No	Type	Seating		Test Drive						
Brown silty clay with rootlets				0.10														
Firm brown/orange mottled CLAY with small cobbles of quartzite				0.20 0.30 0.40 0.50 0.60 0.70			0.3	1	ES									
SPT 'N'=22 Red brown very stiff silty CLAY with occasional gravel of Diorite and quartzite SPT 'N' = 11				0.80 0.90 1.00 1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30			1.2	1	GEO		5	5	5	5	5	7	22	
Sandy gravelly soft orange/brown CLAY with fine gravel of Diorite SPT 'N' = 7				2.40 2.50 2.60 2.70 2.80 2.90 3.00							2	2	1	2	2	2	7	
End of BH@ 3.0mbgl SPT 'N' = 7				3.10 3.20 3.30 3.40 3.50 3.60 3.70 3.80 3.90 4.00 4.10 4.20 4.30 4.40 4.50 4.60 4.70 4.80 4.90 5.00							2	2	1	2	2	2	7	

Casing record			Chiselling records								
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
Remarks: 1. Groundwater not encountered.							Logged By:	Checked By:	Date		Scale
							RPS	RPS	21.10.25		NTS

LINDEN ENVIRONMENTAL LTD Linden Spondon Derby DE21 7LH lindenhouseenv@outlook.com 07717155102 CLIENT Milner Arable Ltd SITE LOCATION Elliot's Lane, Horsepool Grange, Stanton under Bardon, Leics				Date: 21st October 2025 Ground Level: Orientation: Coordinates: Plant: Window Sampling Rig Dimensions:				BOREHOLE NO. WS2 Sheet No. 1 of 1 Job No. LN.09.25								
Description of Strata		Reduced level (m)	Legend	Depth (Thickness) m	SAMPLES/TESTS			SPT Results						N Value Installation	Test Sample Details	
					Depth	No	Type	Searing			Test Drive					
									10mm	15mm	20mm	25mm	30mm	35mm		
Soft silty brown CLAY with rootlets and fine gravel of quartzite and Diorite		0.10 0.20 0.30 0.40 0.50		0.5(0.5)	0.5		I	ES								
Stiff light brown silty CLAY with occasional quartzite cobbles		0.60 0.70 0.80 0.90 1.00		1.0(0.5)					2	1	3	3	9	15	30	
SPT 'N' = 30																
Stiff Light brown/Yellow Stiff CLAY		1.10 1.20 1.30 1.40 1.50		1.5(0.5)												
SPT 'N' = 32									4	5	8	10	8	6	32	
Red/Brown clayey fine to coarse GRAVEL of Diorite		1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00		3.0(1.5)												
SPT 'N' = 8									3	2	1	2	3	2	8	
Refusal at 3.5mbgl		3.10 3.20 3.30 3.40 3.50 3.60 3.70 3.80 3.90 4.00 4.10 4.20 4.30 4.40 4.50 4.60 4.70 4.80 4.90 5.00							25/50						50	
SPT 'N' = 7									2	1	1	2	2	2	7	

Casing record			Chiselling records									
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks	
Remarks: 1. Groundwater not encountered.									Logged By:	Checked By:	Date	Scale
									RPS	RPS	21.10.25	NTS

LINDEN ENVIRONMENTAL LTD Linden Spondon Derby DE21 7LH lindenhouseenv@outlook.com 07717155102 CLIENT Milner Arable Ltd SITE LOCATION Elliot's Lane, Horsepool Grange, Stanton under Bardon, Leics					Date: 21st October 2025 Ground Level: Orientation: Coordinates: Plant: Window Sampling Rig Dimensions:					BOREHOLE NO. WS3 Sheet No. 1 of 1 Job No. LN.09.25						
Description of Strata		Reduced level (m)	Legend	Depth (Thickness) m	SAMPLES/TESTS			SPT Results						N Value	Installation	Test Sample Detail
					Depth	No	Type	Sealing	Pen	Pen	Pen	Pen	Pen			
Brown silty CLAY with many rootlets		0.10 0.20 0.30			0.3	I	ES									
Firm silty brown CLAY with fine to coarse gravel of Diorite		0.40 0.50 0.60														
Stiff brown CLAY with fine to coarse gravel of Diorite		0.70 0.80 0.90 1.00														
SPT 'N' = 11									2	3	3	3	2	3	11	
Stiff orange/brown CLAY with fine gravel of Diorite		1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80 1.90 2.00														
SPT 'N' = 12									3	2	2	3	4	3	12	
Soft brown/grey gravelly CLAY. Gravel is fine of Diorite.		2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80														
SPT 'N' = 50									14	11	16	18	16		50	
Refusal on rock at 2.8mbgl.		2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60 3.70 3.80 3.90 4.00 4.10 4.20 4.30 4.40 4.50 4.60 4.70 4.80 4.90 5.00														

