Report type:	Phase I Site Appraisal (Desk Study)
Site:	Land South of Burford Road, Minster Lovell
Client:	Catesby Strategic Land Ltd
Ref:	GRM/P10086/DS.1
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LAND SOUTH OF BURFORD ROAD, MINSTER LOVELL, OXFORDSHIRE

PHASE I DESK STUDY ASSESSMENT FOR CATESBY STRATEGIC LAND LTD

Project Ref:
P10086

Date:
August 2022

Prepared for:
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This report has been prepared in accordance with GRM's Accredited Quality Procedures.

If you have any queries regarding this report please contact the project manager in the first instance.

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When required in-house geological, geotechnical, environmental, structural and civil staff helped to produce this document.	

Issue	Description of Revision	Signature

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APPENDICES

1 INTRODUCTION

1.1 PREAMBLE

GRM Development Solutions Limited (GRM) has been appointed by Catesby Strategic Land Ltd (Client) to undertake a Phase I Site Appraisal (desk study). The desk study and site inspection form Phase I of the assessment and allow the geotechnical and geo-environmental setting of the site to be determined and the identification of areas of particular concern that require targeted investigation.

This site appraisal is intended to provide information that will assist decision making by identifying potential ground engineering and contamination issues.

GRM Standard Limitations of Reporting are provided in Appendix A of this report.

The Client has indicated the site will be developed for residential end use including associated infrastructure. The proposed end use has been assumed to include private gardens and area of communal soft landscaping. A high-level concept plan provided by the Client is presented in Appendix B.

The Client has informed GRM of the following potential development hazards:

- On-going residential development to the east.
- Existing construction compound within north eastern site boundary.

1.2 OBJECTIVES OF THE SITE APPRAISAL

The principal aims of the Phase I Site Appraisal (desk study) are as follows:

a) Obtain information, from easily accessible sources, about the soil and groundwater conditions within the area of the site.

b) Determine the possible ground related geotechnical and contamination hazards within the site boundaries that may affect the proposed development.

c) Provide preliminary development recommendations.

d) Provide advice on further works required for the cost-effective reduction of risks to the development and procedures likely to satisfy regulators.

Whilst every effort has been made to pre-empt the likely requirements of the Local Authority and the Environment Agency, they are likely to have specific requirements that will need to be discussed and addressed at a later date.

2 PHASE I DESK STUDY AND SITE OBSERVATIONS

2.1 INFORMATION SOURCES

In addition to the general sources of information listed in Appendix A (i) the Client has supplied the following information that has been used in the assessment of the site:

- the location of the site
- Concept layout

2.2 SITE DESCRIPTION

2.2.1 Geographical Setting

The site is located on the western outskirts of Minster Lovell, approximately 4km west of Witney town centre and 21km west of Oxford city centre. The National Grid Reference (NGR) for the approximate centre of the site is SP 305 102. A Site Location and Boundary Plan is presented in Appendix C.

The site forms an approximate 'L' shaped parcel of land. The northern boundary is mostly formed by mature hedgerows and trees with Burford Road beyond, the western boundary by a mature hedgerow with a residential construction site beyond. The site compound for the construction site is situated within the north eastern site boundary. The eastern part of the northern boundary is formed partly by the construction site (with balancing pond in the south east). The eastern boundary is formed by the construction site and partly by further farmland. The western boundary is generally formed by an access drive serving White Hall Farm to the south west, but also by the gardens of the residential dwellings of Repeater House and The Lodge in the north.

The topography of the site is flat lying.

2.2.2 Site Inspection Observations

The Site Features Plan/General Site Photographs presented in Appendix D illustrate the salient observations made during a site inspection on 1st August 2022.

The site is presently mostly used as agricultural land and covers an area of approximately 11.5 hectares. The north eastern corner of the site is used as a compound for the adjacent residential development. Access was not available into the compound.

The site comprised arable land and the site surface was firm under foot. Overhead services were not present, and no evidence of buried services was observed. With the exception of the construction compound in the north east no above ground structures were present within the site boundary. Mature hedges and trees were observed around the periphery and formed internal boundaries.

Significant Features identified during site inspection:
Agricultural land – shallow soils potentially affected by pesticides and ploughing. **Trees & hedges** – deepened foundations in association with cohesive strata. **Construction compound** - potential source of localised made ground, building materials and petroleum hydrocarbon contamination.

2.3 HISTORICAL DEVELOPMENT OF THE SITE

A review of the available historical Ordnance Survey (OS) maps gives an insight into the development of the site and can highlight potential hazards. Extracts of the maps reviewed are provided in Appendix E.

The site presently comprises farmland and no significant changes are recorded in site use on the historical OS mapping. Aerial photography for 2021, however, shows a construction compound in the north east site corner, which is still present today. The high-level concept plan provided by the Client indicates that the area currently occupied by the construction compound will not form part of the developable area and it will be retained under soft landscaping.

Off-site, the structure close to the north west boundary (later named as The Lodge) is recorded from 1880 and remains to the present day. White Hall Farm to the south west (originally named Starveal Farm) is also recorded from 1880 and Repeater House, to the immediate west, is recorded from 1955, both remain to the present day. Significant residential development around Minster Lovell is recorded to begin c.1975 and the on-going residential development adjacent to the sites eastern boundary is recorded from 2021.

A small quarry is illustrated beyond Burford Road opposite the north east corner of the site between 1919 and c.1922, but is no longer recorded by 1955 and presumed to have been backfilled between these dates.

The eastward flowing River Windrush is recorded 275m to the north.

Significant Features identified on OS Maps:
Agricultural land – shallow soils potentially affected by pesticides and ploughing. **Construction compound** - potential source of localised made ground, building materials and petroleum hydrocarbon contamination (considered very low risk). **Backfilled quarry** – potential source of ground gas (very low risk due to intervening infrastructure acting as barrier and age).

2.4 ANTICIPATED GEOLOGY

The BGS Geological Sheet for this area shows:

- Superficial deposits are not recorded within, or close to, the site boundary.
- Solid geology comprises a combination of White Limestone Formation in the east and the Forest Marble Formation (both limestone and mudstone facies) across the remainder of the site. A plan showing the published geology is presented in Appendix F.

The BGS holds a borehole record approximately 270m to the south and within a similar geology to that on site, a copy of which is presented in Appendix G. The BGS borehole suggest Forest Marble Formation (weathered to a clay) to about 8m depth overlying intercalations of white stone and blue clay (White Limestone Formation) to the full depth of the boreholes at c.23m depth.

No local dip information is available, but it is believed that the strata are sub horizontal with a shallow dip to the east. No faults are indicated within 500m.

Made ground is not generally anticipated across the site. The construction compound associated with the adjacent development is, however, a potential source of made ground, but is unlikely to be of sufficient thickness to pose a viable gas risk. Buried sub-structures are not anticipated based on current information.

Significant Features identified from geological data:
Cohesive strata – deepened foundations in association with trees. **Variable strata** – deepened foundations, reinforced foundations. **Potential localised made ground (construction compound)** – potential source of contaminated made ground, building materials and petroleum hydrocarbon contamination (very low risk).

2.5 HYDROGEOLOGICAL INFORMATION

The BGS borehole does not record the depth of any water strike. Accordingly, no detailed information regarding the depths to groundwater is available; however, the groundwater level is likely to be subject to seasonal variations.

The Environment Agency has classified the White Limestone and Forest Marble Formations (limestone) as Principal aquifers and the Forest Marble Formation (mudstone) as a Secondary A aquifer.

A nearby groundwater abstraction license is recorded for general farming and domestic use 338m to the south west and likely to be abstracting from the Forest Marble Formation (limestone). The site is not recorded to be within a Groundwater Source Protection Zone.

Information available at this stage suggests a groundwater table at depth in the Forest Marble Formation (limestone) and the White Limestone Formation and a flow direction following the regional dip of the Solid strata to the east; however, the source protection zone indicates to the south west towards the abstraction point. Hydraulic continuity is expected between the sites surface and the Forest Marble Formation (limestone) and White Limestone Formation. Limited hydraulic continuity is anticipated between the site surface and the Forest Marble Formation (mudstone) due to the predominantly cohesive nature of this facies.

The presence of a cohesive and granular interface within the site may give rise to spring lines.

Significant Features identified from hydrogeological data:
Principal aquifers – potential receptors for site derived contamination should any be present. **Secondary A aquifer** – potential receptor for site derived contamination should any be present. **Potential spring lines at geological boundaries** – flood risk, upgraded water controls for excavations.

2.6 HYDROLOGICAL INFORMATION

The only local surface water feature identified is the River Windrush located 275m to the north and flowing to the east. The principal pathway for pollution (should any exist) is overland flow following periods of heavy rainfall. Given the distance and likely dilution factors involved the river is not considered to be a viable receptor for site derived contamination, should any exist.

A nearby surface water abstraction license is recorded 368m to the west for the purposes of general farming and domestic use. Given distance and likely flow direction the abstraction point is not considered a viable receptor.

There are no recorded pollution incidents to controlled waters within 500m.

Significant Features identified from hydrological data:
None identified.

2.7 FLOOD RISK

Data from Ambiental Analytics confirms that the highest risk of on-site groundwater flooding is low. The risk from surface water flooding is assessed as a 1 in 30-year event with an inundation depth of between 0.3m and 1m. In addition, there is no appreciable risk of flooding from rivers and the sea (RoFRaS).

A Phase II ground investigation would provide information on the local groundwater regime so that the risk can be assessed by the project's infrastructure engineer. Any

risk associated with the groundwater regime should be catered for within the development infrastructure design.
Based on the geological mapping there is the potential for spring lines to be present along the cohesive and granular interface, which could be a potential source of flooding.

A Flood Risk Assessment (FRA) is required for this site as it is over 1ha in size.

Significant Flood Risk Features identified:
Potential spring lines – flood risk. **Site in excess of 1ha** – FRA required.

2.8 MINING

2.8.1 Coal

The site is not within an area recorded to require a Coal Authority mining report and the geology is not suitable for such extraction, therefore, the risk from coal mining is assessed as negligible.

2.8.2 Brine

The site is not within the area defined by the Brine Compensation Board and the geology is not suitable for the extraction of brine; therefore, the risk from brine extraction is assessed as negligible.

2.8.3 Oil And Gas

GRM have conducted an on-line search, which has shown that the Oil and Gas Authority does not record the site to be within an on-shore licence area an On-shore Hydrocarbon Field or a Shale Prospecting Area. Accordingly, the risk from oil and gas exploration is considered to be negligible.

Significant Mining Risks:
None identified.

2.9 QUARRYING

A quarry was recorded between 1919 and c.1922 beyond the sites north east corner. Based on the geological map the quarry is likely to have been extracting rock from the Forest Marble Formation (limestone). However, the quarry was very short-lived, very small-scale and located beyond the Burford Road. The quarry is likely to have been backfilled c.1955 and accordingly, given the scale, date of backfilling and intervening infrastructure the quarry is not considered to be a significant source of ground gas.

Significant Quarrying Risks:
Backfilled limestone extraction beyond north east boundary – potential source ground gas (very low risk).

2.10 MINERAL RESOURCE PROTECTION

Whilst GRM can comment on the geological considerations regarding Mineral Resources, a legal expert should be commissioned concerning Mineral and Manorial Rights.

Both the White Limestone Formation and the Forest Marble Formation have in the past been quarried as a source of limestone. However, the Oxfordshire Mineral and Waste Local Plan (Annex 4 – SD3) states that planning permission will not normally be granted for new limestone and chalk quarries. All existing mineral extraction proposals are to the east of Witney and remote from the area of the site.

Given the proximity of the development site to the village of Minster Lovell and the on-going residential construction adjacent to the site it is considered unlikely that the development is underlain by significant and easily exploitable reserves of limestone and so a detailed Mineral Risk Assessment is unlikely to be required. However, this should be confirmed with the Minerals Officer.

Mineral Risk Assessment:
Low risk of further assessment being required. To be confirmed following intrusive investigation and consultation with the local Minerals Officer.

2.11 ENVIRONMENTAL INFORMATION

An Environmental Report has been acquired for the site. The full report is presented in Appendix H. A summary of the relevant information not included elsewhere in this report is presented below:

- A telecommunications feature is recorded 13m to the south. Given the nature of the feature it is not considered to pose a significant risk to the development.
- A sewage pumping station is recorded 49m to the north. Given the nature of the feature it is not considered to pose a significant risk to the development.
- No landfills or waste sites are recorded within influencing distance.

Significant Features identified from Environmental data:
None identified.

2.12 ARCHAEOLOGY

Archaeological information has not been sought as part of this desk study and has not been identified as an issue by the Client. Some Local Authorities require at least an initial archaeological appraisal for development sites. GRM can undertake such appraisals if required. Archaeological investigations occasionally reveal ground-related problems from ancient times (prior to the 1st Edition OS maps) and can occasionally cause foundation and contamination development hazards.

Archaeological Hazards:
Not assessed.

2.13 INVASIVE PLANT SPECIES/ECOLOGY

GRM is not a specialist in this topic and has not conducted such a survey; however, we will endeavour to report easily recognisable issues such as Japanese Knotweed, Giant Hogweed, badger sets etc, when seen on site. No such issues were observed during the walkover; however, an ecological specialist should be consulted.

Invasive Plant Species/Ecological Hazards:
None observed.

2.14 RADON ASSESSMENT

The site has been assessed following the guidelines in 'Radon: guidance on protective measures for new dwellings' (BR211 2015). It is estimated that at most between 1% and 3% of properties will be affected by radon. Accordingly, no radon protection measures are required.

Radon Hazard:
None.

2.15 SUMMARY OF POTENTIAL GEOTECHNICAL/GENERAL HAZARDS

Potential geotechnical/general hazards have been identified in earlier sections and are summarised below.

Potential Hazard	Potential Consequence	Action
Localised made ground associated with construction compound in north east	Deepened foundations	Ground investigation
Variable strata	Deepened foundations	Ground investigation
Shrinkable clay/trees	Deepened foundations	Ground investigation plasticity testing/tree survey
Potential spring lines	Danger to infrastructure	Ground investigation and monitoring
Site >1ha	Flood risk	FRA required
Minerals Assessment	Delay to Development program	Liaison with Minerals Officer
Topsoil disturbed by ploughing	Poor quality topsoil	Ground investigation and testing

Potential sources, pathways and receptors are summarised in the Phase I Conceptual Model in Section 3, which is based on current relevant guidance, the principles of which are set out in Appendix A (iii).

Potential hazards to the proposed development are shown on the Hazard Plan (Ground Model) presented in Appendix I.

2.16 CONTAMINANTS OF CONCERN

In addition to the general contaminants listed in Appendix A (ii), the following site-specific contaminants have been identified:

- Pesticides associated with agricultural land use.
- Petroleum hydrocarbons associated with construction compound.

3 PHASE I CONCEPTUAL SITE MODEL

HUMAN HEALTH			
Source	**Pathway**	**Receptor**	**Level of Risk**
Shallow soils potentially affected by pesticides.	Indoor and outdoor inhalation of soil dust, the ingestion of, and dermal contact with, contaminated soil and soil dust, ingestion of vegetables that have taken up contamination and contaminated soil attached to vegetables.	End users.	Very Low.
Localised potentially contaminated made ground associated with construction compound in north east.		Construction and Maintenance Workers.	
Localised potentially contaminated made ground associated with construction compound in north east.	Inhalation of ground gas.	End users.	Very Low.
Shallow soils potentially affected by pesticides.	Water pipes.	End users.	Very Low.
Localised potentially contaminated made ground associated with construction compound (particularly hydrocarbons) in north east.			

CONTROLLED WATERS			
Localised potentially contaminated made ground associated with construction compound in north east.	Leaching of contaminants and vertical migration to the groundwater.	Principal and Secondary A aquifers.	Very Low.
	Leaching of contaminants and lateral migration to surface waters.	River Windrush.	Negligible.

4 CONTAMINATION / REMEDIATION RECOMMENDATIONS

The risk from ground contamination is considered to be very low as the only potential sources identified are pesticides and localised made ground associated with the construction compound.

The risk from ground gas is considered to be negligible as no viable source has been identified.

Prior to development a ground investigation will be required, the scope of which is outlined in Section 6. At this stage, based on the desk study information available, it is considered that allowance be made for the following:

- Chemical analysis of the topsoil to assess its suitability for re-use as a growing medium.
- Disposal of a volume of made ground from the construction compound area.

5 PRELIMINARY GEOTECHNICAL ASSESSMENT

It should be noted that the following comments and recommendations are based on the findings of this desk study which may not give a true indication of a soils actual engineering properties (i.e. stability, mass structure etc). Prior to development a ground investigation will be required to confirm the initial recommendations outlined below, the scope of which is outlined in Section 6. However, at this stage based on the desk-based information available it is considered:

- The ground conditions are likely to comprise a combination of clay (weathered Forest Marble Formation) in the west and possible shallow rock (limestone) and clay in the east.
- Deep made ground is not anticipated to be present and so the use of traditional trench fill foundations is considered likely. Given the variable geology an allowance for some reinforcement would be prudent.
- Due to the suspected presence of cohesive soils and the presence of trees, along both external and internal boundaries, allowance should be made for deepening foundations in accordance with NHBC standards. At this stage it should be assumed that 35-40% of the site will require some degree of deepening below minimum depth and an allowance for around 20% piling would be prudent dependent upon final layout and levels.
- Some disturbed ground is expected from former ploughing; accordingly, suspended floors are likely to be required for most of the site. Any plots that fall within the heave zone of trees will require voided suspended floors (beam and block).

- Overly aggressive ground conditions are not expected, and standard concrete should be suitable.
- Given the anticipated geology the adoption of a soakaway drainage system is considered unlikely. Should limestone be proven across the eastern area soakaways may be feasible depending upon the fracture state of the rock; however, until and ground investigation and testing is conducted it would be prudent to consider an alternative to soakaway drainage.
- Due to the potential for spring lines upgraded de-watering methods, and some land drainage should be allowed for.
- The anticipated cohesive geology is likely to yield CBR values of between 2% and 4%. Any rock quality strata are likely to yield CBR values >5%. Lower values should be anticipated during periods of inclement weather.
- Some improvement of topsoil due to previous ploughing may be necessary.

6 FURTHER INVESTIGATION

A Phase II ground investigation is recommended to determine more accurately the effect of the identified hazards on the development. Initially, this should include:

- A ground investigation designed to BS10175:2011 and BS5930:2015 and comprising window sampling and trial pitting to confirm ground conditions and collect samples for analysis.
- Chemical analysis of soils followed by risk assessment so that the risk to human health and controlled waters can be determined.
- Based on the Phase I Conceptual Model (Section 3) the ground gas risk has been assessed as negligible. Even so, a ground gas investigation designed to current guidance will be required to determine the ground gas regime beneath the site and allow any necessary mitigation measures to be recommended. At this stage allowance for 6 visits over 3 months should be made to assess potential liabilities.
- Geotechnical soils testing of the founding strata to assess its character and suitable grades of buried concrete.

Following your review of this document, a copy of it should be submitted to the Planning Department of the Local Authority for comment and approval prior to any ground investigation works being undertaken, as this is often a condition of planning.

7 CONCLUSIONS

This Phase I Site Appraisal has shown the site is suitable for the proposed development, assuming compliance with all the recommendations contained within this report.

APPENDIX A

GENERAL APPRAISAL COMMENTS

i INFORMATION SOURCES

Where available the following sources have been used for the identification and assessment of potential ground hazards:

- Relevant British Standards
- British Geological Survey (BGS) Geology Map Scale 1:10,000 for local area
- British Geological Survey (BGS) Geology Map Scale 1:50,000/1:63,320
- BGS Memoir
- BGS Borehole Records
- BGS online viewer: http://www.bgs.ac.uk/data/mapViewers/home.html
- Environment Agency Groundwater Vulnerability Maps
- Historical Ordnance Survey (OS) Maps
- Environmental Data Report
- Environment Agency Website: http://www.environment-agency.gov.uk/
- Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites, UKWIR, 2010.
- Coal Authority Records / Coal Mining Report
- DEFRA/Environment Agency Contaminated Land publications and DoE Industry Profiles
- BRE Guide BR211 (2015), 'Radon: Guidance on protective measures for new buildings'
- HPA-RPD-033 (2007), 'Indicative Atlas of Radon in England and Wales'
- PHE-CRCE-032 (PHE, 2017), Radon in Homes in England: 2016 Data Report
- CIRIA C665 'Assessing risks posed by hazardous ground gases to buildings'
- BS8485:2015, 'Code of Practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings'
- Other technical references used throughout this document are detailed in the text.

ii CONTAMINANTS OF CONCERN

The DoE Industry Profiles are normally used to assess likely contaminants from past land use and potential nearby industrial sources. For land uses where no profile is available, likely contaminants of concern are selected by GRM based on past experience of similar sites, a general screening suite of contaminants covered by CLEA and common contaminants from the Industry Profiles.

- Arsenic
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Copper
- Nickel
- Zinc
- Phenols
- cyanide (total)
- pH
- Water soluble sulphate
- PAH (polycyclic aromatic hydrocarbons)

Asbestos and PCBs are listed in the vast majority of profiles. PCBs are listed as the profiles expect electricity substations and switch boxes on all industrial sites. There is the potential for asbestos containing material to be mixed up with made ground, following any demolition works.

iii CONCEPTUAL MODEL METHODOLOGY

The consideration of contamination is based upon the principles of risk assessment, using the 'source-pathway-receptor' model in order to establish the presence, or potential presence, of a pollutant linkage.

To create a risk, contamination must have the potential to cause harm to susceptible targets or receptors such as humans, the water environment or the built environment. The potential for harm to occur requires three conditions to be satisfied to form a pollutant linkage:

- The presence of substances that may cause harm (SOURCE).
- The presence of a target which may be harmed (RECEPTOR).
- The existence of a plausible migration route between the source and the receptor (PATHWAY).

In the absence of a plausible pollutant linkage there is no risk. Where a potential linkage is identified in order for it not to pose a risk to the identified receptor it must be broken.

iv INTRUSIVE INVESTIGATION SAMPLING METHODOLOGY

The ground investigation (including fieldwork, sampling, monitoring and laboratory analyses) has been designed to identify and assess potential ground related problems and to allow cost effective solutions to be advised. It has been planned on the basis of the desk study, site inspection and the proposed development layout (where available). All fieldwork and soil descriptions were carried out in general accordance with relevant British Standards.

The exploratory holes have been positioned and advanced to depths to determine the general ground/groundwater/gas conditions below the site. A general grid pattern has been adopted, where possible, to provide sufficient information based on the current proposed layout scheme. Some holes have been targeted at particular hazards identified in the Phase I assessment. The resultant exploratory hole density is considered to be commensurate with the complexity of the site conditions and detail of information required for this phase of the investigation.

v GROUND GAS RISK ASSESSMENT METHODOLOGY

Gas monitoring programmes undertaken by GRM are designed to broadly comply with the recommendations outlined in CIRIA Report C665 'Assessing risks posed by hazardous ground gas to buildings' (2007) and BS8576 'Guidance on Investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOCs) (2013).

To assess the risks posed by ground gases such as radon, carbon dioxide and methane, the relevant current guidance has been used. For radon the site has been assessed following the guidelines in 'Radon: guidance on protective measures for new dwellings (BR211: 2015)'. For methane and carbon dioxide the primary guidance document used to determine if protection measures are required is *BS8485:2015 Code of practice for the design of protective measures from methane and carbon dioxide ground gases for new buildings*. This uses hazardous gas flow rates (Q_{hg}), which are gas concentrations multiplied by borehole flow rates, to derive a Gas Flow Rate (GSV) for the site. The gas regime is then determined based on the GSV and other limiting factors such as gas concentrations.

Where flow is not recorded during the monitoring a default flow rate of 0.1l/hr will be used in the assessment to produce a positive result.

vi HUMAN HEALTH RISK ASSESSMENT METHODOLOGY

Guidance contained in the Environment Agency's CLEA Reports has been used to assess the risks posed to human health.

For residential developments that include domestic gardens the default Tier 1 Assessment Criteria (TAC) for 'residential land with plant uptake' are used, i.e. a female with a start age class of one and an end age class of six. All pathways are considered including the consumption of home-grown vegetables.

For residential developments that do not include domestic gardens the default Tier 1 Assessment Criteria (TAC) for 'residential land without plant uptake' are used, i.e. a female with a start age class of one and an end age class of six. All pathways are considered except the consumption of home-grown vegetables. For commercial/industrial developments the default Tier 1 Assessment Criteria (TAC) for 'commercial/industrial' are used, i.e. a female with a start age class of sixteen and an end age class of eighteen. All pathways are considered except the consumption of home-grown vegetables.

The TAC used by GRM include Category 4 Screening Levels (C4SLs) published by DEFRA, values calculated by GRM using the CLEA v1.071 risk assessment, and values and Suitable for Use Levels (S4UL) developed by LQM/CIEH. The TAC used in the assessment are selected based on the lowest site specific SOM values returned as part of the chemical analysis.

Where soil chemical analysis results are found to exceed the TAC, Site-Specific Risk Assessments may be undertaken using the CLEA v1.071 risk assessment software using the age classes and pathways described above.

vii RISK TO SITE WORKERS – GENERAL COMMENTS

The risks to site workers are similar to those posed to site end users, although likely to be less severe due to the site workers' shorter exposure to the identified contamination. However, site workers (particularly groundworkers) are more likely to come into direct contact with contaminated soils due to the nature of their work. On this basis ground and construction workers should be provided with basic Personal Protective Equipment based on the site's general health and safety risk assessment, but including as a minimum safety footwear, gloves and overalls.

A site specific risk assessment should be carried out for all hazards identified within the ground investigation in accordance with current health and safety legislation. This assessment should identify any measures required to further reduce risks i.e. providing further Personal Protective Equipment, welfare facilities and if necessary preventing access to certain areas.

Demolition and dismantling of existing structures on the site must be carried out to a safe and acceptable standard, in accordance with current UK guidance and best practice. Whilst not ground related, asbestos and hazardous substances surveys should be conducted prior to any demolition.

Any unusual colours, odours and suspicious ground should be reported immediately to site management and then GRM.

Whilst this appraisal has considered the long-term effects of contamination, GRM can also help during the formulation of Health and Safety documentation, if required.

viii CONTROLLED WATERS RISK ASSESSMENT METHODOLOGY

Where the desk study and fieldwork do not reveal a potential source of contamination no leachate or groundwater testing will be performed. Where a potential source is identified the testing will comprise leachate testing on the material considered most likely to pose a risk, groundwater testing will be undertaken if water is present at shallow depth.

The UK Drinking Water Standards (UKDWS) or Environmental Quality Standards (EQS) are usually adopted for comparison with the leachate/groundwater test results. When the most sensitive receptor is considered to be the aquifer (groundwater) UKDWS will be adopted as the Initial Tier 1 screening values. Where the most sensitive receptor is a surface water feature the EQS values will be used as Initial Tier I Screening values.

ix CONSTRUCTION MATERIALS RISK ASSESSMENT METHODOLOGY

The 'screening levels' adopted for the assessment of risk to construction materials are taken from the following documents:

- UK Water Industry Research (UKWIR) Contamination thresholds for sub-surface water pipes, for the protection of buried pipes.
- Building Research Establishment (BRE) Special Digest SD1 (2005), 'Concrete in Aggressive Ground', for the protection of buried concrete.

x WASTE DISPOSAL, SITE WASTE MANAGEMENT PLANS AND MATERIAL MANAGEMENT PLANS

Under current Waste Management Regulations, waste soil materials produced from the site will require characterisation to enable it to be disposed of correctly.

The chemical analysis results included in this report should be provided to the relevant landfill operators to establish the characterisation of the waste, confirm its suitability for landfill disposal and provide estimated costings. If material is classified as hazardous, then the site will need to be registered with the Environment Agency prior to the movement of the waste. Depending on the receiving landfill's current permit, further chemical analysis, incorporating Waste Acceptance Criteria (WAC) leachate analysis, may be required.

All materials removed from the site will be classified as 'waste' and therefore must be removed by a suitably licensed carrier of waste. This applies whether or not the waste is contaminated. All waste removed to landfill will attract Landfill Tax.

The developer/builder is likely to be classed as the waste producer and therefore, has a duty of care to ensure that all waste is disposed of appropriately. This includes ensuring the waste carrier is licensed and disposes of the waste to a suitably licensed landfill site. They are also required to keep a paper trail from 'cradle to grave' including copies of the waste disposal tickets.

Efficient materials management on site is recommended as it can lead to significant cost savings when compared to the traditional side casting or single stockpile of arisings. GRM can assist in the production of Material Management Plans under the CL:AIRE Definition of Waste: Code of Practice. The DoWCoP enables:

- The direct transfer and re-use of clean naturally occurring soil materials between sites, and
- The re-use of both contaminated and uncontaminated materials on their site of origin and between sites within defined Cluster projects.

GRM can also undertake the role of Qualified Person and submit the DoW CoP project Declaration.

Likewise making the site as volume neutral as possible will reduce the costs of development. Whilst not a statutory requirement, Site Waste Management Plans allow better waste management practices, help to reduce the amount of waste produced and identify best environmental disposal options. Implementing a Site Waste Management Plan (SWMP) can reduce costs (increasing business profits) and maximise resource efficiency.

xi GEOTECHNICAL ASSESSMENT GENERAL COMMENTS

Where finished floor levels of proposed structures have not been provided by the Client, then for the purposes of initial assessment, GRM will assume that finished levels will not vary appreciably from the existing ground levels. If the depths of any underground engineering works (i.e. sewers, pumping stations

etc.) are unknown they will not be taken in to account in the assessment and it will be assumed that any such works will not compromise foundation or ground stability.

Should the development proposals or finished levels be different from these assumptions then the comments/recommendations in the Geotechnical Assessment may require revising.

It should be noted that the results of window sampling and/or cable percussive boreholes may not give a true indication of a soils actual engineering properties (i.e. stability, mass structure etc). GRM consider that that prior to development trial pitting should be undertaken to confirm the recommendations in the Geotechnical Assessment.

xii GEOTECHNICAL ASSESSMENT – ENGINEERING GROUND TREATMENT

Near surface soils have the potential to be disturbed by weathering and site traffic. Precautions should always be taken to avoid this, as excessive disturbance may leads to more onerous floor slab designs, road cap thickness and increased amounts of off-site disposal etc.

Near surface soils may need treatment or reinforcing to allow safe movement of construction plant and labour. An assessment by the contractor should be undertaken once the type of machinery/plant needed to complete the development is known.

xiii GEOTECHNICAL ASSESSMENT – EXCAVATIONS

Excavation instability (over-break) can result in damage to existing services or structures (e.g. foundations, roads or boundary walls/fences) both on and off-site, as well as increased foundation concrete costs. In order to minimise this, all excavations deeper than 1.2m deep (or any excavation within 1.5m of any existing structure or service) should be supported. Full support should be provided to the full depth of all near vertically sided excavations in made ground, soft and very soft clays and granular soils. A reduction to intermediate support should be acceptable within firm and stiffer natural clays.

Wherever possible, man entry into excavations should be prevented; however, where this is not possible, entry to, and time spent in, excavations should be kept to a minimum.

The build program should be tailored to reflect the impact that deep excavations through potentially unstable strata can have on adjacent properties, so that they are not undermined.

All excavations on site should be in accordance with HSE guidelines and stability should be practically maintained at all times. Reference should be made to HSE construction information sheet No. 8 (Revision 1) ‘Safety in Excavations’.

Care should be taken to ensure that falls from excavation faces do not adversely affect the integrity of foundation concrete.

If contaminated water enters excavations it should be removed and transported to an appropriate treatment facility by a suitably licensed carrier before construction begins.

xiv GEOTECHNICAL ASSESSMENT – SUBSTRUCTURES

Where practicable, existing buried construction should be fully removed; however, if this is not practicable all new foundations should be carried down to fully penetrate it and it should be broken well away from all new structures.

There may be existing structures and/or infrastructure in close proximity to the proposed development. New build foundations may be constructed next to pavements with existing underground services beneath them, or excavations may be required near existing footings associated with adjacent properties. These potential hazards need to be taken into consideration when designing foundations and the groundworker needs to be made aware of their potential impact during the redevelopment works. Foundations close to existing underground services or buildings may require alternative foundation techniques (such as piling) to protect the integrity of these structures.

The contractor for the works should carry them out in such a fashion so as to not cause excessive overbreak, concrete usage or undermine existing buildings/roads/ services that are to be retained.

xv GEOTECHNICAL ASSESSMENT – SOAKAWAYS

Soakaway testing in trial pits by GRM is broadly carried out in accordance with BRE DG 365 (2016). The testing comprises the excavation of a test pit to a suitable depth, and the placement of water into the pit. The level of water present is then monitored over time. For borehole installations, the permeability testing (falling head/rising head) is undertaken in accordance with BS5930.

If it is decided to proceed with the use of soakaway drainage, then the following general points should be noted:

- Soakaways should not be placed so that water can be discharged through potentially contaminated made ground.
- The Environment Agency may require soakaways to be sealed systems such that only roof run off falls to soakaway.
- Interceptors are likely to be required for soakaways for highway drainage. The adopting authority for the highways should be consulted at the earliest opportunity regarding the use of soakaways for highways drainage.
- Consideration of site levels and slopes should be taken into account during the design.
- The construction of all soakaways should be in accordance with the current building regulations.
- Soakaways should not be placed within 5m of a proposed building.
- Placement of soakaways needs to be considered so as to avoid ponding of water down slope.
- The base of a soakaway should not be below the highest recorded water level.
- The Environment Agency prefer 1m of dry soil to be present between the base of a soakaway and the water table to provide attenuation for contamination.

xvi GEOTECHNICAL ASSESSMENT – FOUNDATIONS

If soft or hard spots are encountered during foundation excavation then they should be replaced with suitably compacted material or the footings deepened to suitable strata, to avoid differential settlement.

If strata of differing bearing character (e.g. sand and clay) are encountered at foundation levels within the excavations for a single plot then the excavation depths should be altered as appropriate to ensure the foundations rest on a single stratum, or strata that will not induce differential settlement. Where this is impractical then GRM should be contacted to assess a reinforced concrete detail or an alternative foundation solution (e.g. piles or vibro-replacement).

NOTES ON LIMITATIONS

General

GRM Development Solutions Limited has prepared this report solely for the use of the Client and those parties with whom a warranty agreement had been executed, or with whom an assignment had been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from GRM Development Solutions Limited; a charge may be levied against such approval.

GRM Development Solutions Limited accepts no responsibility or liability for:

a) the consequences of this document being used for any purpose or project other than for which it was commissioned, and

b) the consequences of this document being used by any third party with whom an agreement has not been executed.

Phase I Environmental Audits/ Desk Studies

The work undertaken to provide the basis of this report comprised a study of available documented information from a variety of sources (including the Client), together with (where appropriate) a brief walk over inspection of the site and meetings and discussions with relevant authorities and other interested parties. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only to the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, GRM Development Solutions Limited reserves the right to review such information and as considered necessary and appropriate to modify the opinions accordingly. It should be noted that any risks identified in a Phase 1 report are perceived risks based on the information reviewed; actual risks can only be assessed following a physical investigation of the site.

Phase II Environmental Audits (Contamination Investigations)

The investigation of the site has been carried out to provide sufficient information concerning the type and degree of contamination, ground and groundwater conditions to allow a reasonable risk assessment to be made. The objectives of the investigation have been limited to establishing the risks associated with potential human targets, building materials, and controlled waters.

The amount of exploratory work and chemical testing undertaken has necessarily been restricted by the short timescale available, and the locations of exploratory holes have been restricted to the areas unoccupied by the building(s) on the site and by buried services. A more comprehensive investigation may be required if the site is to be redeveloped as, in addition to risk assessment, a number of important engineering and environmental issues need to be resolved.

For these reasons if costs have been included in relation to site remediation these must be considered as provisional only and must, in any event, be confirmed by a commercial adviser.

The exploratory holes undertaken, which investigate only a small volume of the ground in relation to the size of the site, can only provide a general indication of site conditions. Whilst exploratory testing is intended to gain an accurate representation of the site, the very nature of sampling and testing is such that it cannot ensure that all localised conditions are detected

The risk assessment and opinions provided take in to consideration, inter alia, currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values.

Phase II Geo-environmental Investigations (Combined Geotechnical and Contamination Investigations)

The investigation of the site has been carried out to provide sufficient information concerning the type and degree of contamination, geotechnical characteristics, and ground and groundwater conditions to provide a reasonable assessment of the environment risks together with engineering and development implications. If costs have been included in relation to site development a commercial adviser must confirm these.

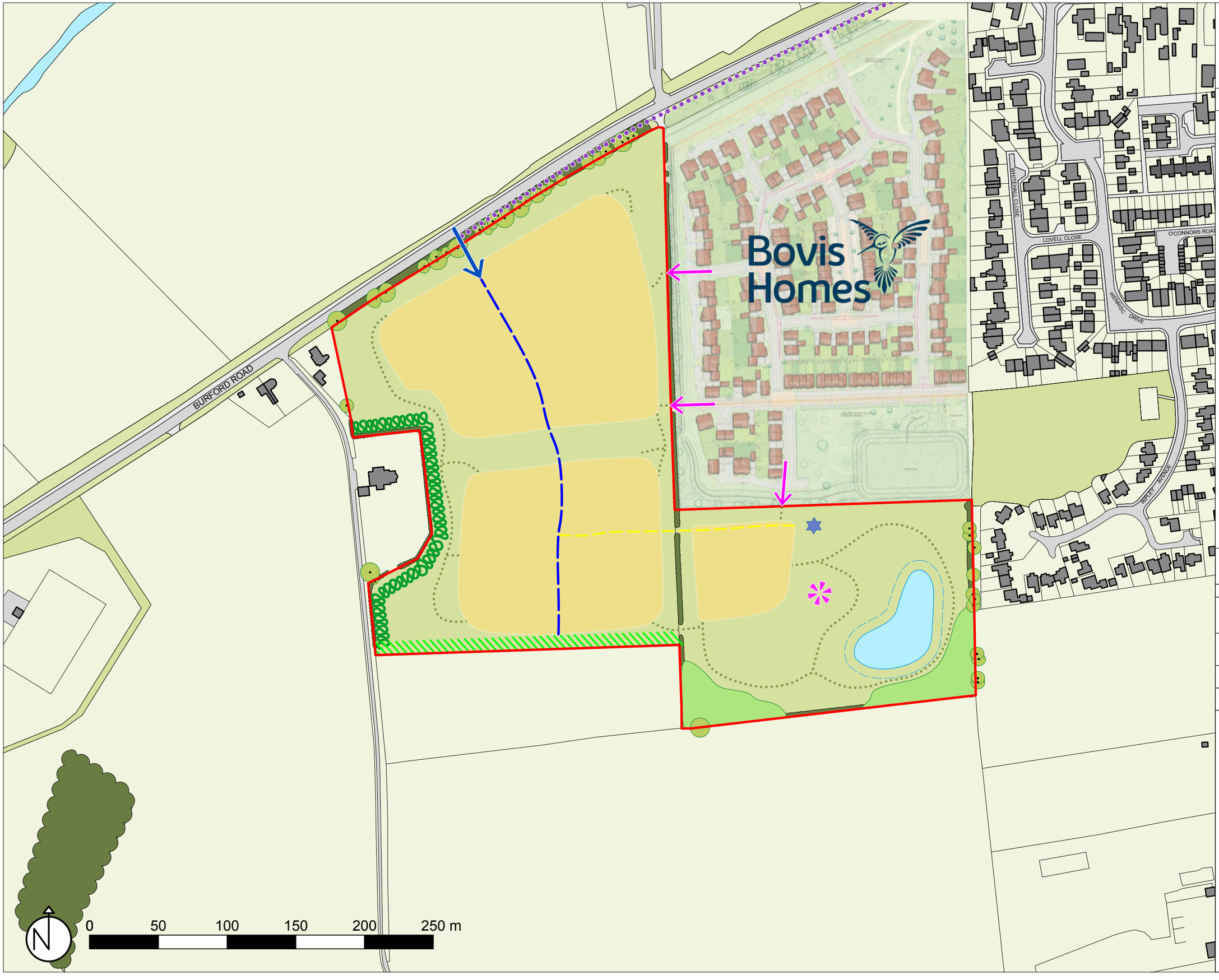
The exploratory holes undertaken, which investigate only a small volume of the ground in relation to the size of the site, can only provide a general indication of site conditions. The opinions provided and recommendations given in this report are based on the ground conditions apparent at the site for each of the exploratory holes. There may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report.

The comments made on groundwater conditions are based on observations made at the time the site work was conducted. It should be noted that groundwater levels will vary owing to seasonal, tidal and weather related effects.

The scope of the investigation was selected on the basis of the specific development proposed by the Client and may be inappropriate to another form of development or scheme.

The risk assessment and opinions provided take in to consideration, inter alia, currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values.

APPENDIX B



PLANNING

- Site boundary *(10.07xxha)*
- Proposed residential development *(4.66ha)*
- Open space
- Proposed woodland
- Existing trees/hedgerows (incl. areas of undergrowth) to be retained *(where possible)*
- Proposed landscape buffer features
- Enhanced boundary planting
- Proposed site access point
- Proposed pedestrian/cycle access
- Proposed footpath along Burford Rd
- Primary street *(indicative alignment only)*
- Secondary street *(indicative alignment only)*
- Proposed recreational routes *(indicative only)*
- Play area *(indicative only)*
- Approximate zone to accommodate surface water attenuation feature *(indicative only)*
- Location for foul pump station *(indicative only)*

N.B.
- All land use zone areas allow for a limit of deviation 5m either side of the illustrated line, except for when immediately adjoining existing properties or protected vegetation/ ecology sensitive areas.
- Maximum building height is 2 storey (10m to ridgeline)

Rev.	Date	Description
E	22.10.13	Amendments to site boundary
D	22.10.12	Amendments to site boundary
C	22.10.06	Amendments to footpath
B	22.09.30	Amendments to footpath
A	22.09.29	Amendments to key & proposals

Land to the west of
MINSTER LOVELL

Framework Plan

Job ref:	Drawing number:	Revision:
466	P02	E

Scale:	Date:
1:2,500 @ A3	October 2022

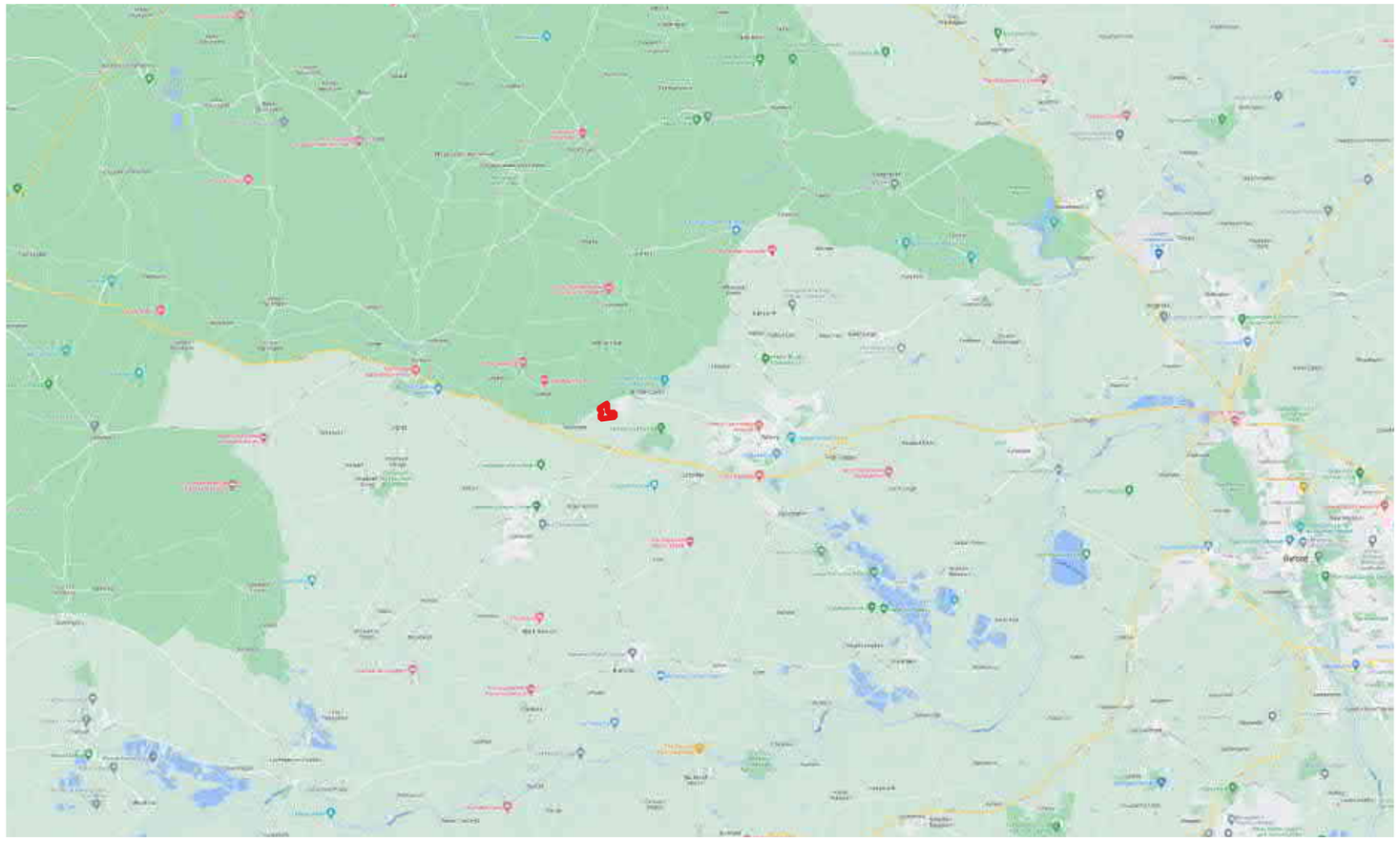
edge URBAN DESIGN

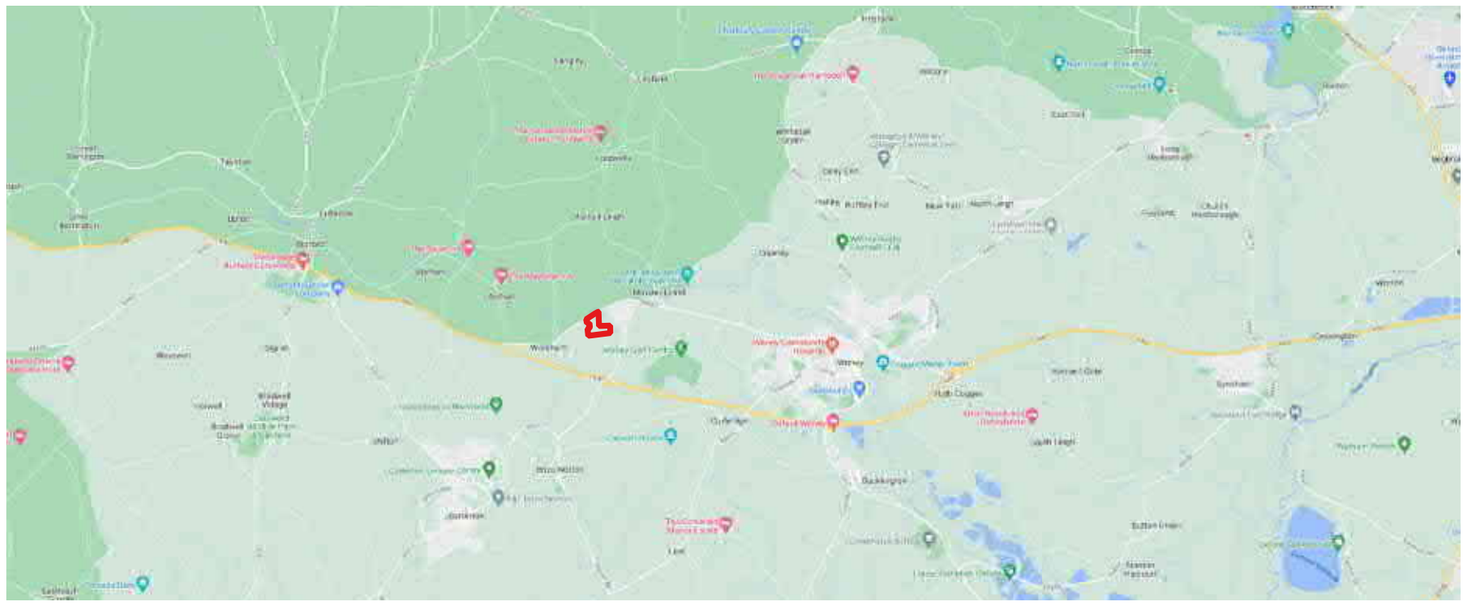
part of
edge Placemaking Group Ltd

Suite 2
7 Buttermarket
Thame
Oxfordshire
OX9 3EW

01865 522395
enquiries@edgeUD.co.uk
www.edgeUD.co.uk

APPENDIX C





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CLIENT: **Catesby Strategic Land Ltd**