Casing record			Chiselling records									
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks	
Remarks: I. Groundwater not encountered.									Logged By:	Checked By:	Date	Scale
									RPS	RPS	21.10.25	NTS

LINDEN ENVIRONMENTAL LTD Linden Spondon Derby DE21 7LH lindenhouseenv@outlook.com 07717155102 CLIENT Milner Arable Ltd					Date: 21st October 2025 Ground Level: Orientation: Coordinates: Plant: Window Sampling Rig Dimensions:										BOREHOLE NO. WS4 Sheet No. 1 of 1 Job No. LN.09.25		
SITE LOCATION																	
Elliot's Lane, Horsepool Grange, Stanton under Bardon, Leics																	
Description of Strata	Reduced level (m)	Legend	Depth (Thickness) m	SAMPLES/TESTS			SPT Results							N Value	Installation	Test Sample Detail	
				Depth	No	Type	Sealing	Test Drive									
Brown silty CLAY with many rootlets	0.10		0.2(0.2)	0.2	1	ES											
	0.20																
	0.30																
	0.40																
	0.50																
MADE GROUND Concrete cobbles and still brown CLAY SPT 'N' = 14	0.60																
	0.70																
	0.80																
	0.90																
	1.00						4	4	3	4	4	3	14				
MADE GROUND Stiff Brown silty Clay with large cobble of concrete and black vegetation remnants. SPT 'N' = 25	1.10			1.5	1	Geo											
	1.20																
	1.30																
	1.40																
	1.50																
	1.60																
	1.70																
	1.80																
	1.90																
	2.00						4	5	6	6	6	7	25				
Grey/Orange/Brown stiff CLAY with very fine gravel of Diorite.	2.10																
	2.20																
	2.30																
Orange brown firm gravelly CLAY, fine gravel of Diorite SPT 'N' = 50	2.40																
	2.50																
	2.60																
	2.70																
	2.80																
	2.90																
	3.00						3	4	4	6	40	50					
BH complete @ 3.0mbgl on concrete obstruction	3.10																
	3.20																
	3.30																
	3.40																
	3.50																
	3.60																
	3.70																
	3.80																
	3.90																
	4.00																
	4.10																
	4.20																
	4.30																
	4.40																
	4.50																
	4.60																
	4.70																
	4.80																
	4.90																
	5.00																

Casing record			Chiselling records								
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
Remarks: 1. Groundwater not encountered.								Logged By:	Checked By:	Date	Scale
								RPS	RPS	21.10.25	NTS

LINDEN ENVIRONMENTAL LTD Linden Spondon Derby DE21 7LH lindenhouseenv@outlook.com 07717155102 CLIENT Milner Arable Ltd SITE LOCATION Elliot's Lane, Horsepool Grange, Stanton under Bardon, Leics				Date: 21st October 2025 Ground Level: Orientation: Coordinates: Plant: Window Sampling Rig Dimensions:										BOREHOLE NO. WS5 Sheet No. 1 of 1 Job No. LN.09.25																		
Description of Strata	Reduced level (m)	Legend	Depth (Thickness) m	SAMPLES/TESTS			SPT Results							N Value	Installation	Test Sample Detail																
				Depth	No	Type	Sealing	Test Drive																								
Brown very silty CLAY with rootlets	0.10		0.3(0.3)	0.3	1	ES																										
	0.20																															
	0.30																															
Firm brown silty CLAY with fine gravel of Diorite	0.40																															
	0.50																															
	0.60																															
Stiff silty brown CLAY with fine gravel of Diorite	0.70																															
																	0.80															
																	0.90															
SPT 'N' = 7	1.00						1.0	1	Geo	3	2	3	3	3	4	13																
	1.10																															
	1.20																															
Stiff silty orange/brown/red CLAY.	1.30																															
																		1.40														
																		1.50														
Stiff silty orange/brown/red CLAY with increasing fine gravel of Diorite.	1.60																															
																		1.70														
																		1.80														
SPT 'N' = 16	1.90																															
	2.00																															
	2.10																															
Stiff dark grey CLAY	2.20																															
																		2.30														
																		2.40														
Stiff dark grey becoming orange CLAY with gravel of Diorite	2.50																															
																		2.60														
																		2.70														
End of BH@ 2.8mbgl SPT 'N' = 50	2.80																															
	2.90																															
	3.00																															
	3.10																															
	3.20																															
	3.30																															
	3.40																															
	3.50																															
	3.60																															
	3.70																															
	3.80																															
	3.90																															
	4.00																															
	4.10																															
	4.20																															
	4.30																															
	4.40																															
	4.50																															
	4.60																															
	4.70																															
4.80																																
4.90																																
5.00																																

Borehole ended at 5.00mbgl.

Casing record			Chiselling records								
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Sanding level	Remarks
Remarks: 1. Groundwater not encountered.							Logged By:	Checked By:	Date	Scale	
							VS	RPS	21.10.25	NTS	

APPENDIX E



Richard Sutton
Ivy House Environmental Ltd
Linden
Potter Street
Spondon
Derby
DE21 7LH

Normec DETS Limited
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 25-09023

Site Reference: Eliots Lane, Horsepool Grange, Stanton by Bardon

Project / Job Ref: LN.09.25

Order No: None Supplied

Sample Receipt Date: 22/10/2025

Sample Scheduled Date: 22/10/2025

Report Issue Number: 1

Reporting Date: 30/10/2025

Authorised by:



Steve Knight
Customer Support Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Soil Analysis Certificate						
DETS Report No: 25-09023	~Date Sampled	21/10/25	21/10/25	21/10/25	21/10/25	21/10/25
Ivy House Environmental Ltd	~Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Eliots Lane. Horsepool Grange, Stanton by Bardon	~TP / BH No	WS01	WS02	WS03	WS04	WS5
~Project / Job Ref: LN.09.25	~Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: None Supplied	~Depth (m)	0.30	0.30	0.30	0.20	1.00
Reporting Date: 30/10/2025	DETS Sample No	793868	793869	793870	793871	793872

Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	
pH	pH Units	N/a	MCERTS	6.8	7.0	6.8	6.6	6.9
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	277	339	355	260	
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.03	0.03	0.04	0.03	
W/S Sulphate as SO ₄ (2:1)	mg/l	< 10	MCERTS	15	19	11	16	40
W/S Sulphate as SO ₄ (2:1)	g/l	< 0.01	MCERTS	0.02	0.02	0.01	0.02	0.04
Organic Matter (SOM)	%	< 0.1	MCERTS	3.1	4	4	3.8	
Arsenic (As)	mg/kg	< 2	MCERTS	11	10	7	6	
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	0.2	< 0.2	< 0.2	
Chromium (Cr)	mg/kg	< 2	MCERTS	48	27	19	37	
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
Copper (Cu)	mg/kg	< 4	MCERTS	22	43	16	20	
Lead (Pb)	mg/kg	< 3	MCERTS	32	34	26	20	
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	19	16	12	27	
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Vanadium (V)	mg/kg	< 1	MCERTS	42	36	30	32	
Zinc (Zn)	mg/kg	< 3	MCERTS	56	93	52	59	
TPH (EPH EC10-EC40) : EH_1D_Total	mg/kg	< 6	MCERTS	< 6	< 6	< 6	< 6	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Analysis carried out on the dried sample is corrected for the stone content