PROJECT: **Land South of Burford Road, Minster Lovell**

TITLE: **Site Location and Boundary Plan**

PROJECT No:	DATE:	DESIGN/DRAWN:
P10086	08/02022	PW

DRAWING NUMBER:	ISSUE:
001	Final

GRM Development Solutions Ltd
Tel: 01283 551 249
mail@grm-uk.com www.grm-uk.com

APPENDIX D

NOTES:

CLIENT:
Catesby Strategic Land Ltd

PROJECT:
Land South of Burford Road, Minter Lovell

TITLE:
Site Features Plan

PROJECT No:	DATE:	DESIGN/DRAWN:
P10086	08/2022	PW

DRAWING NUMBER:	ISSUE:
002	Final

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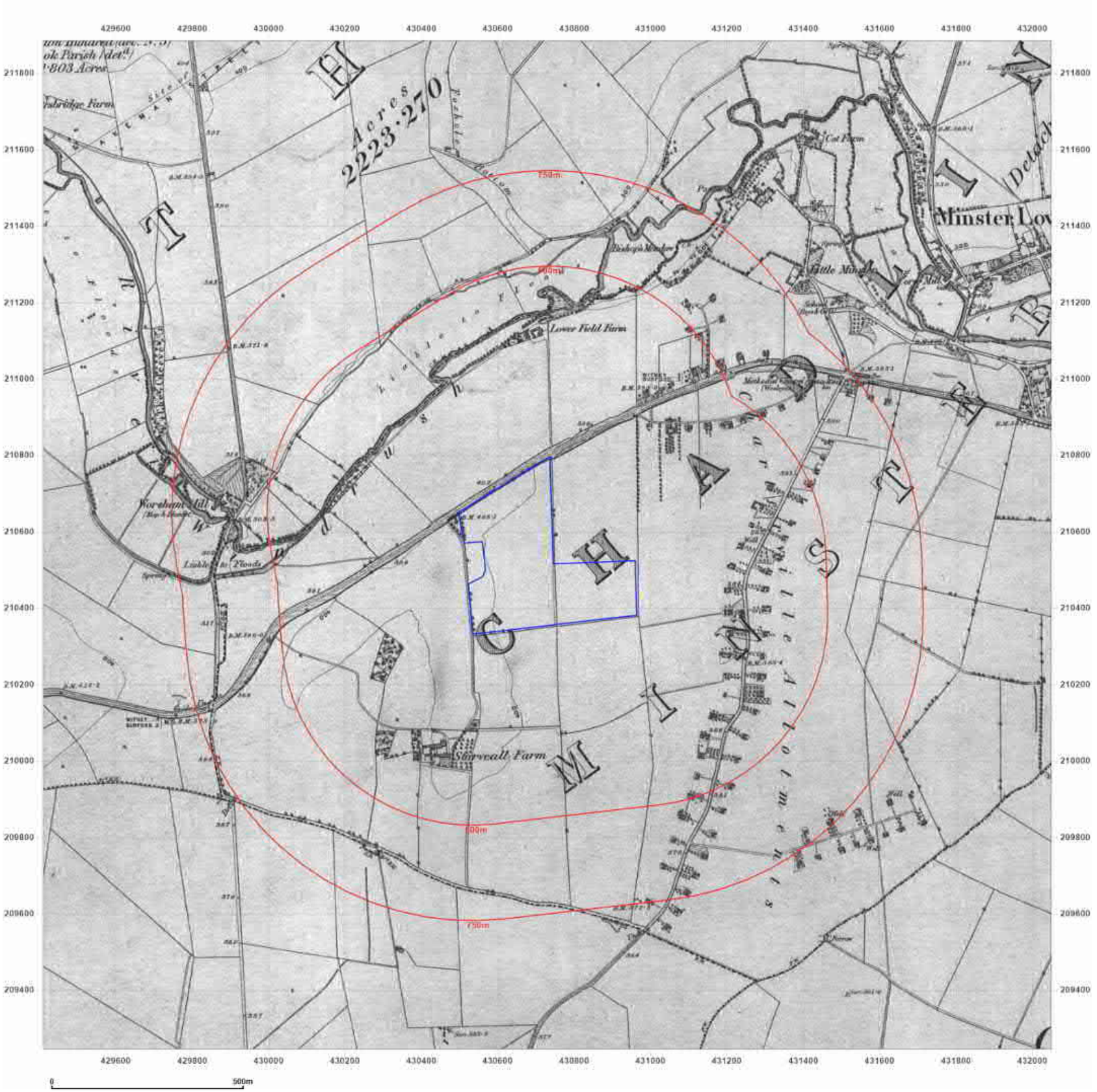
APPENDIX E



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Report Ref: EMS-798145_1028414
Grid Ref: 430729, 210565

Map Name: County Series

Map date: **1880**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1880
Revised 1880
Edition N/A
Copyright N/A
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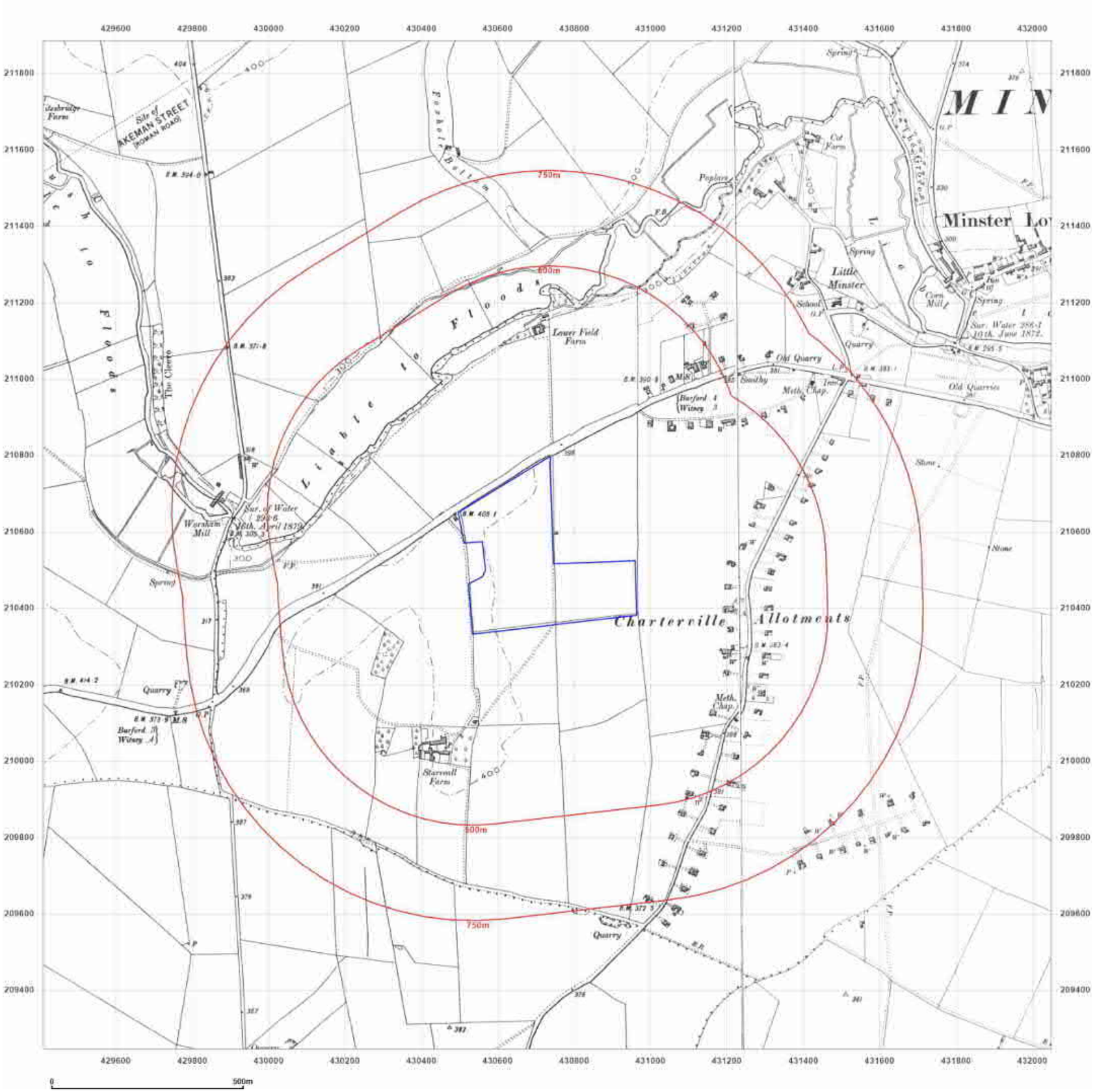

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Printed at: 1:10,560

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Edition N/A
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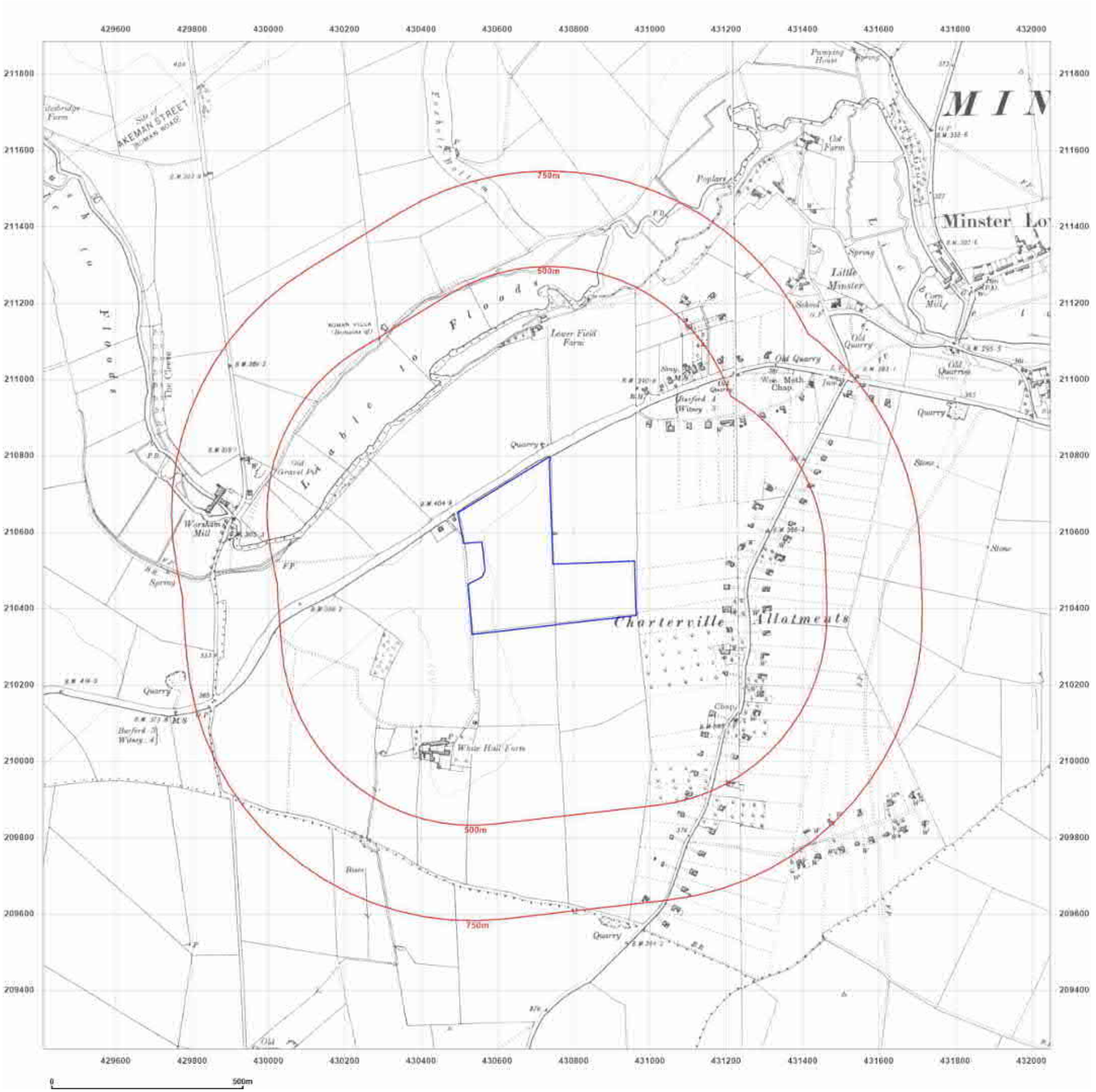

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Map Name: County Series

Map date: **1919-1922**

Scale: 1:10,560

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Edition N/A
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Surveyed 1879
Revised 1919
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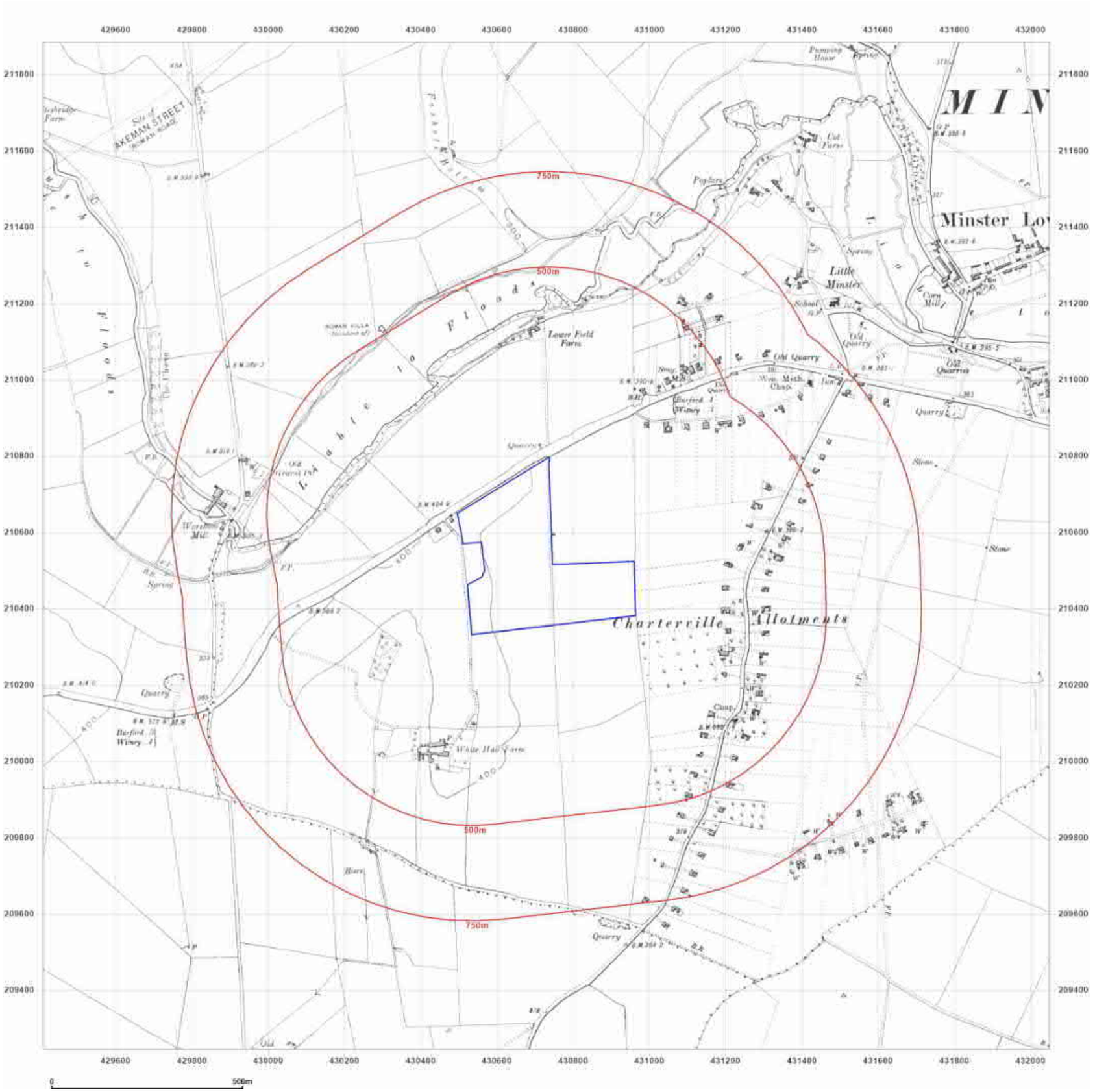

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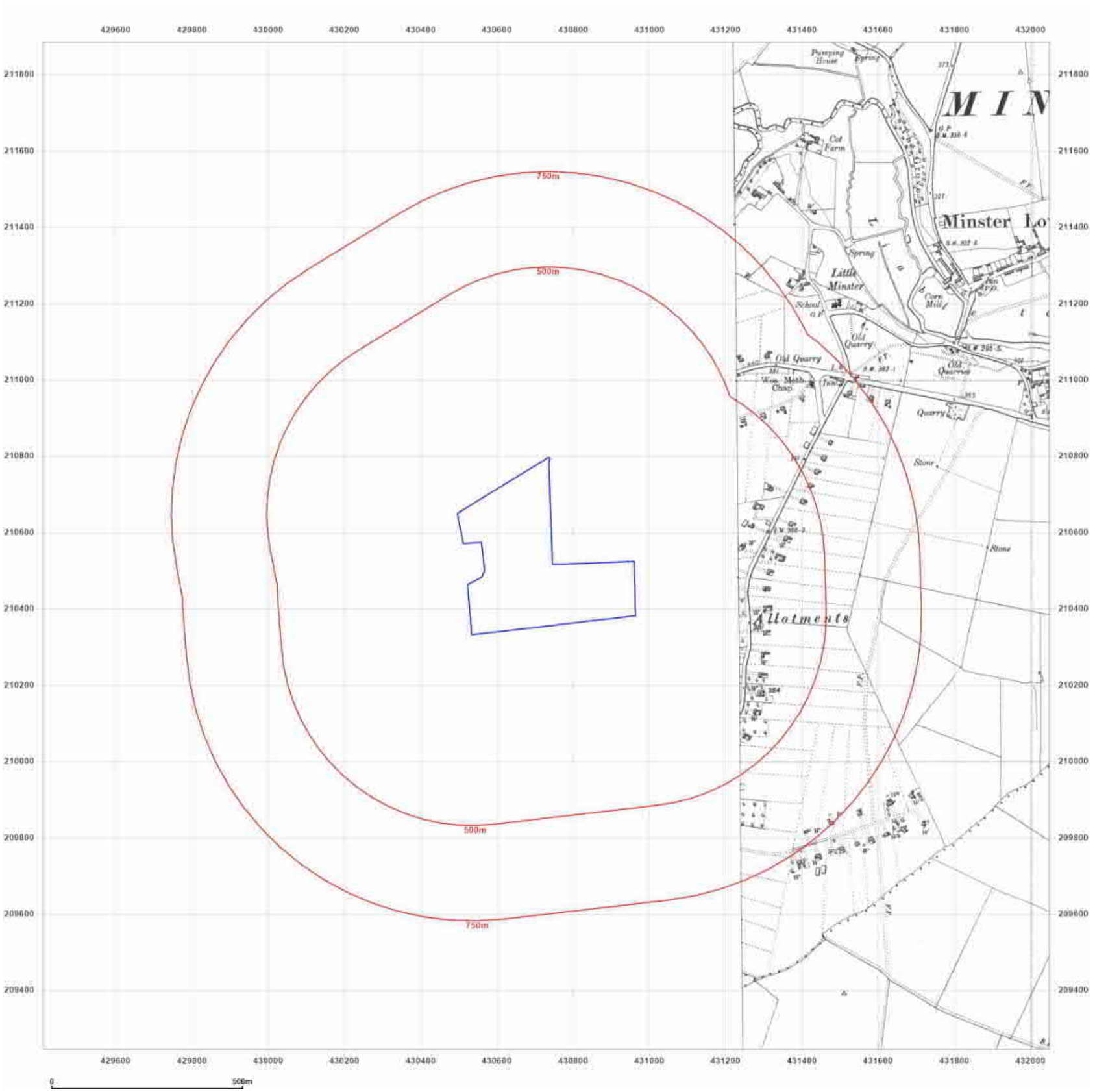

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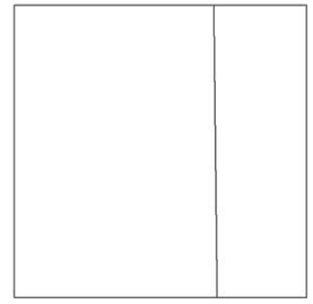

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Edition 1938
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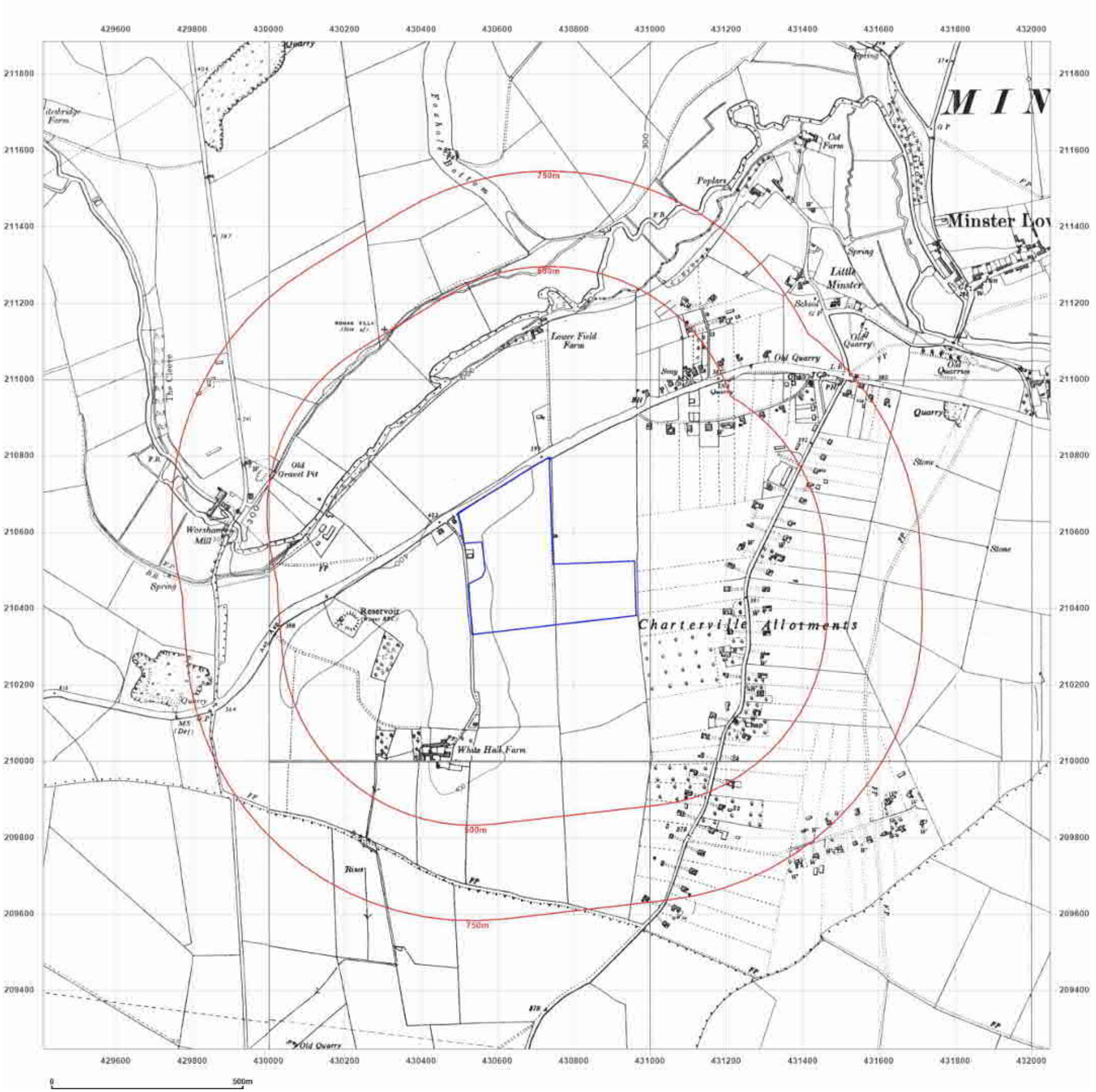

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Surveyed N/A
Revised 1954
Edition 1955
Copyright N/A
Levelled N/A

Surveyed 1950
Revised 1950
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Copyright 1955
Levelled N/A