Soil Analysis Certificate

DETS Report No: 25-09023	~Date Sampled	21/10/25				
Ivy House Environmental Ltd	~Time Sampled	None Supplied				
~Site Reference: Eliots Lane. Horsepool Grange, Stanton by Bardon	~TP / BH No	WS4				
~Project / Job Ref: LN.09.25	~Additional Refs	None Supplied				
~Order No: None Supplied	~Depth (m)	1.50				
Reporting Date: 30/10/2025	DETS Sample No	793873				

Determinand	Unit	RL	Accreditation				
Asbestos Screen ^(S)	N/a	N/a	ISO17025				
pH	pH Units	N/a	MCERTS	7.5			
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS				
Total Sulphate as SO ₄	%	< 0.02	MCERTS				
W/S Sulphate as SO ₄ (2:1)	mg/l	< 10	MCERTS	45			
W/S Sulphate as SO ₄ (2:1)	g/l	< 0.01	MCERTS	0.04			
Organic Matter (SOM)	%	< 0.1	MCERTS				
Arsenic (As)	mg/kg	< 2	MCERTS				
Cadmium (Cd)	mg/kg	< 0.2	MCERTS				
Chromium (Cr)	mg/kg	< 2	MCERTS				
Chromium (hexavalent)	mg/kg	< 2	NONE				
Copper (Cu)	mg/kg	< 4	MCERTS				
Lead (Pb)	mg/kg	< 3	MCERTS				
Mercury (Hg)	mg/kg	< 1	MCERTS				
Nickel (Ni)	mg/kg	< 3	MCERTS				
Selenium (Se)	mg/kg	< 2	MCERTS				
Vanadium (V)	mg/kg	< 1	MCERTS				
Zinc (Zn)	mg/kg	< 3	MCERTS				
TPH (EPH EC10-EC40) : EH_1D_Total	mg/kg	< 6	MCERTS				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Analysis carried out on the dried sample is corrected for the stone content

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 25-09023	~Date Sampled	21/10/25	21/10/25	21/10/25	21/10/25	
Ivy House Environmental Ltd	~Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
~Site Reference: Eliots Lane. Horsepool Grange, Stanton by Bardon	~TP / BH No	WS01	WS02	WS03	WS04	
~Project / Job Ref: LN.09.25	~Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
~Order No: None Supplied	~Depth (m)	0.30	0.30	0.30	0.20	
Reporting Date: 30/10/2025	DETS Sample No	793868	793869	793870	793871	

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
**Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	

Soil Analysis Certificate - Sample Descriptions

DETS Report No: 25-09023
Ivy House Environmental Ltd
~Site Reference: Eliots Lane. Horsepool Grange, Stanton by Bardon
~Project / Job Ref: LN.09.25
~Order No: None Supplied
Reporting Date: 30/10/2025

DETS Sample No	~TP / BH No	~Additional Refs	~Depth (m)	Moisture Content (%)	Sample Matrix Description
793868	WS01	None Supplied	0.30	17.8	Brown clayey sand with stones and vegetation
793869	WS02	None Supplied	0.30	18	Brown clayey sand with stones and vegetation
793870	WS03	None Supplied	0.30	14	Brown clayey sand with stones and vegetation
793871	WS04	None Supplied	0.20	18.2	Light brown sandy clay with stones
793872	WS5	None Supplied	1.00	10.2	Light brown sandy clay with stones
793873	WS4	None Supplied	1.50	12.7	Light brown sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test

Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 25-09023
Ivy House Environmental Ltd
~Site Reference: Eliots Lane, Horsepool Grange, Stanton by Bardonia
~Project / Job Ref: LN.09.25
~Order No: None Supplied
Reporting Date: 30/10/2025

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	DS	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	DS	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	DS	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	DS	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	DS	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 - C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	DS	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	DS	Fraction Organic Carbon (FOC)	Determination of FOC by combustion analyser.	E027
Soil	DS	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	DS	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	DS	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	DS	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	DS	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	DS	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	DS	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	DS	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	DS	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	DS	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	DS	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	DS	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	DS	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	DS	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	DS	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