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Revised 1956
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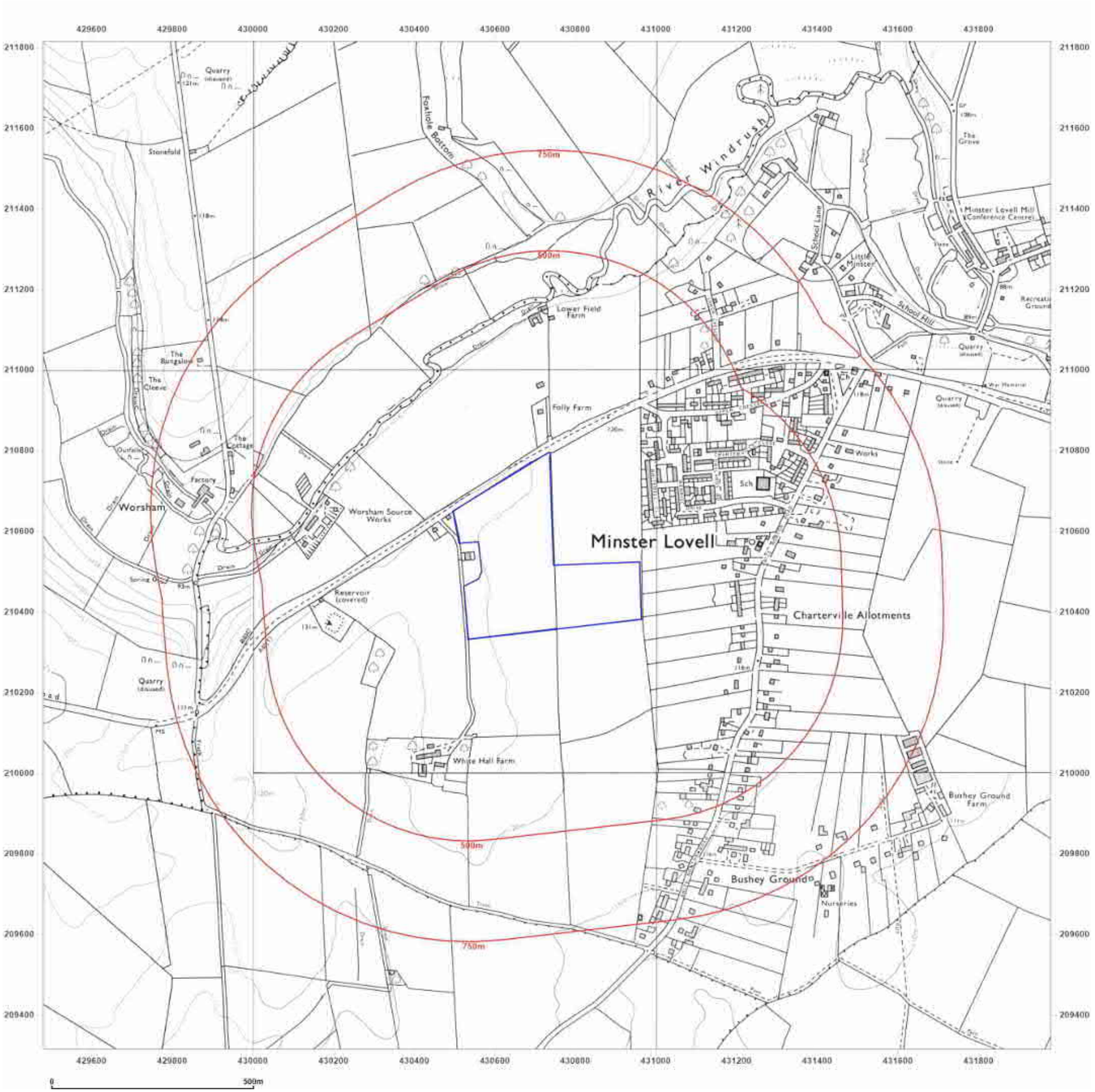

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Grid Ref: 430729, 210565

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

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Surveyed 1977
Revised 1981
Edition N/A
Copyright 1981
Levelled 1978

Surveyed 1974
Revised 1977
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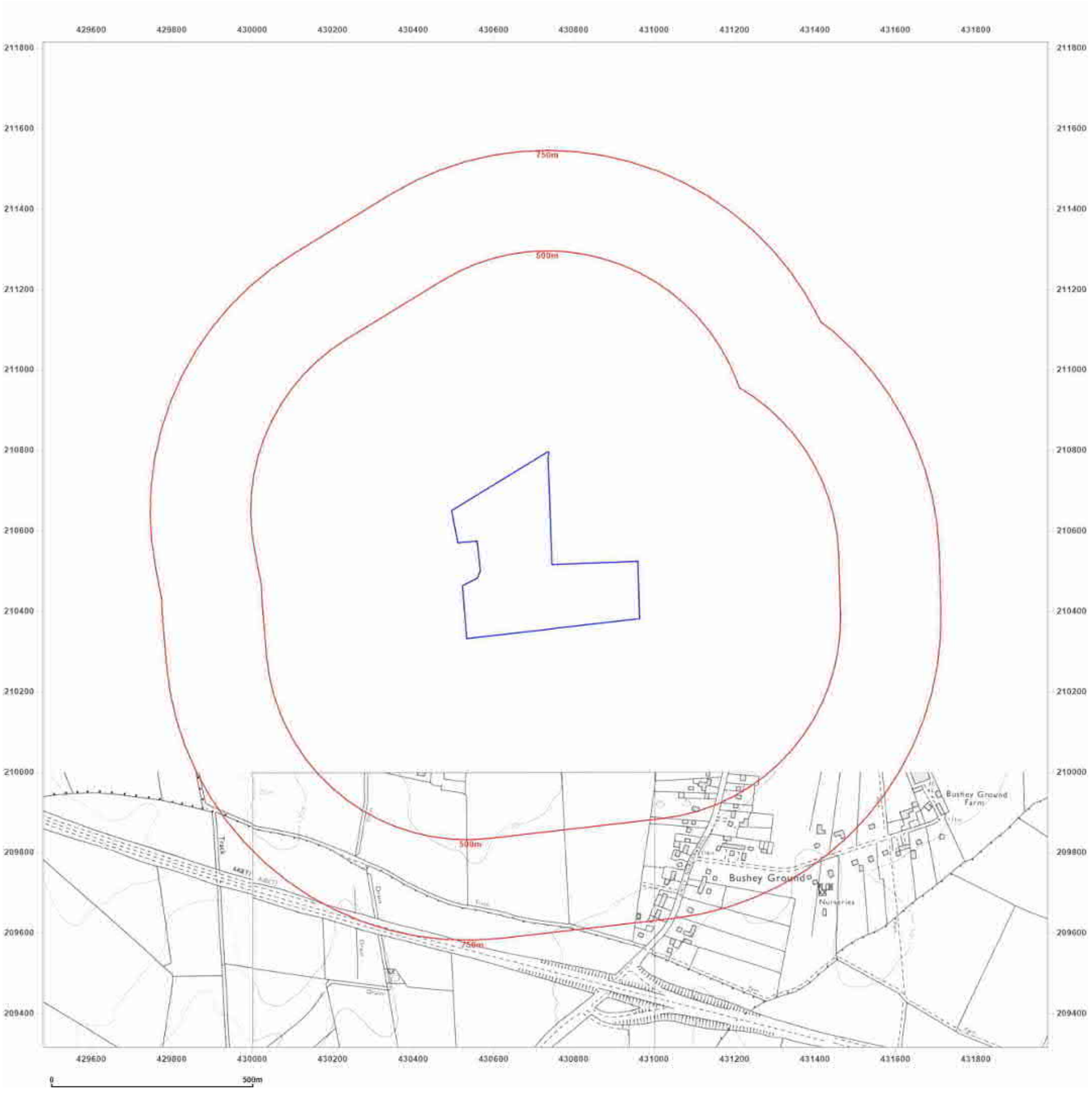

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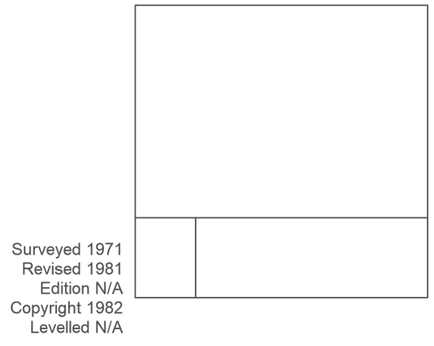

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Revised 1981
Edition N/A
Copyright 1982
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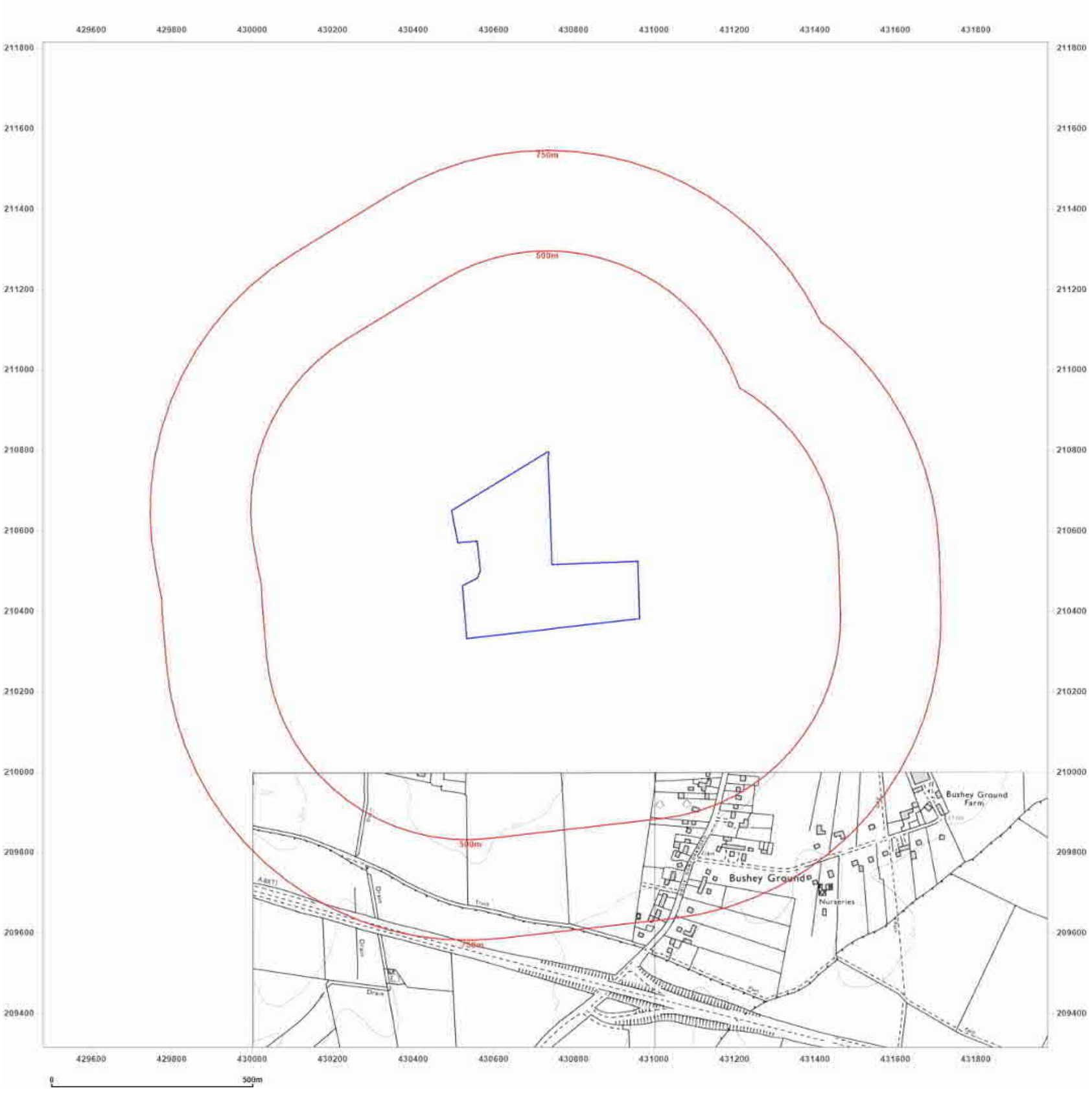

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Report Ref: EMS-798145_1028414
Grid Ref: 430729, 210565

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

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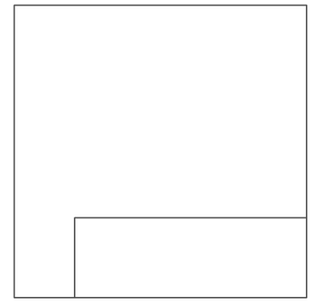

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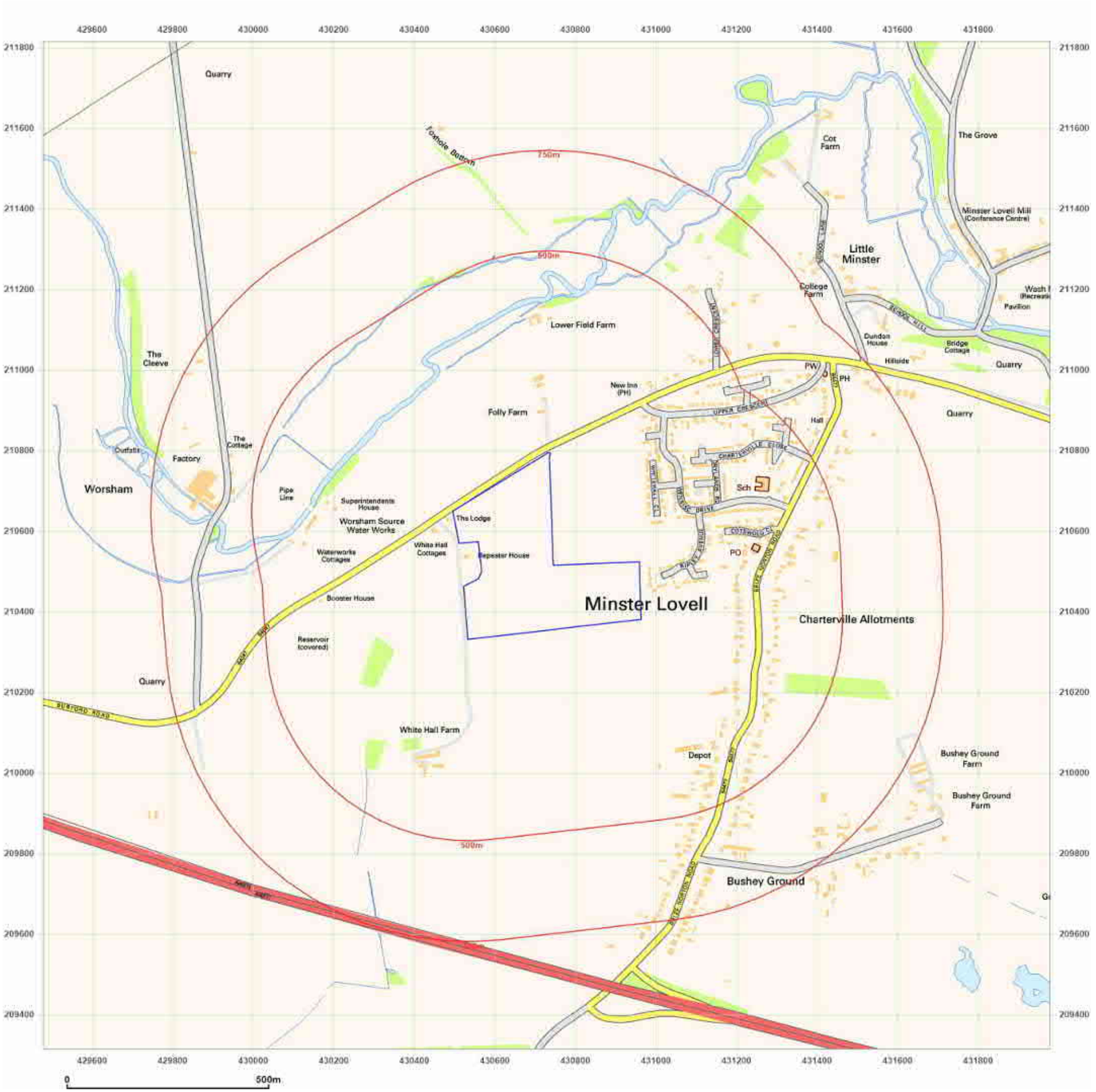

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Report Ref: EMS-798145_1028414
Grid Ref: 430729, 210565

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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2001

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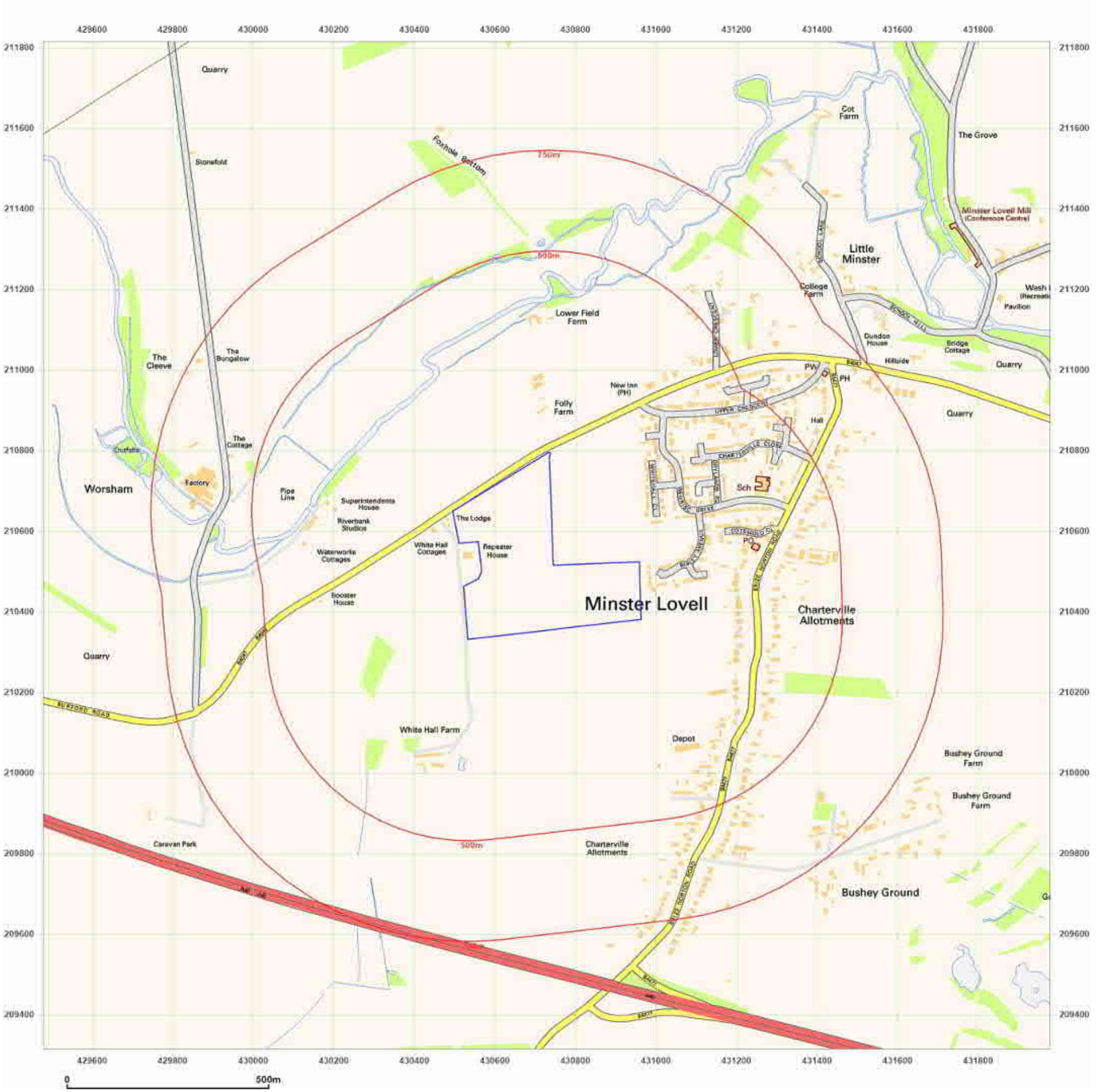

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Grid Ref: 430729, 210565

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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2010

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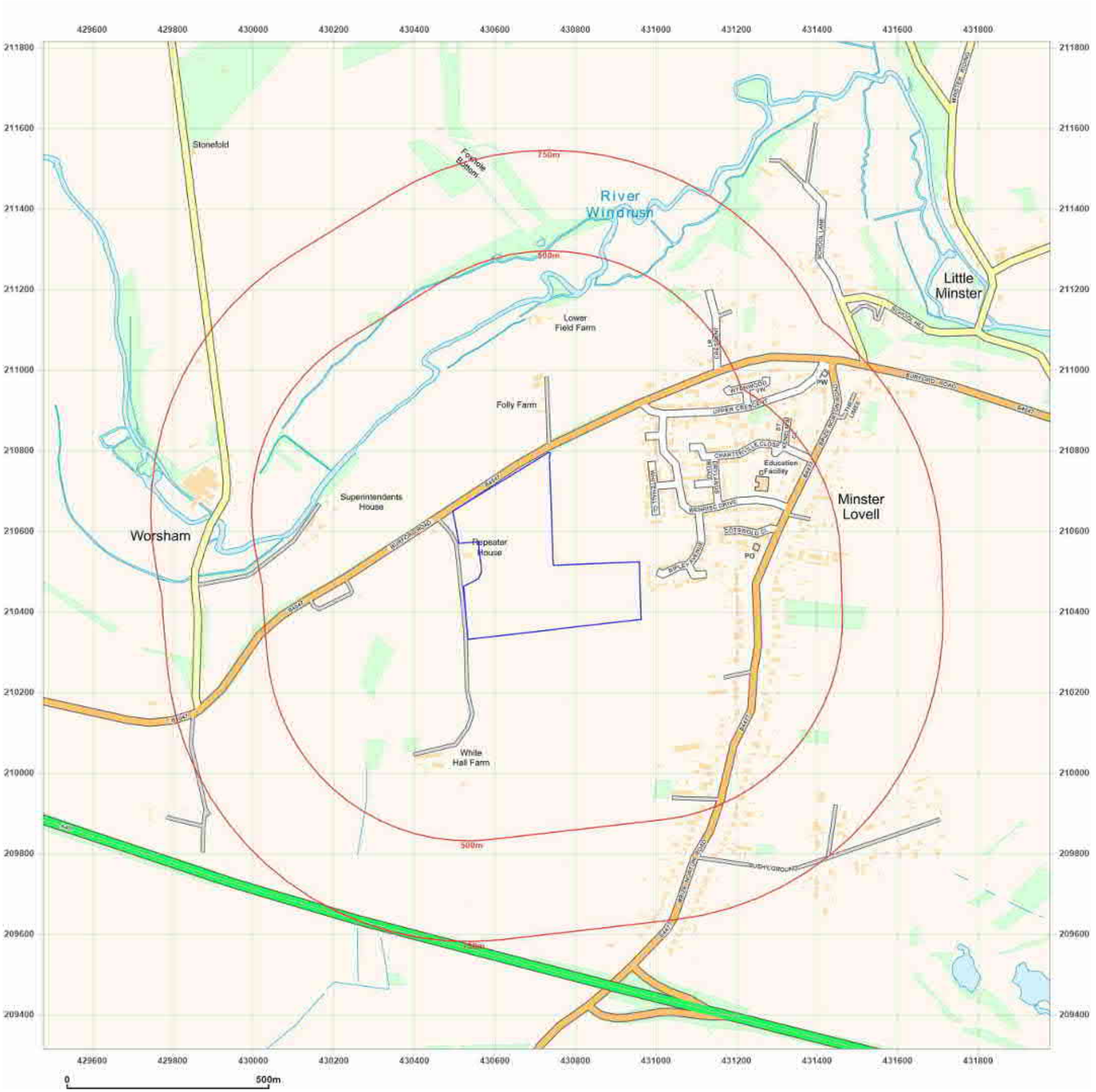

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414
Grid Ref: 430729, 210565