List of HWOL Acronyms and Operators

DETS Report No: 25-09023

Ivy House Environmental Ltd

~Site Reference: Eliots Lane. Horsepool Grange, Stanton by Bardonia

~Project / Job Ref: LN.09.25

~Order No: None Supplied

Reporting Date: 30/10/2025

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total
~	Sample details provided by customer and can affect the validity of results

TPH (EPH EC10-EC40) - EH_1D_Total

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Certificate Key

Symbol	Description
F	Filtered sample
UF	Unfiltered sample
D	Dried sample
AR	As received sample
RL	Reporting limit
~	Sample details provided by customer and can affect the validity of results
M/S	Missing Sample
*	The Dutch 10 PAH compounds consist of Naphthalene, Anthracene, Phenanthrene, Fluoranthene, Benz(a)anthracene, Chrysene, Benzo(k)fluoranthene, Benzo(a)pyrene, Benzo(g,h,i)perylene, and Indeno(1,2,3-cd)pyrene
**	Total EPA-16 PAHs consist of the following polycyclic aromatic hydrocarbons: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, and Benzo(ghi)perylene.
***	Total WAC-17 PAHs consist of the following polycyclic aromatic hydrocarbons: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(ghi)perylene and Coronene.
^	No sampling date provided; unable to confirm if samples are within acceptable holding times
\$	Samples exceeded their recommended holding times
C	Deviation due to exceeded time between Sampling and Receipt
S	Subcontracted analysis
M	MCERTS accredited test
U	UKAS accredited test

APPENDIX F



Generic Assessment Criteria					
Land Use Scenario					
Contaminants	Residential With Produce	Residential Without Produce	POS (Resi)	Commercial	Source
	6% SOM	6% SOM	6%SOM	6%SOM	S4UL
Arsenic	37	40	79	635	
Cadmium	11	85	120	230	
Chromium VI	6	6	8	34	
Chromium III	910	910	1500	8840	
Copper	2400	7100	12000	71700	
Lead	200	310	630	2300	
Mercury, elemental	1	1	16	83	
Mercury, inorganic	40	56	120	3640	
Mercury, methyl	11	15	40	409	
Nickel	180	180	230	980	
Vanadium	410	1200	2000	9000	
Zinc	3700	40000	81000	665000	
Selenium	250	430	1100	13000	
Asbestos Fibre	>0.01%	>0.01%	>0.01%	>0.01%	

Note:

All figures are in mg/kg

LQM/CIEH/S4UL Adopted.