Map Name: National Grid
Map date: **2022**
Scale: 1:10,000
Printed at: 1:10,000

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2022

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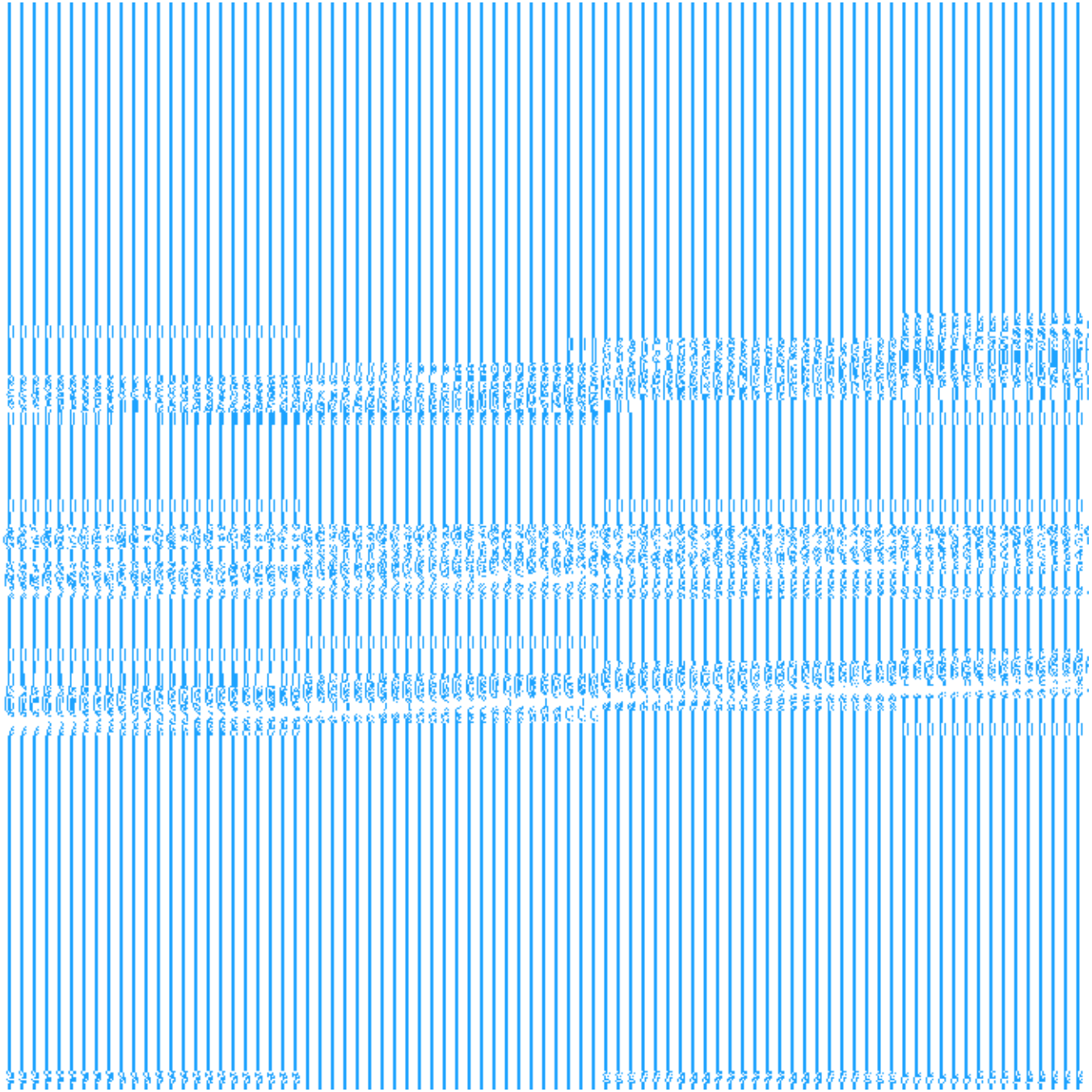

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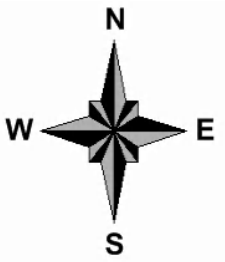
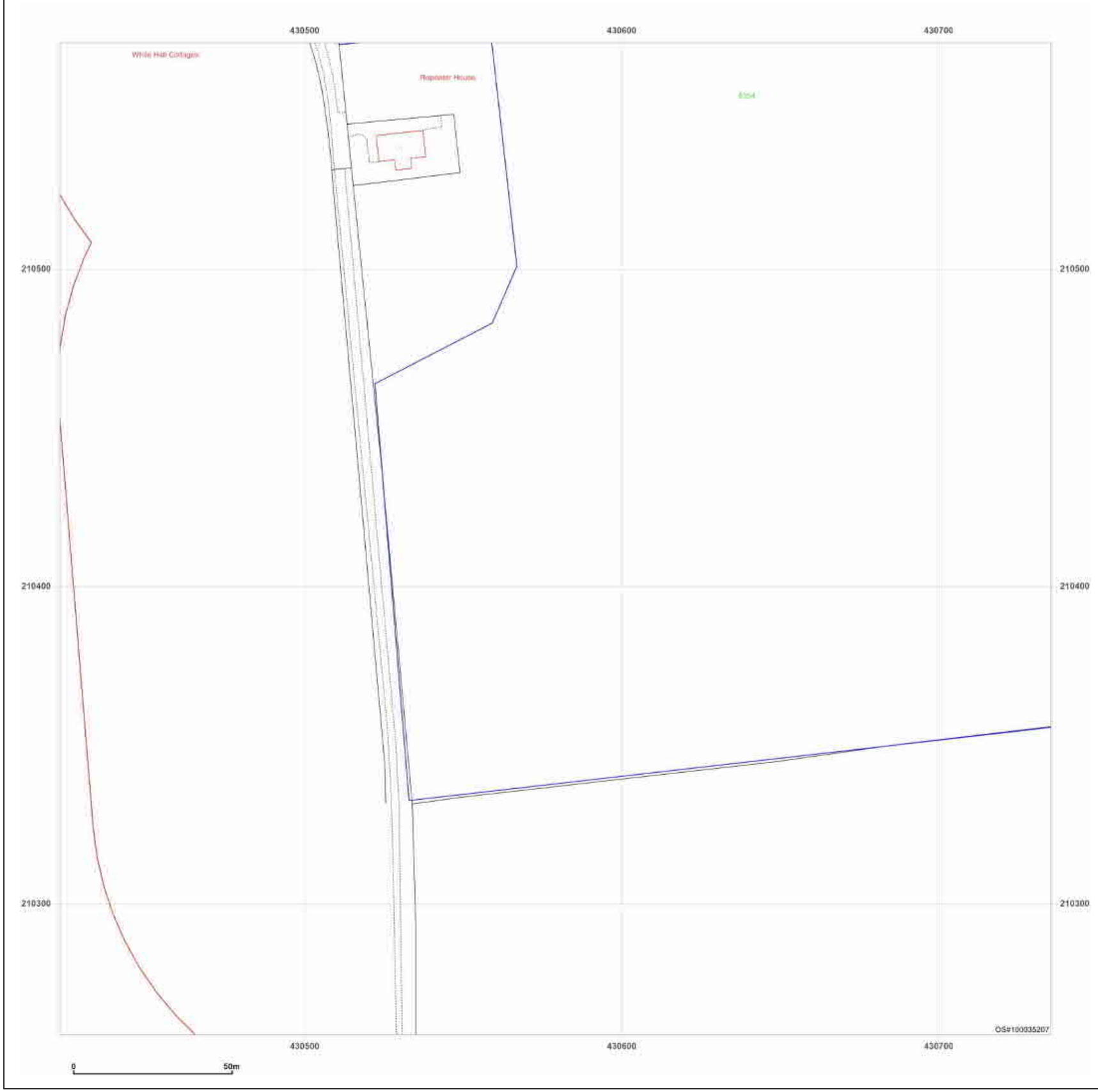
INSIGHTS

1:2,500 Scale Grid Index





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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_Landline_1_1
Grid Ref: 430579, 210415

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

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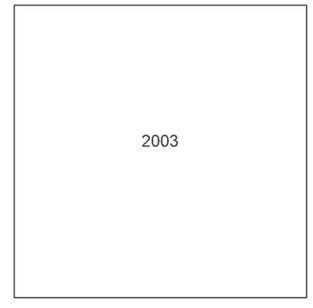

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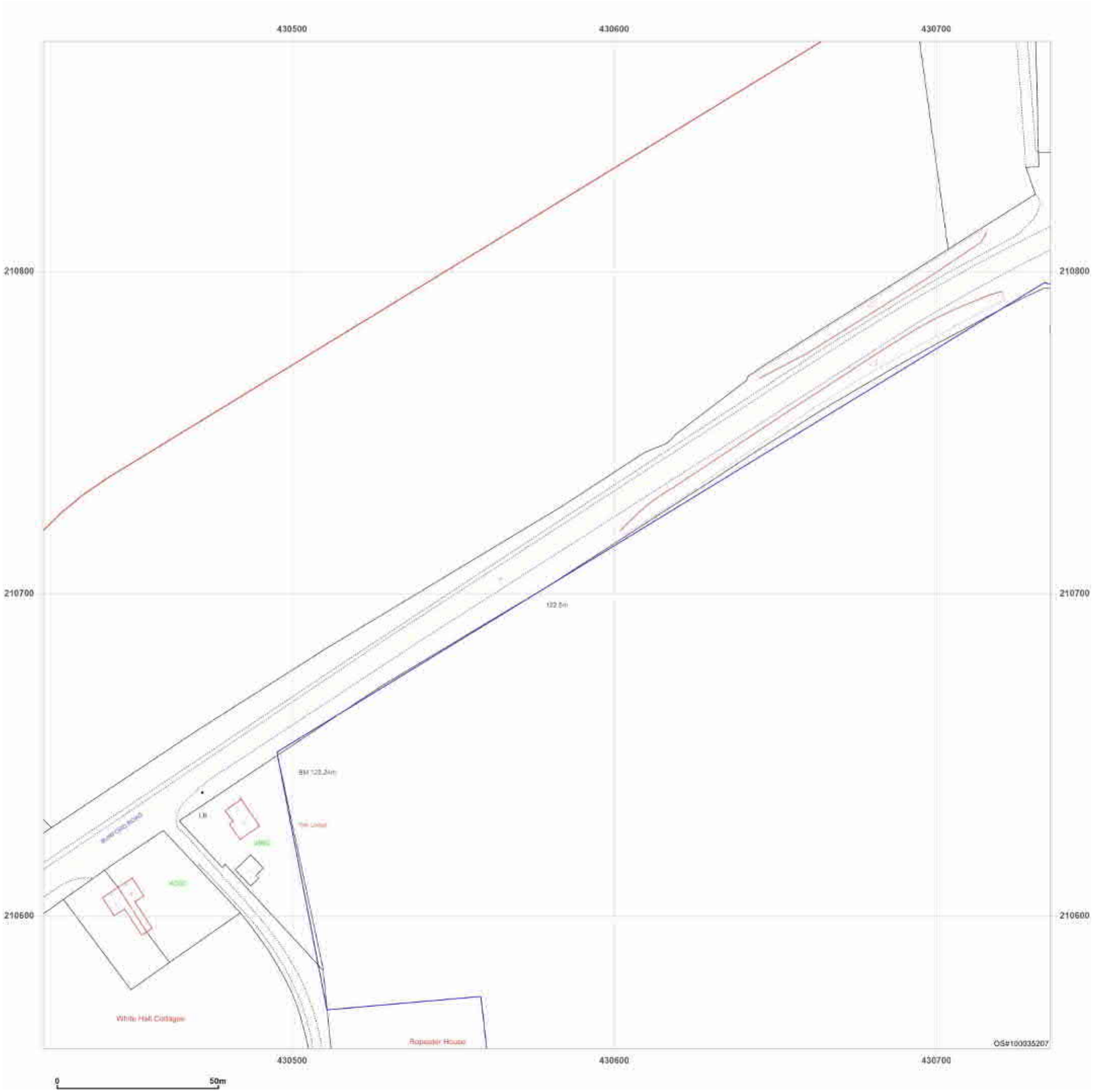

Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_Landline_1_2
Grid Ref: 430579, 210715

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

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2003

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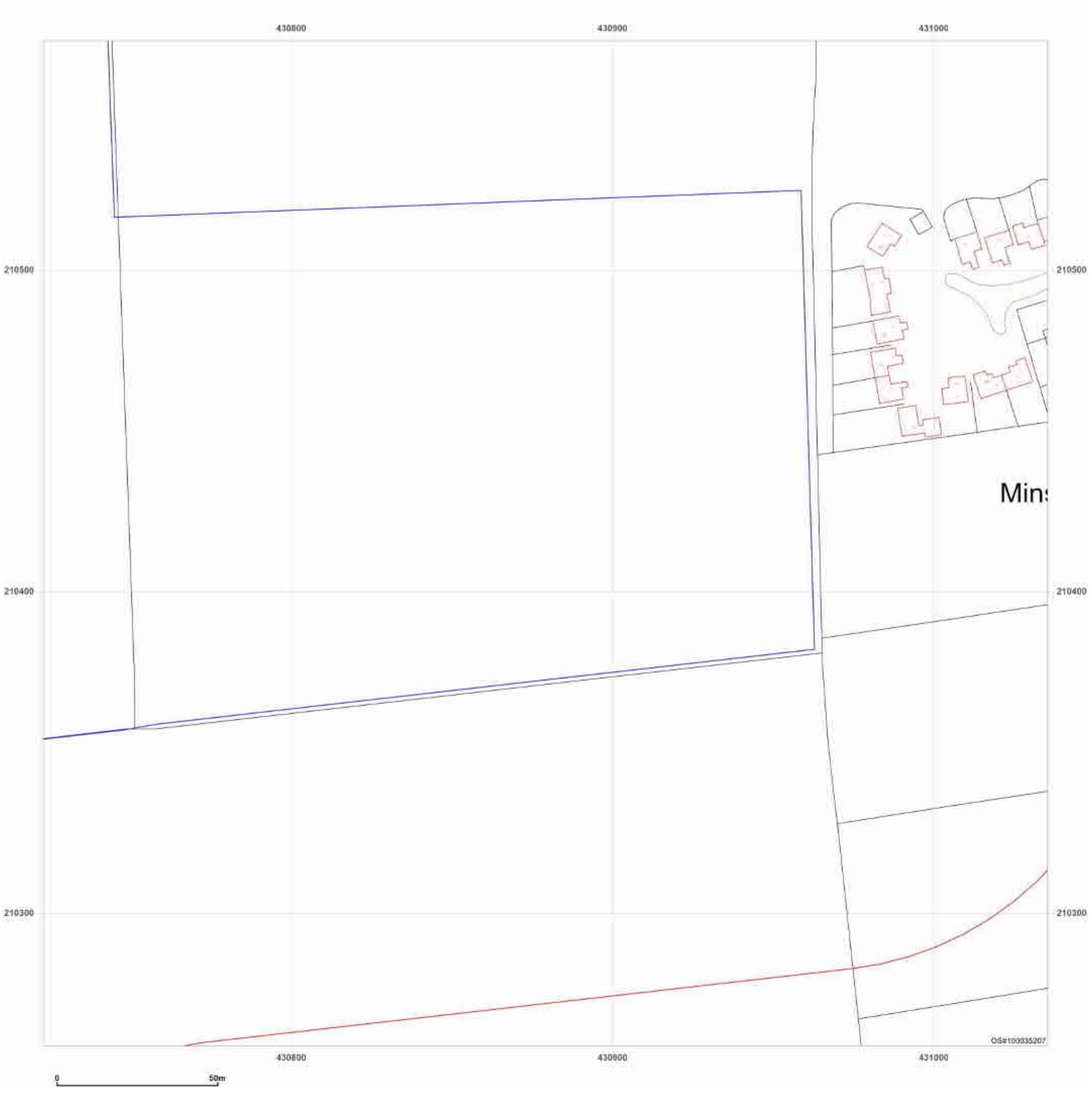

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_Landline_2_1
Grid Ref: 430879, 210415

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

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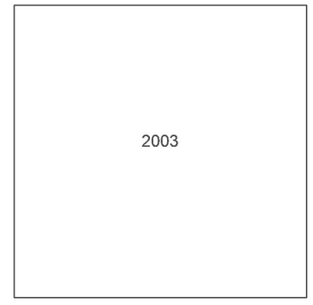

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_Landline_2_2
Grid Ref: 430879, 210715

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

N
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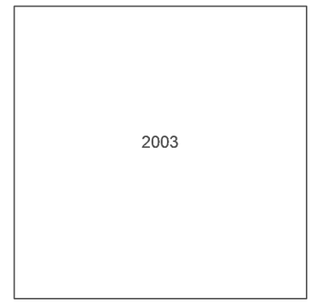

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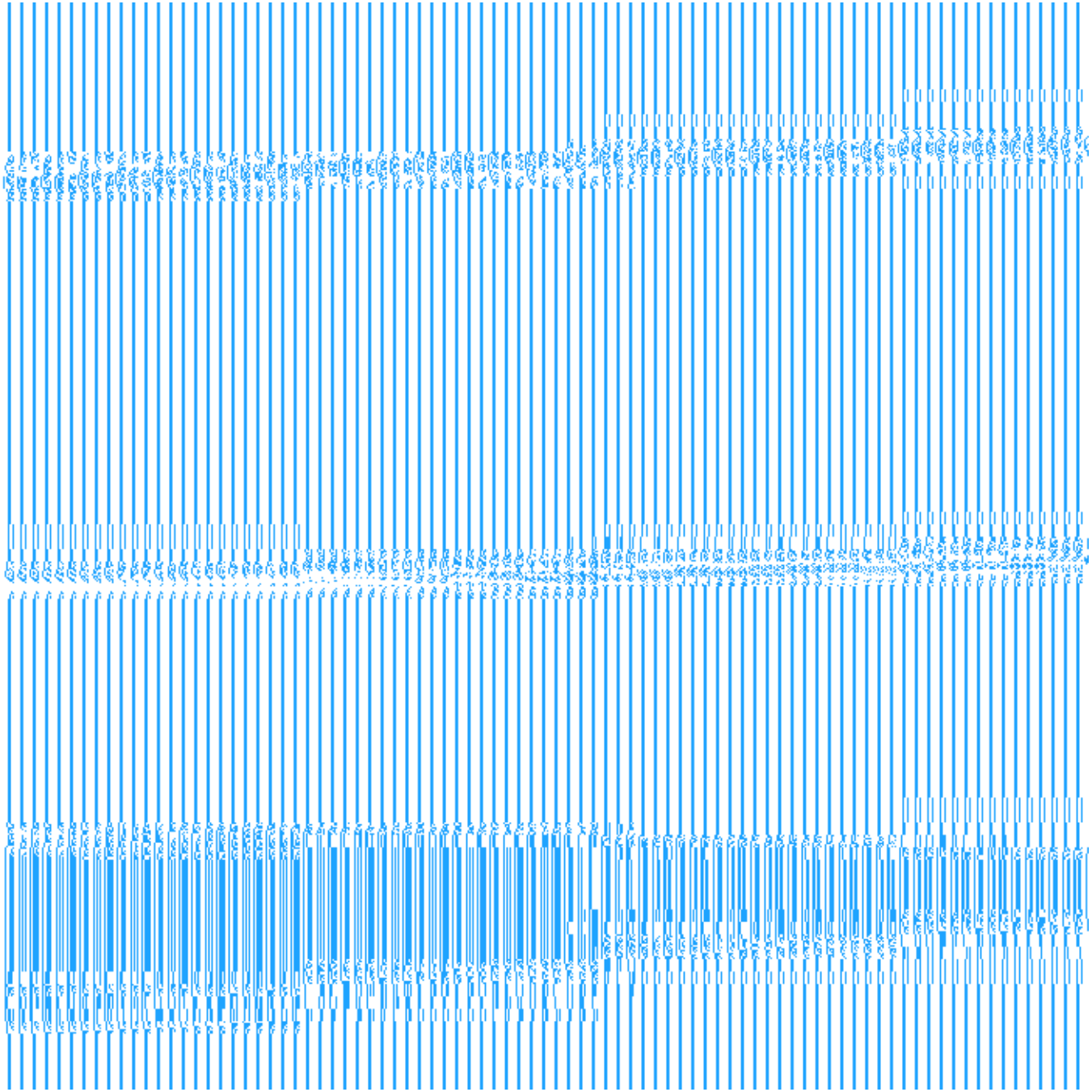

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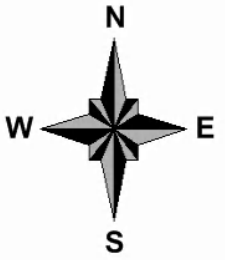
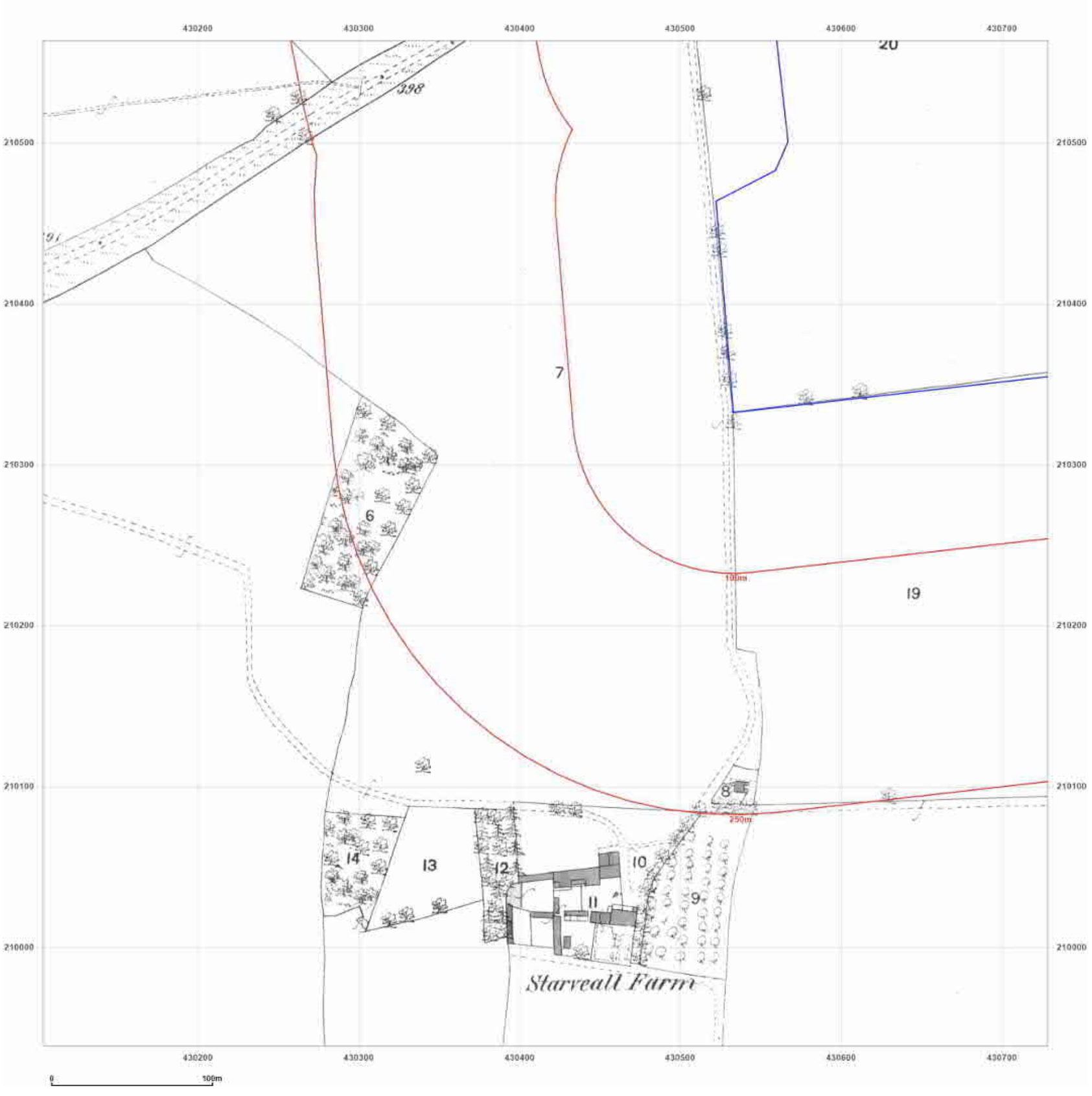
Landline Scale Grid Index





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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_1
Grid Ref: 430416, 210251

Map Name: County Series

Map date: **1880**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1880
Revised 1880
Edition N/A
Copyright N/A
Levelled N/A