Soil type chosen is sandy loam, pH 7



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Publication No. S4UL3278

Contaminants	Residential With Produce						Residential Without Produce						Land Use Scenario						Source
	Residential With Produce			Residential Without Produce			POS (Resi)			Commercial									
	1% SOM	2.5% SOM	6% SOM	1% SOM	2.5% SOM	6% SOM	1% SOM	2.5% SOM	6% SOM	1% SOM	2.5% SOM	6% SOM							
Arsenic			37			40			79						635	S4UL			
Cadmium			11			85			120						190	S4UL			
Chromium VI			6			6			8						33	S4UL			
Chromium III			910			910			1500						8600	S4UL			
Copper			2400			7100			12000						68000	S4UL			
Mercury, elemental			1			1			16						58 ^(25.8)	S4UL			
Mercury, inorganic			40			56			120						3640	S4UL			
Mercury, methyl			11			15			40						407	S4UL			
Nickel			180			180			230						980	S4UL			
Vanadium			410			1200			2000						9000	S4UL			
Zinc			3700			4000		81000	73000						73000	S4UL			
Selenium			250			430		1100	1100						12000	S4UL			
Benzene*	0.087		0.37			1.4		72	73						90	S4UL			
Ethylbenzene*	47	0.17	260	0.38	0.7	440	24000	24000	25000	570 ⁽⁵¹⁸⁾		47	13, 000 ⁽¹²²⁰⁾		27, 000 ⁽²⁸⁴⁰⁾	S4UL			
Phenol	280		1100	750	1300	2300	760 ⁽¹¹⁰⁰⁰⁰⁾	1500 ⁽³⁵⁰⁰⁰⁾	3200 ⁽³⁷⁰⁰⁰⁾	760 ⁽³¹⁰⁰⁰⁾			1500 ⁽³⁵⁰⁰⁰⁾		3200 ⁽³⁷⁰⁰⁰⁾	S4UL			
*Toluene	130		290	660	1900	3900		56000	56000	56000 ⁽⁸⁶⁹⁾			110, 000 ⁽¹⁹²⁰⁾		180, 000 ⁽⁴³⁶⁰⁾	S4UL			
*Xylene, o	60		140	330	88	480	41000	42000	43000	6600 ⁽⁴⁷⁸⁾			15000 ⁽¹¹²⁰⁾		33000 ⁽¹³⁵⁰⁾	S4UL			
*Xylene, m	59		140	320	82	450	41000	42000	43000	6200 ⁽⁶²⁵⁾			14000 ⁽¹⁴⁷⁰⁾		31000 ⁽¹³⁵⁰⁾	S4UL			
*Xylene, p	56		130	310	79	430	41000	42000	43000	5900 ⁽⁵⁷⁶⁾			14000 ⁽¹³⁵⁰⁾		30000 ⁽¹³⁵⁰⁾	S4UL			
Benzo(a)pyrene*	2		3	3	3	3		5.7	5.7	35			35		36	S4UL			
Dibenzo(a,h)anthracene*	0		0.3	0.3	0.3	0		0.57	0.57	0.58			4		4	S4UL			
Acenaphthene*	210		510	1100	3000	6000	15000	1500	1500	84, 000			97000		100, 000	S4UL			
Acenaphthylene*	170		420	2900	4600	6000	15000	1500	1500	83, 000			1010000		1010000	S4UL			
Anthracene*	2400		5400	11000	31000	35000	74000	15000	74000	52, 000			54, 000		54, 000	S4UL			
Benzo(a)anthracene*	7.2		11	13	11	15		29	29	170, 000			170, 000		180, 000	S4UL			
Benzo(b)fluoranthene*	2.6		3.3	3.7	4	4		7.1	7.2	44			44		45	S4UL			
Benzo(g,h,i)perylene	320		340	350	360	360		640	640	3900			4000		4000	S4UL			
Benzo(k)fluoranthene*	77		93	100	110	110		190	190	1200			1200		1200	S4UL			
Chrysene*	15		22	27	31	32		57	57	350			350		350	S4UL			
Fluoranthene*	280		560	1500	1600	1600		3100	3100	23000			23000		23000	S4UL			
Fluorene*	170		400	860	2800	4500		9900	9900	63000 ^(30.9)			68, 000		71, 000	S4UL			
Indeno(1,2,3-c,d)pyrene*	27		36	41	45	46		82	82	510			510		510	S4UL			
Phenathrene*	95		220	440	1300	1500		3100	3100	22, 000			22, 000		23, 000	S4UL			
Pyrene*	620		1200	2000	3700	3800		7400	7400	54, 000			54, 000		54, 000	S4UL			
Napthalene*	2.3		5.6	13	2	13		4900	4900	190 ^(76.4)			460 ⁽¹⁸³⁾		1110 ⁽⁸³²⁾	S4UL			
Aliphatic C5 - C6*	42		78	160	42	78	570 ⁽³⁰⁴⁾	590, 000	600, 000	5900 ⁽⁹⁵⁸⁾			12000 ⁽¹¹⁵⁰⁾			S4UL			
Aliphatic C6 - C8	100		230	530	100	530	600, 000	610, 000	620, 000	7800 ⁽¹⁴⁴⁾			17000 ⁽³²²⁾		40K ⁽⁷³⁶⁾	S4UL			
Aliphatic C8 - C10	27		65	150	27	150		13000	13000	2000 ⁽⁷⁸⁾			4.8K ⁽¹⁹⁰⁾		11K ⁽⁴⁵¹⁾	S4UL			
Aliphatic C10 - C12	130 ⁽⁶⁸⁾		330 ⁽¹¹⁸⁾	760 ⁽²⁸³⁾	130 ⁽⁴⁸⁾	330 ⁽¹¹⁸⁾		13000	13000	9700 ⁽⁴⁸⁾			23K ⁽¹¹⁸⁾		47000 ⁽²⁶³⁾	S4UL			
Aliphatic C12 - C16	1100 ⁽²⁴⁾		2400 ⁽⁵⁹⁾	4300 ⁽¹⁴²⁾	1100 ⁽²⁴⁾	4400 ⁽¹⁴²⁾		13000	13000	59K ⁽⁸⁹⁾			90000 ⁽¹⁴²⁾			S4UL			
Aliphatic C16 - C35	65000 ^(8,48)		92, 000 ⁽²¹⁾	110000	65000 ^(8,48)	92000 ⁽²¹⁾	250000	250, 000	250, 000				1600000		1800000	S4UL			
Aliphatic C35 - C44	65000 ^(8,48)		92, 000 ⁽²¹⁾	110000	65000 ^(8,48)	92000 ⁽²¹⁾	250, 000	250, 000	250, 000				1700000		1800000	S4UL			
Aromatic C5 - C7 (benzene)	70		140	300	370	1400	56, 000	56, 000	56, 000	26000 ⁽¹²²⁰⁾			46000 ⁽¹⁹²⁰⁾		86000 ⁽⁴³⁶⁰⁾	S4UL			
Aromatic C7 - C8 (toluene)	130		290	660	860	3900	56, 000	56, 000	56, 000	56000 ⁽⁸⁶⁹⁾			110000 ⁽¹⁹²⁰⁾		180000 ⁽⁴³⁶⁰⁾	S4UL			
Aromatic C8 - C10	34		83	190	47	270	5000	5000	5000	3500 ⁽¹³⁾			8100 ⁽⁵⁸⁰⁾		17000 ⁽²¹⁵⁰⁾	S4UL			
Aromatic C10 - C12	74		180	380	250	1200	5000	5000	5000	16000 ⁽³⁶⁴⁾			280000 ⁽⁸⁹⁹⁾		34000 ⁽²¹⁵⁰⁾	S4UL			
Aromatic C12 - C16	140		330	660	1800	2500	5100	5100	5000	36, 000 ⁽¹⁶⁹⁾			37, 000		38, 000	S4UL			
Aromatic C16 - C21	260		540	930	1900	1900	3800	3800	3800	28, 000			28, 000		28, 000	S4UL			
Aromatic C21 - C35	1100		1500	1700	1900	1900	3800	3800	3800	28, 000			28, 000		28, 000	S4UL			
Aromatic C35 - C44	1100		1500	1700	1900	1900	3800	3800	3800	28, 000			28, 000		28, 000	S4UL			