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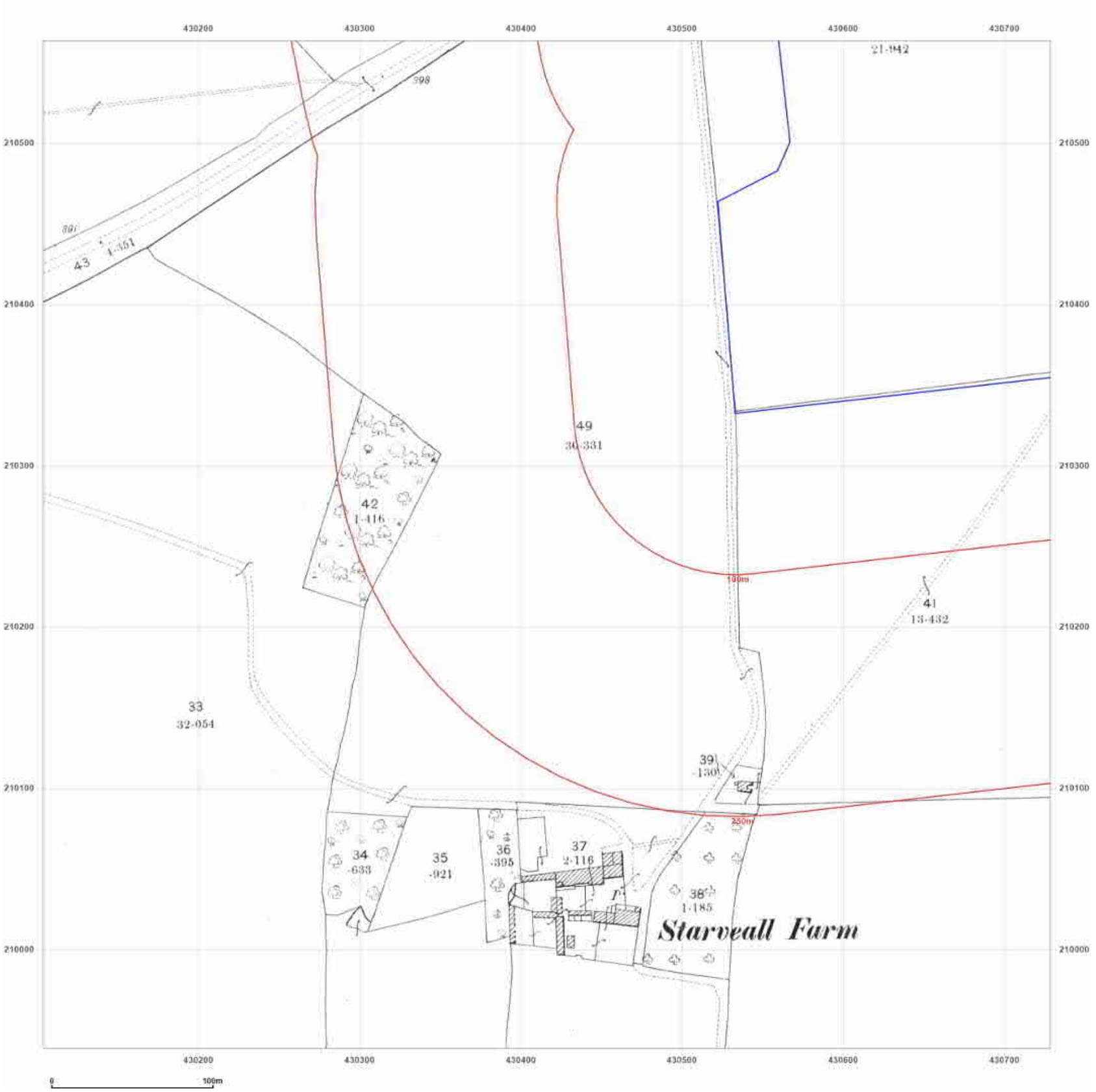

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_1
Grid Ref: 430416, 210251

Map Name: County Series
Map date: **1899**
Scale: 1:2,500
Printed at: 1:2,500

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Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_1
Grid Ref: 430416, 210251

Map Name: County Series

Map date: **1921**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1921
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_1
Grid Ref: 430416, 210251

Map Name: National Grid

Map date: **1972-1975**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1973
Revised 1973
Edition N/A
Copyright 1975
Levelled 1969

Surveyed 1971
Revised 1971
Edition N/A
Copyright 1972
Levelled 1953

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_1
Grid Ref: 430416, 210251

Map Name: National Grid

Map date: **1975-1977**

Scale: 1:2,500

Printed at: 1:2,500

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

Surveyed N/A
Revised N/A
Edition N/A
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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_1
Grid Ref: 430416, 210251

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

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

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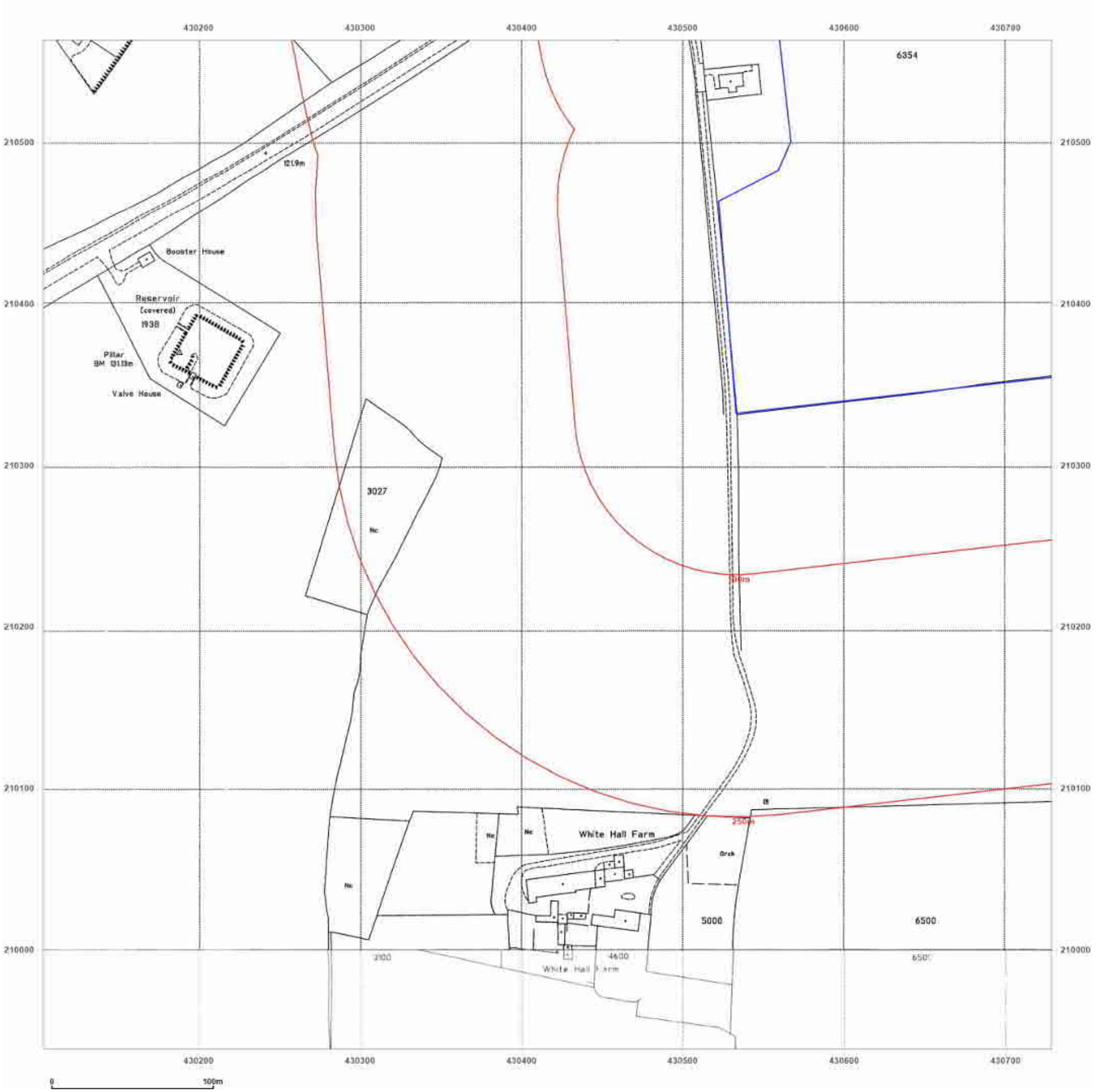

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_1
Grid Ref: 430416, 210251

Map Name: National Grid

Map date: **1994-1995**

Scale: 1:2,500

Printed at: 1:2,500

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

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

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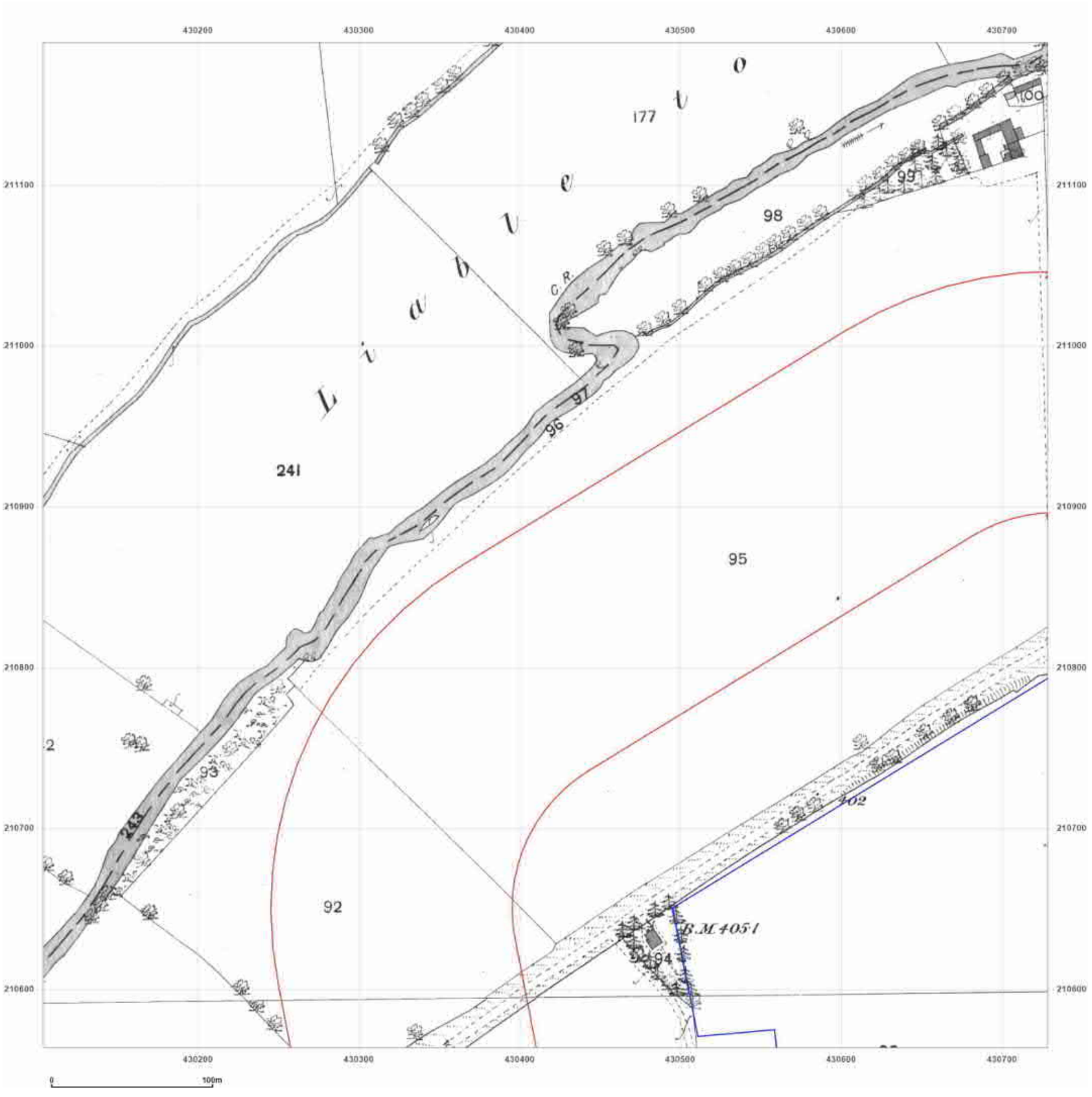

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_2
Grid Ref: 430416, 210876

Map Name: County Series

Map date: **1880-1881**

Scale: 1:2,500

Printed at: 1:2,500

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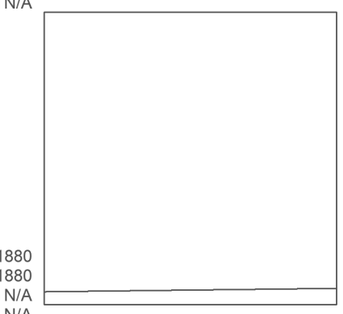
Surveyed 1881
Revised 1881
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1880
Revised 1880
Edition N/A
Copyright N/A
Levelled N/A

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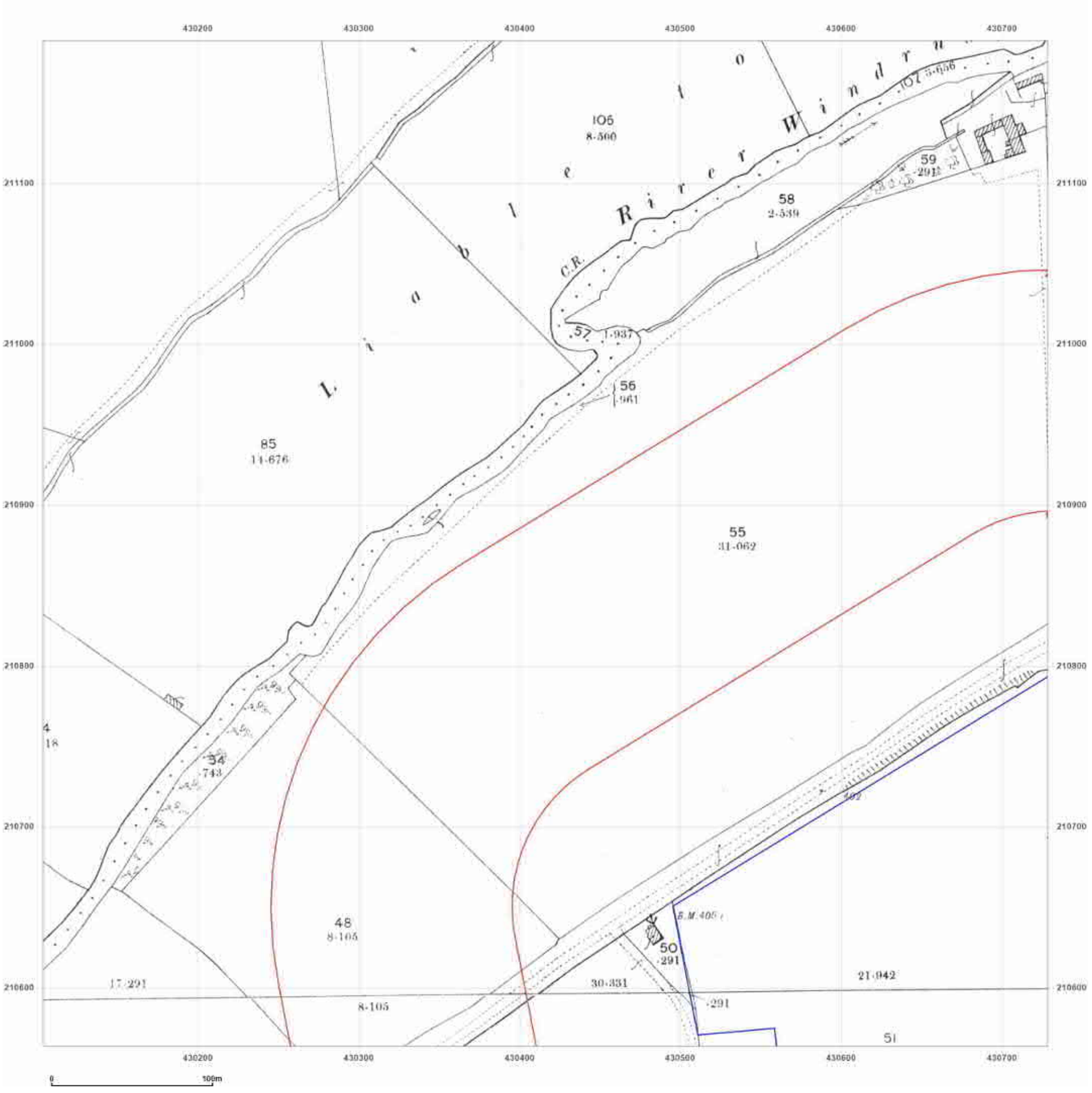

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_2
Grid Ref: 430416, 210876

Map Name: County Series
Map date: **1899**
Scale: 1:2,500
Printed at: 1:2,500

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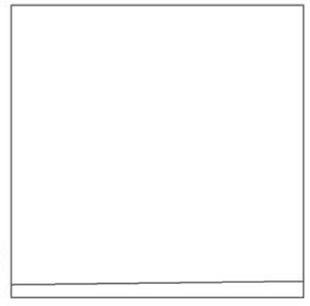
Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

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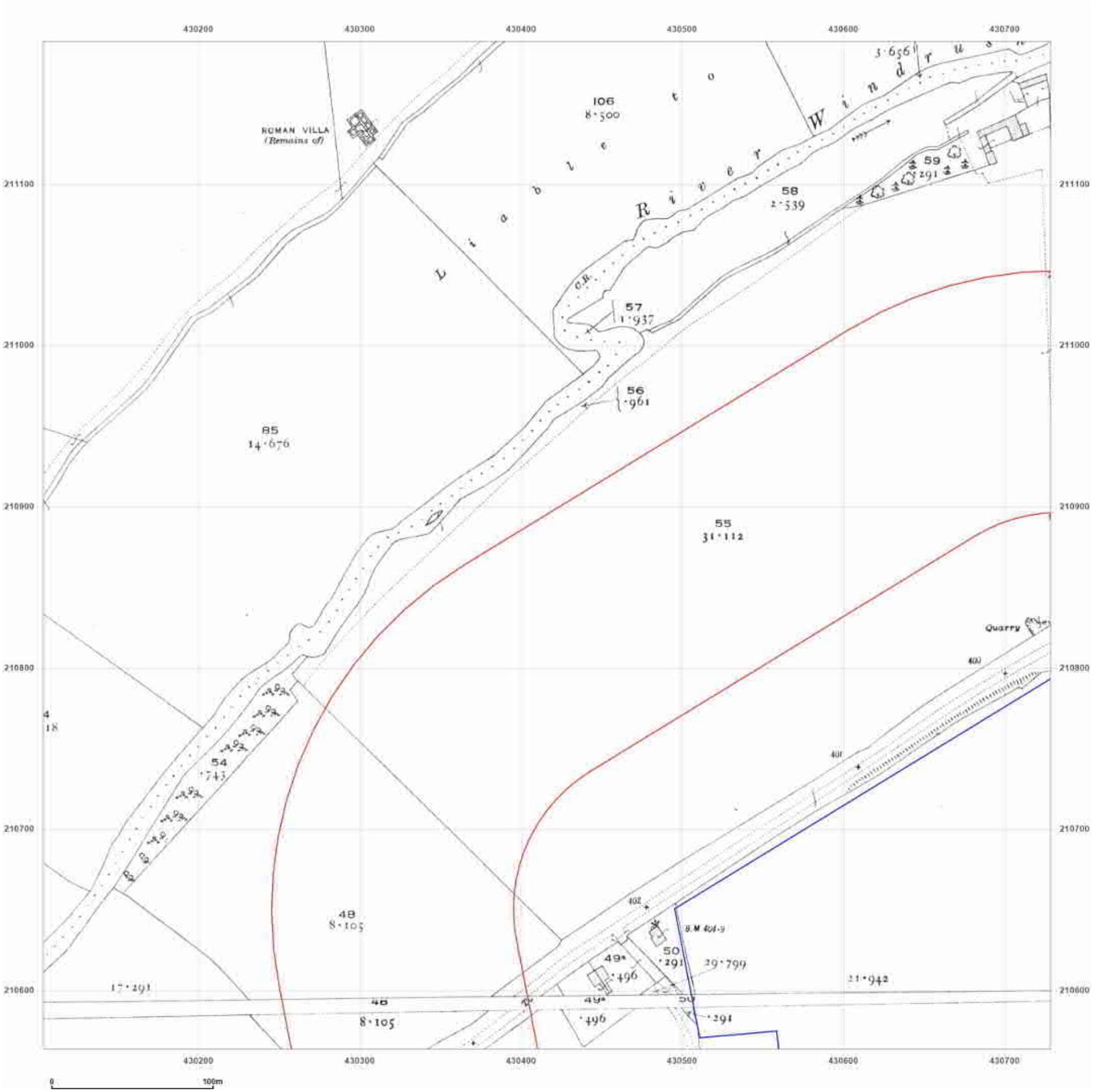

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_2
Grid Ref: 430416, 210876

Map Name: County Series
Map date: **1921**
Scale: 1:2,500
Printed at: 1:2,500

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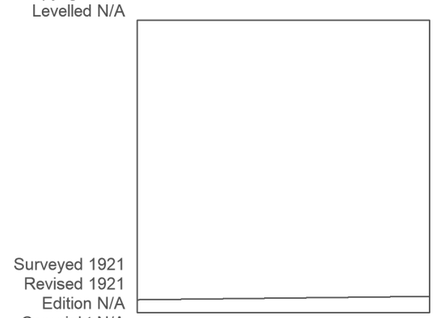
Surveyed 1921
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1921
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

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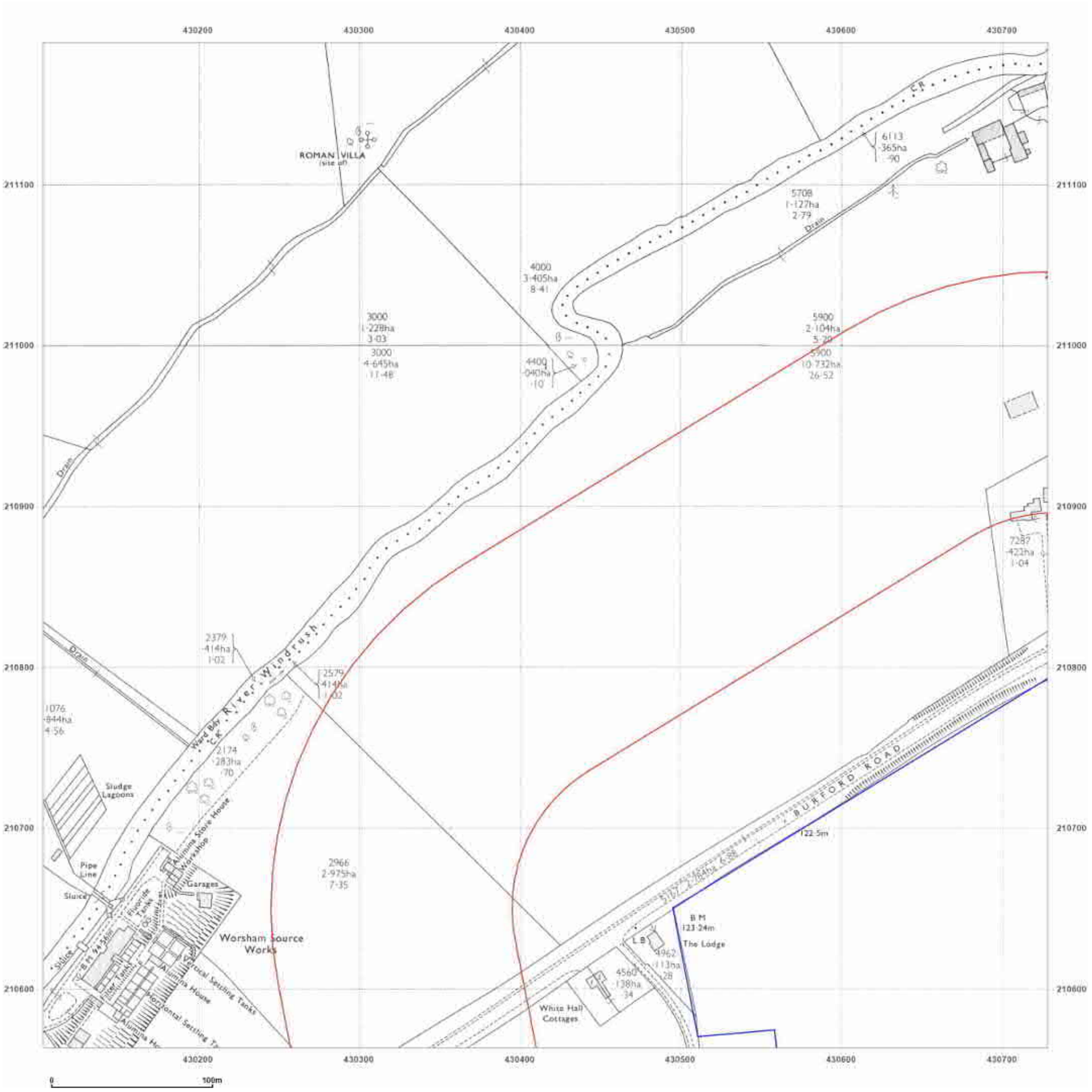

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_2
Grid Ref: 430416, 210876

Map Name: National Grid

Map date: **1975**

Scale: 1:2,500

Printed at: 1:2,500

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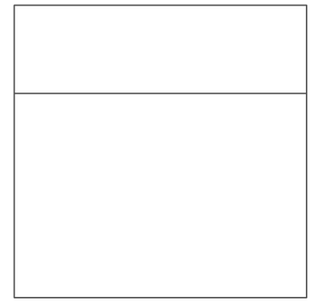
Surveyed 1973
Revised 1973
Edition N/A
Copyright 1975
Levelled 1969



Surveyed 1973
Revised 1973
Edition N/A
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Levelled 1969

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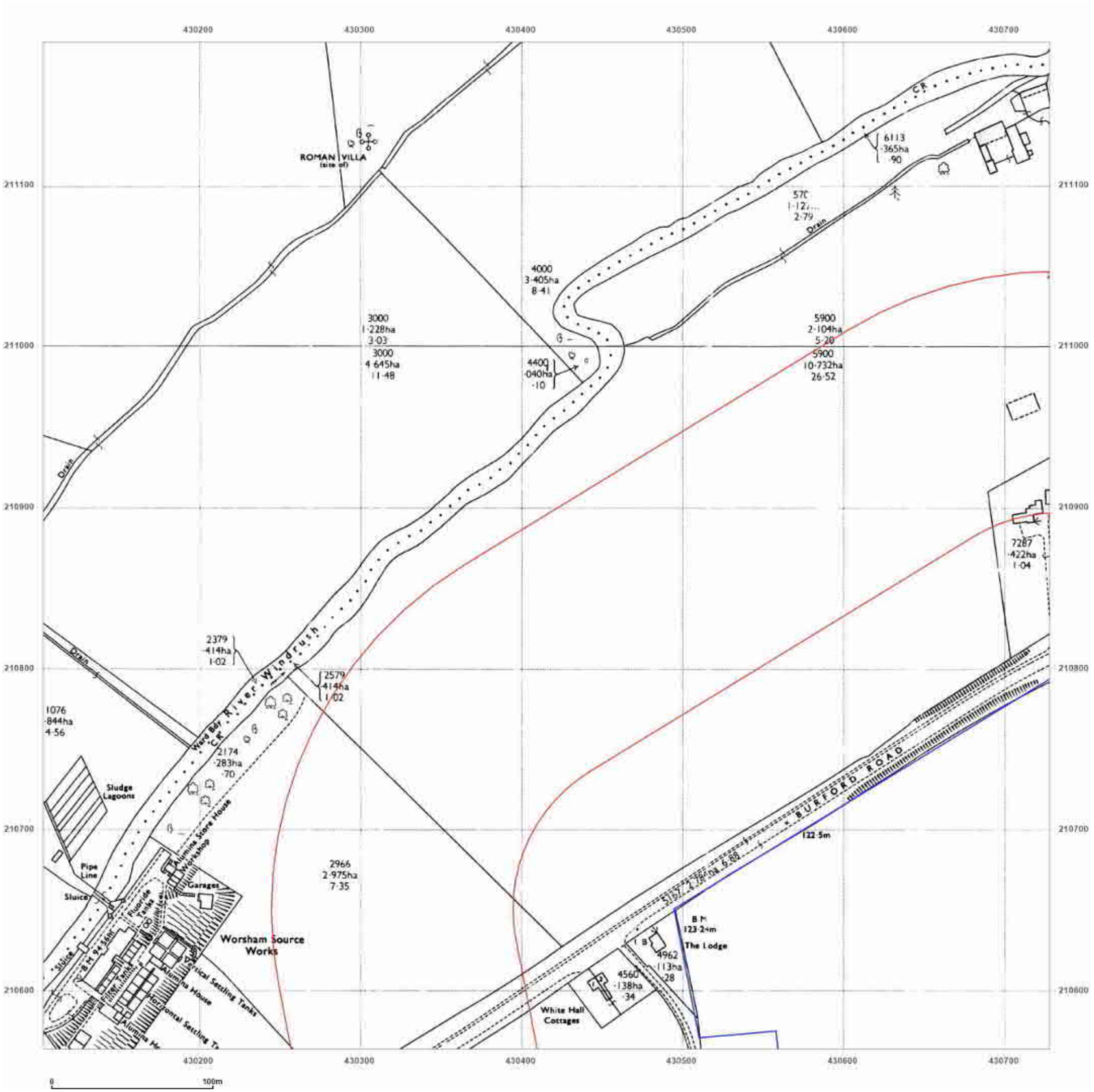

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_2
Grid Ref: 430416, 210876

Map Name: National Grid

Map date: **1975**

Scale: 1:2,500

Printed at: 1:2,500

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

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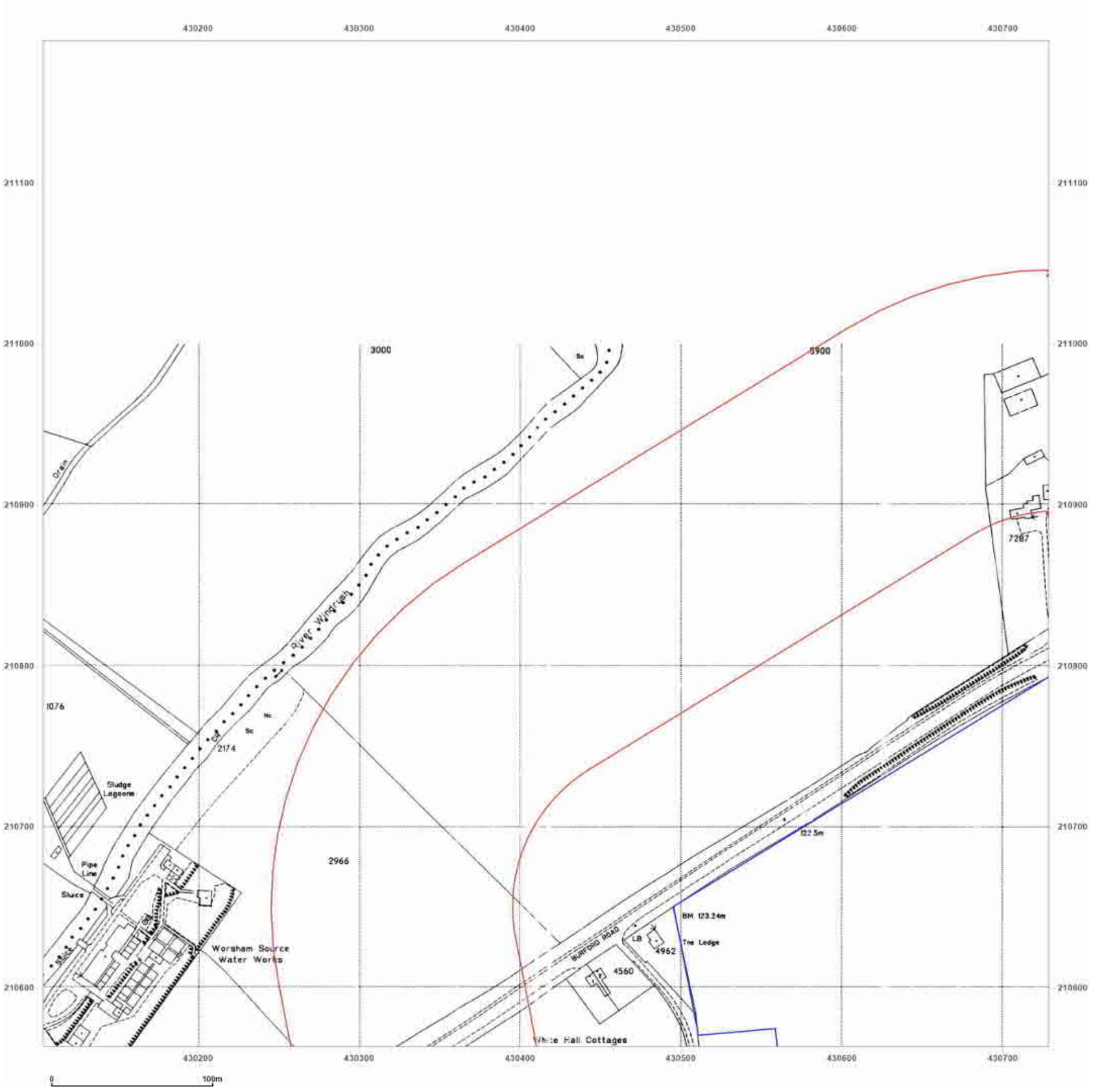

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_2
Grid Ref: 430416, 210876

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

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

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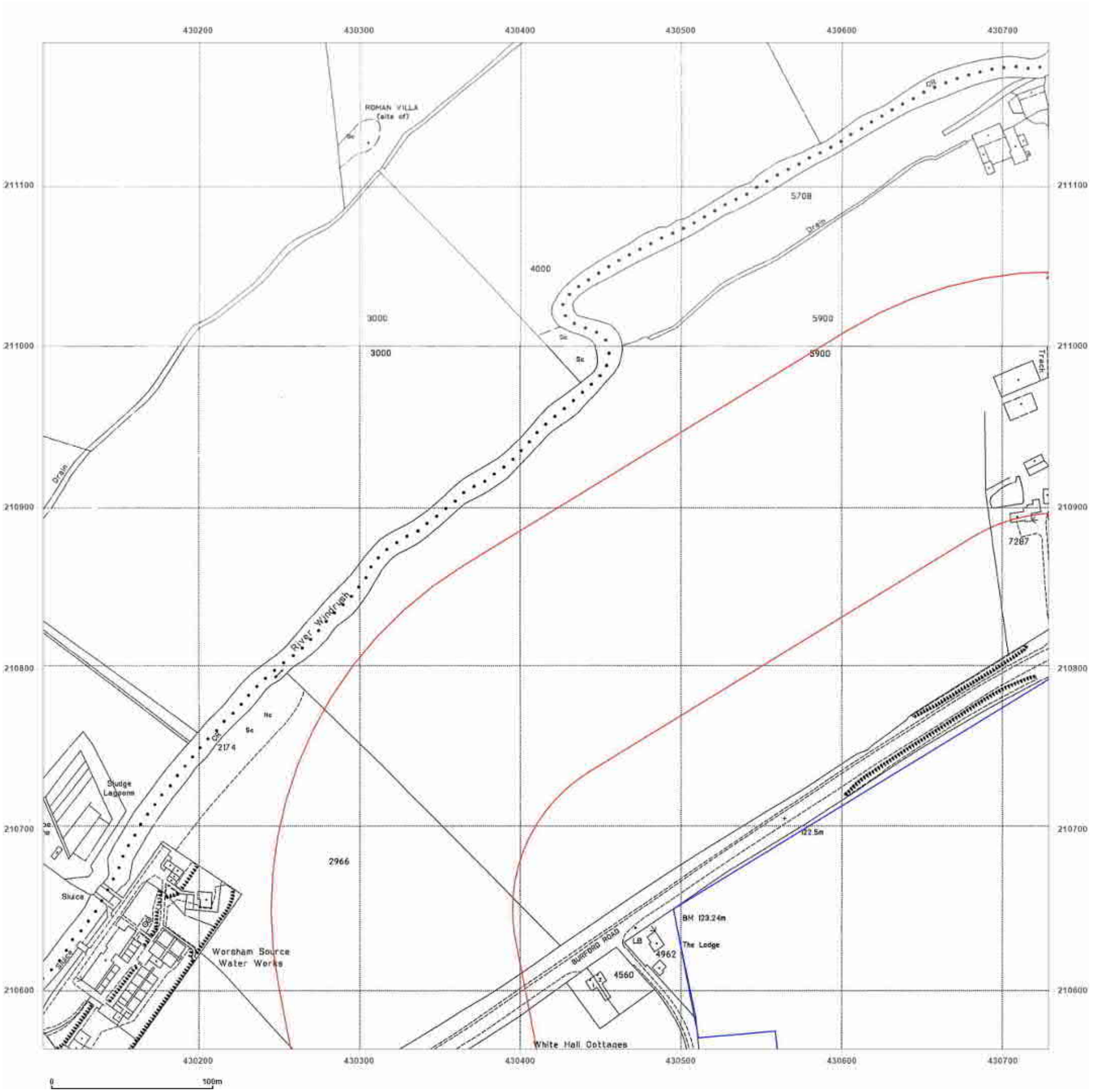

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_1_2
Grid Ref: 430416, 210876

Map Name: National Grid

Map date: **1994-1995**

Scale: 1:2,500

Printed at: 1:2,500

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

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

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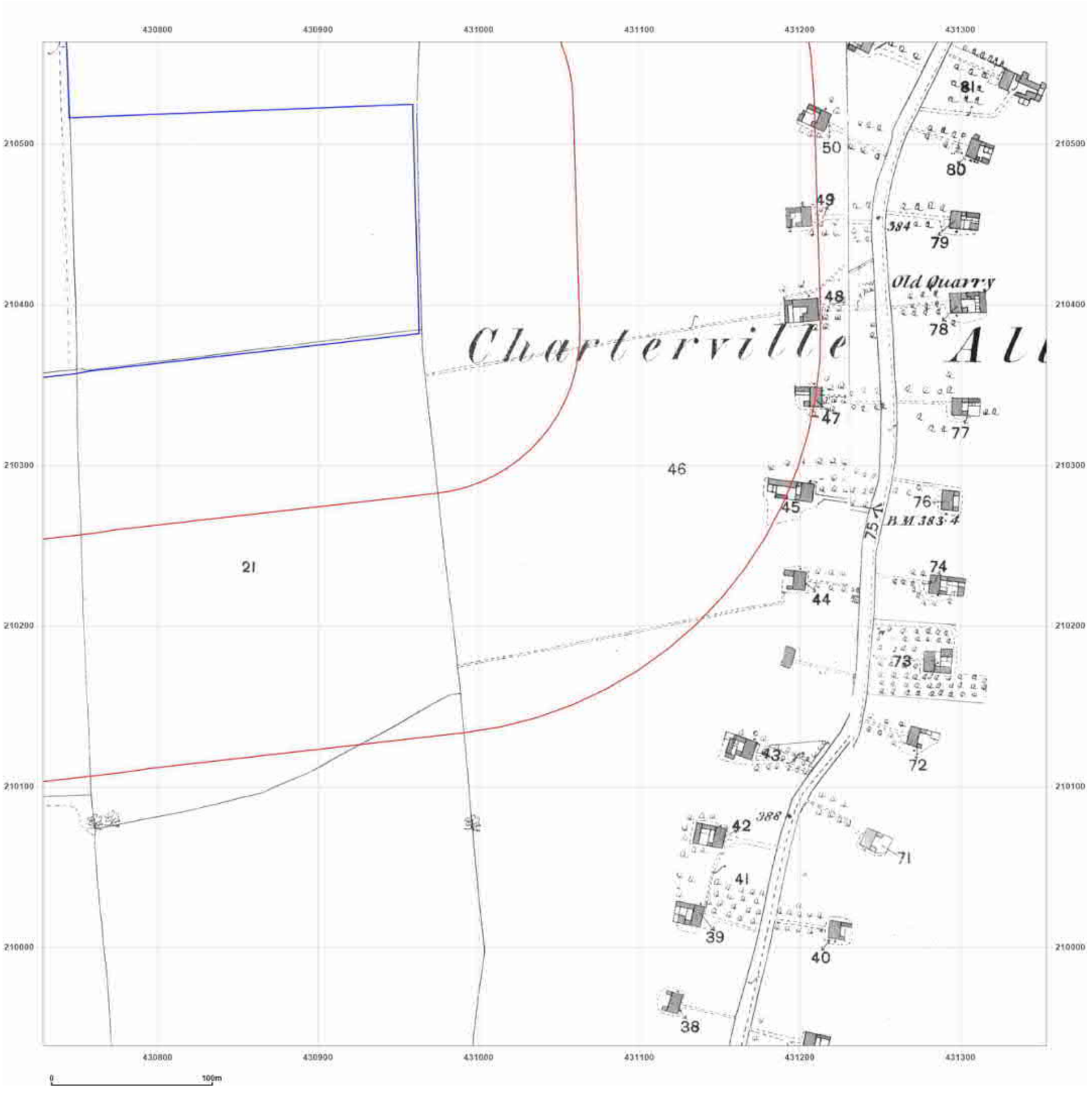

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: County Series
Map date: 1880
Scale: 1:2,500
Printed at: 1:2,500

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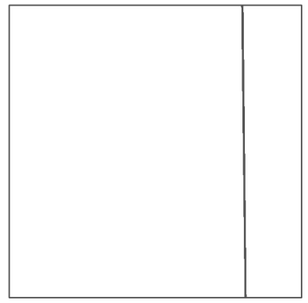

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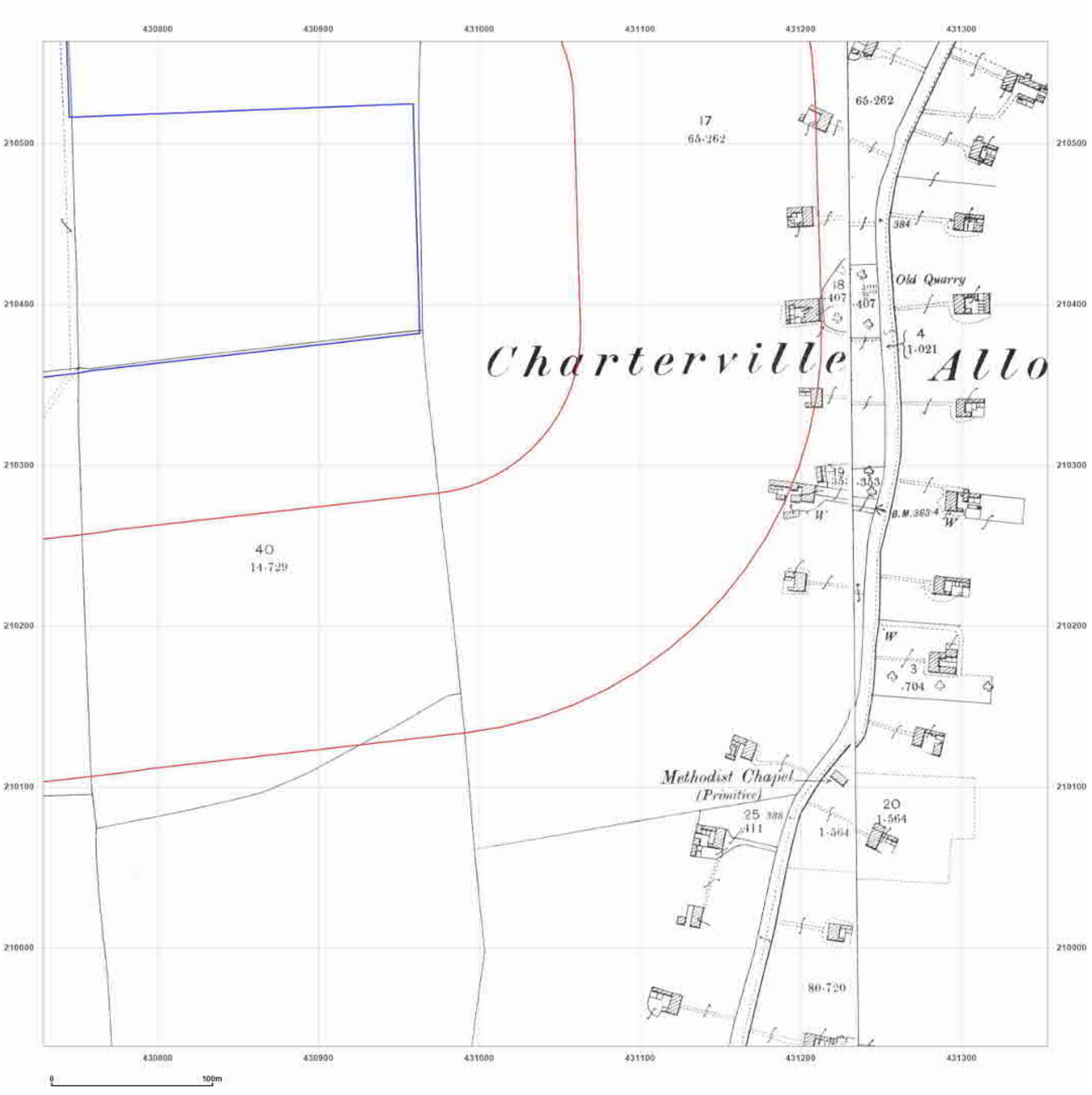

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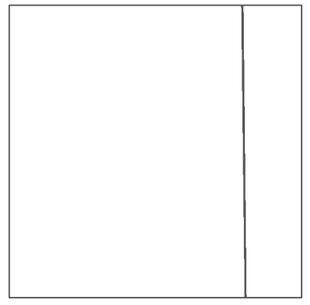
Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: County Series
Map date: **1899**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S



Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

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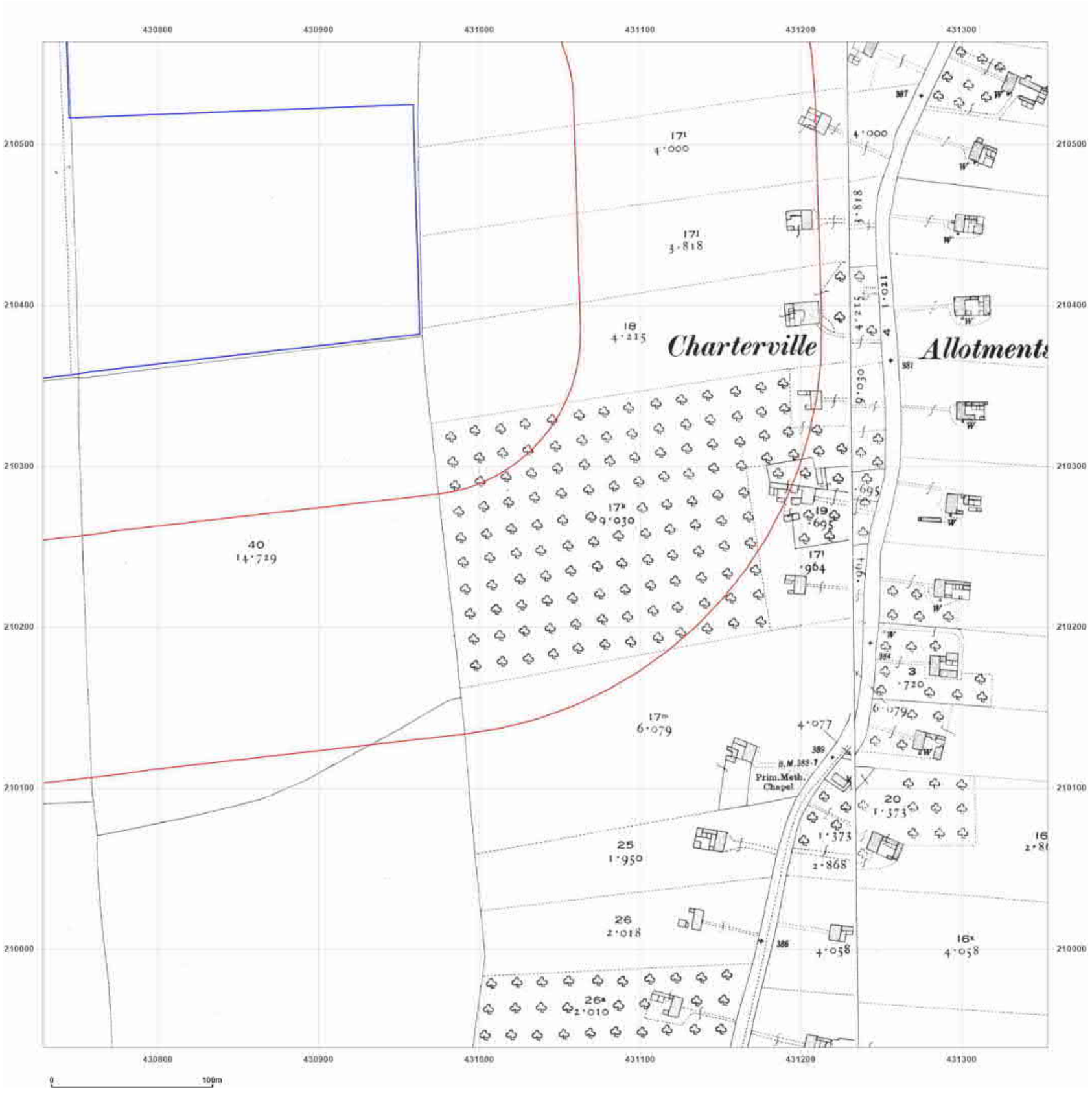