Note:
All figures are in mg/kg
LQM/CI/CH/S4UL Adopted.
Soil type chosen is sandy loam, pH 7
All inorganic determinands calculated using 6% SOM
^(SCL) Solubility Saturation Limit
^(VAP) Vapour Saturation Limit

Contaminant Thresholds for Subsurface Water Pipes

Contaminant	Material selection Threshold Level (mg/kg dried soil)
Corrosion	
Sulphate (SO ₄)	2000
Sulphur (S)	5000
Sulphide (S)	250
pH	<pH5, >pH8
Toxic Substances	
Antimony (Sb)	10
Arsenic (As)	10*
Cadmium (Cd)	3
Chromium (hexavalent) (Cr)	25
Chromium (total)	600
Cyanide (free) (Cn)	25*
Cyanide (complexed) (Cn)	250*
Lead (Pb)	500
Mercury (Hg)	1
Selenium (Se)	3
Thiocyanate (SCN)	50
Organic Contaminants	
Coal Tar	50
Cyclohexane extractable	50
Phenol	5
Poly Aromatic Hydrocarbons	50
Toluene extractable	50
TPH DRO (diesel, kerosene)	100
Petrol	10
Mineral oils	1000

* It is not recommended that water pipes should be laid in sites where these substances are identified or suspected

Ref: Water Regulations Advisory Scheme (WRAS) (No. 9-04-03 Issue 1)