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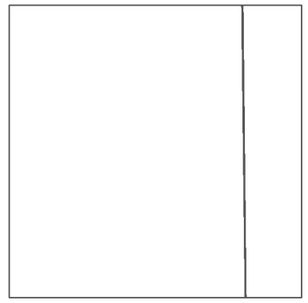
Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: County Series
Map date: **1921**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S



Surveyed 1921
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1921
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

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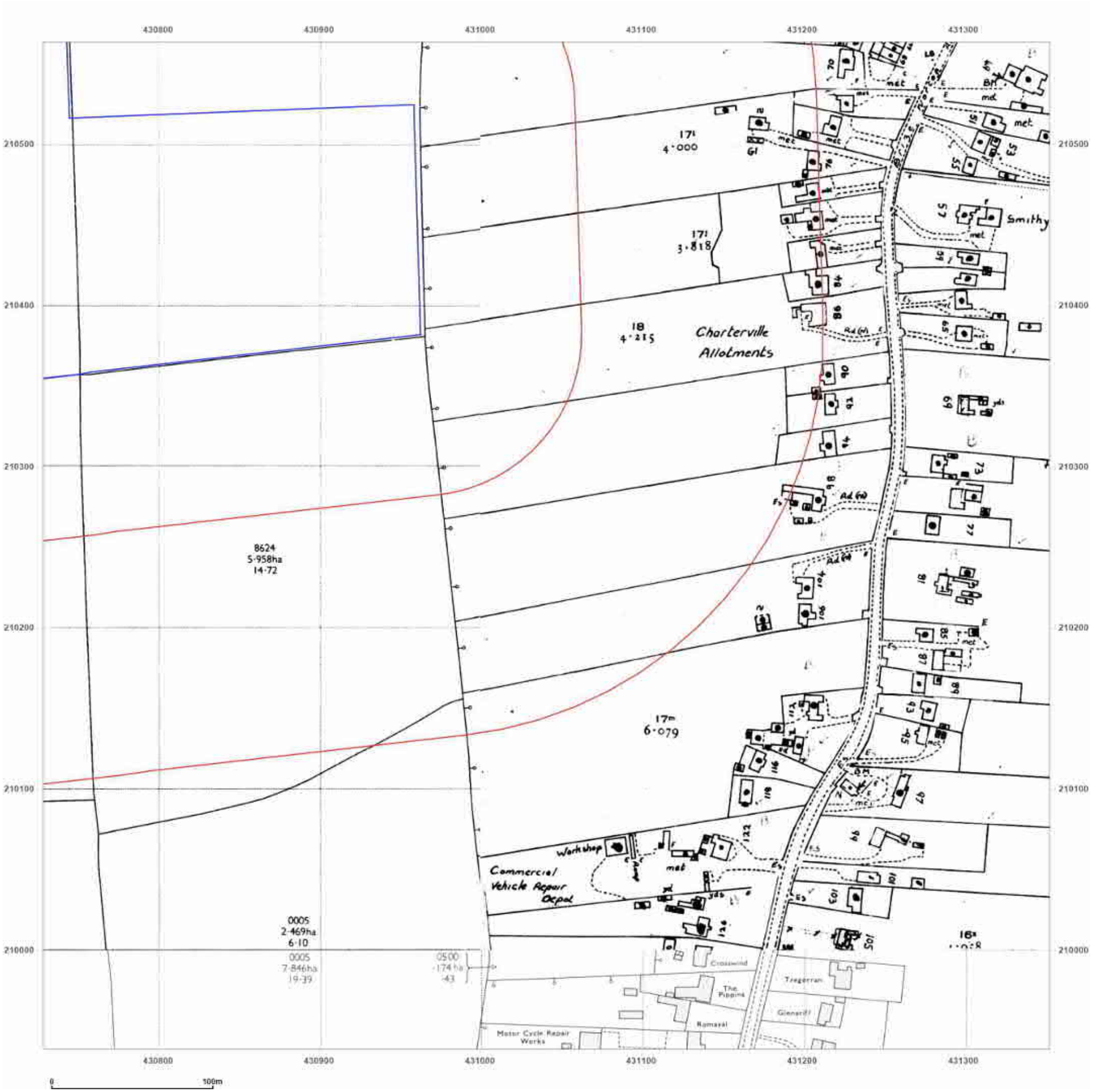

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: National Grid
Map date: **1972-1975**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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

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

Surveyed 1971
Revised 1971
Edition N/A
Copyright 1972
Levelled 1953

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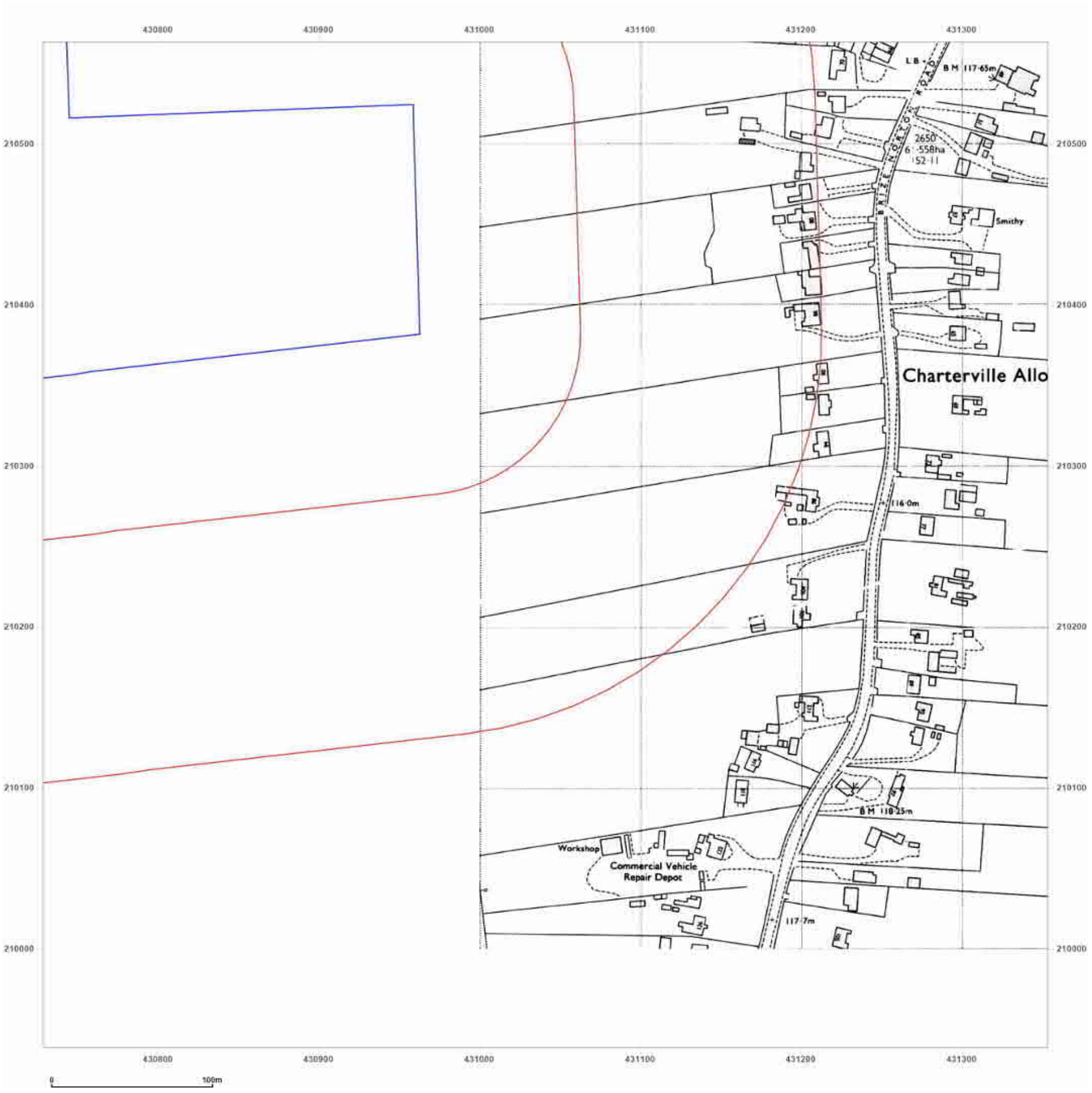

emapsite™

Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: National Grid
Map date: **1975**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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

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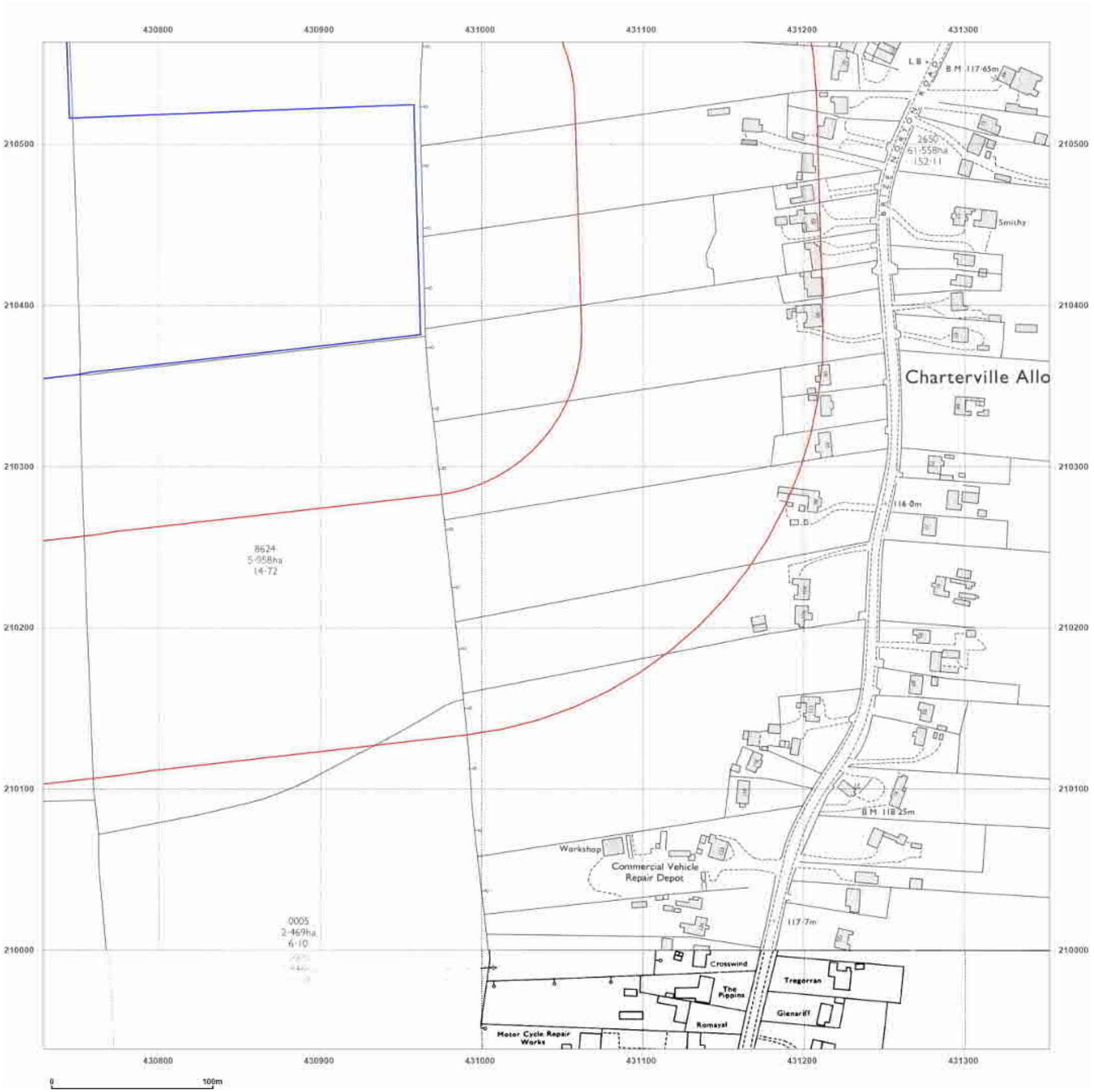

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: National Grid
Map date: **1972-1977**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1973
Revised 1973
Edition N/A
Copyright 1975
Levelled 1969

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

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

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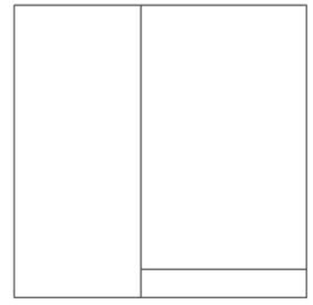
Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: National Grid
Map date: **1975-1977**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S



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Map legend available at:
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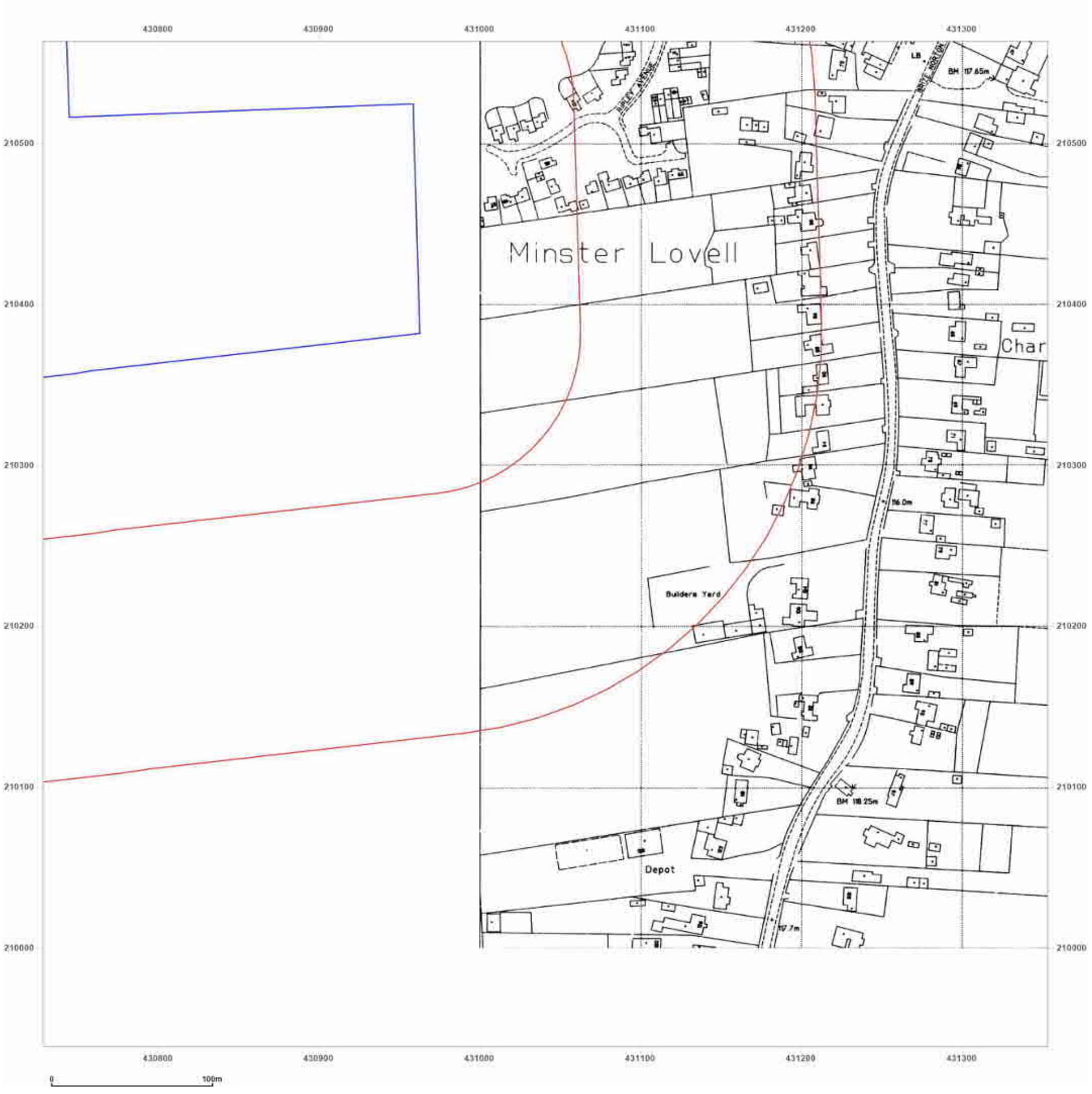

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

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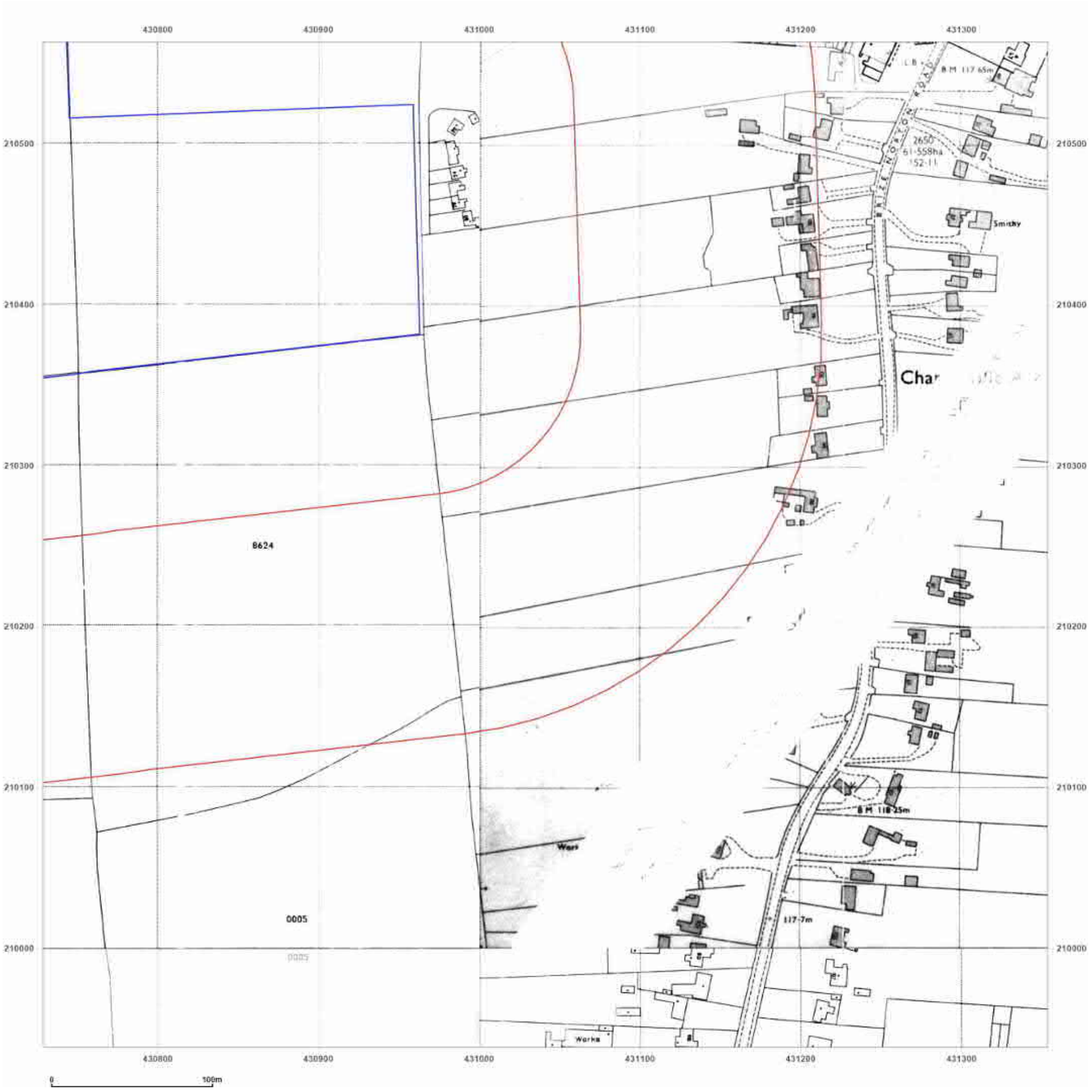

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

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

N
W E
S

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

Surveyed 1973
Revised 1989
Edition N/A
Copyright 1989
Levelled 1973

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

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

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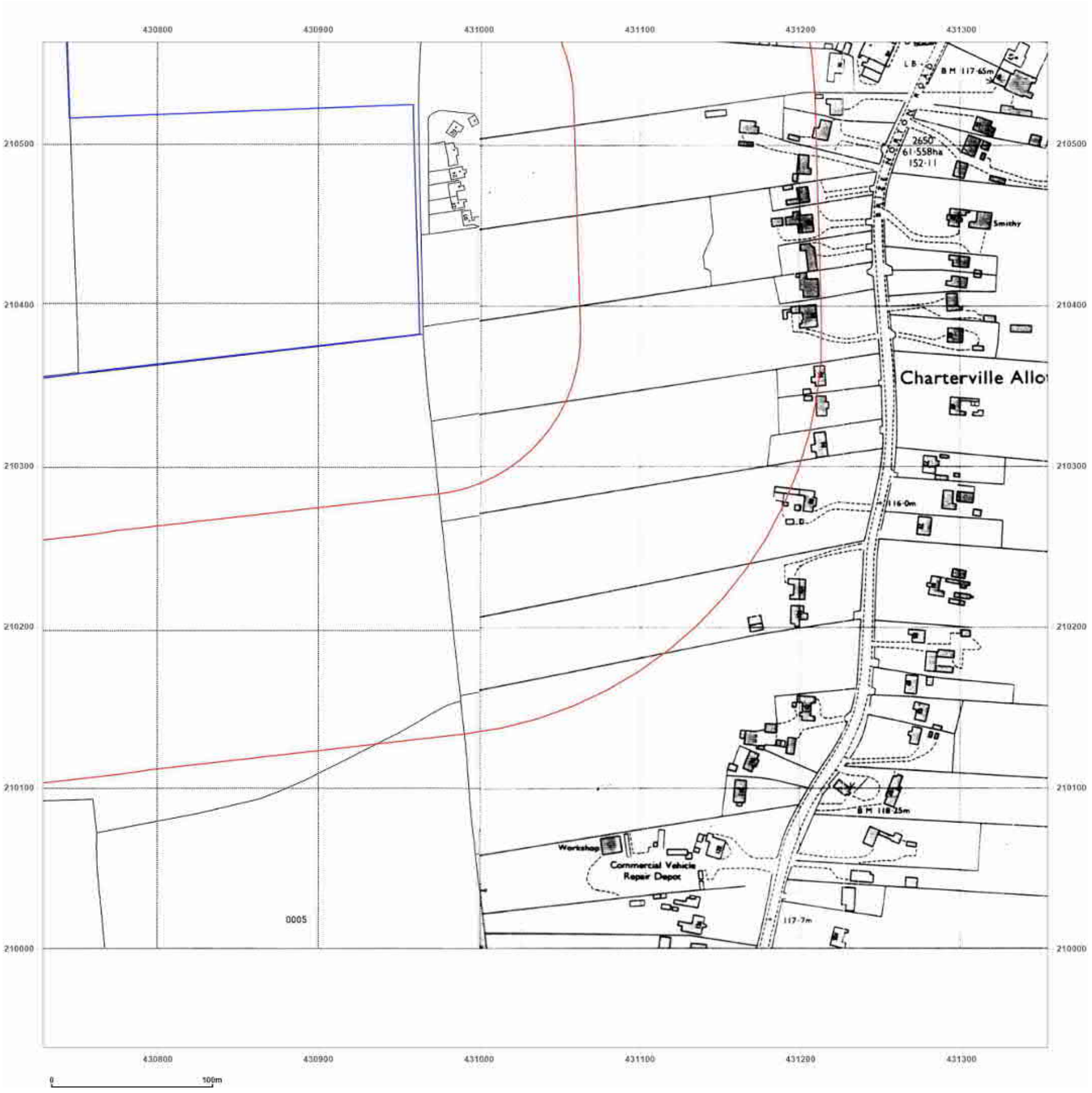


emapsite™

Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_1
Grid Ref: 431041, 210251

Map Name: National Grid

Map date: **1990-1995**

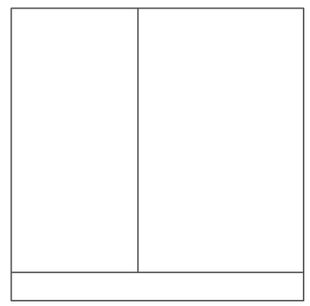
Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

Surveyed 1973
Revised 1990
Edition N/A
Copyright 1990
Levelled 1973



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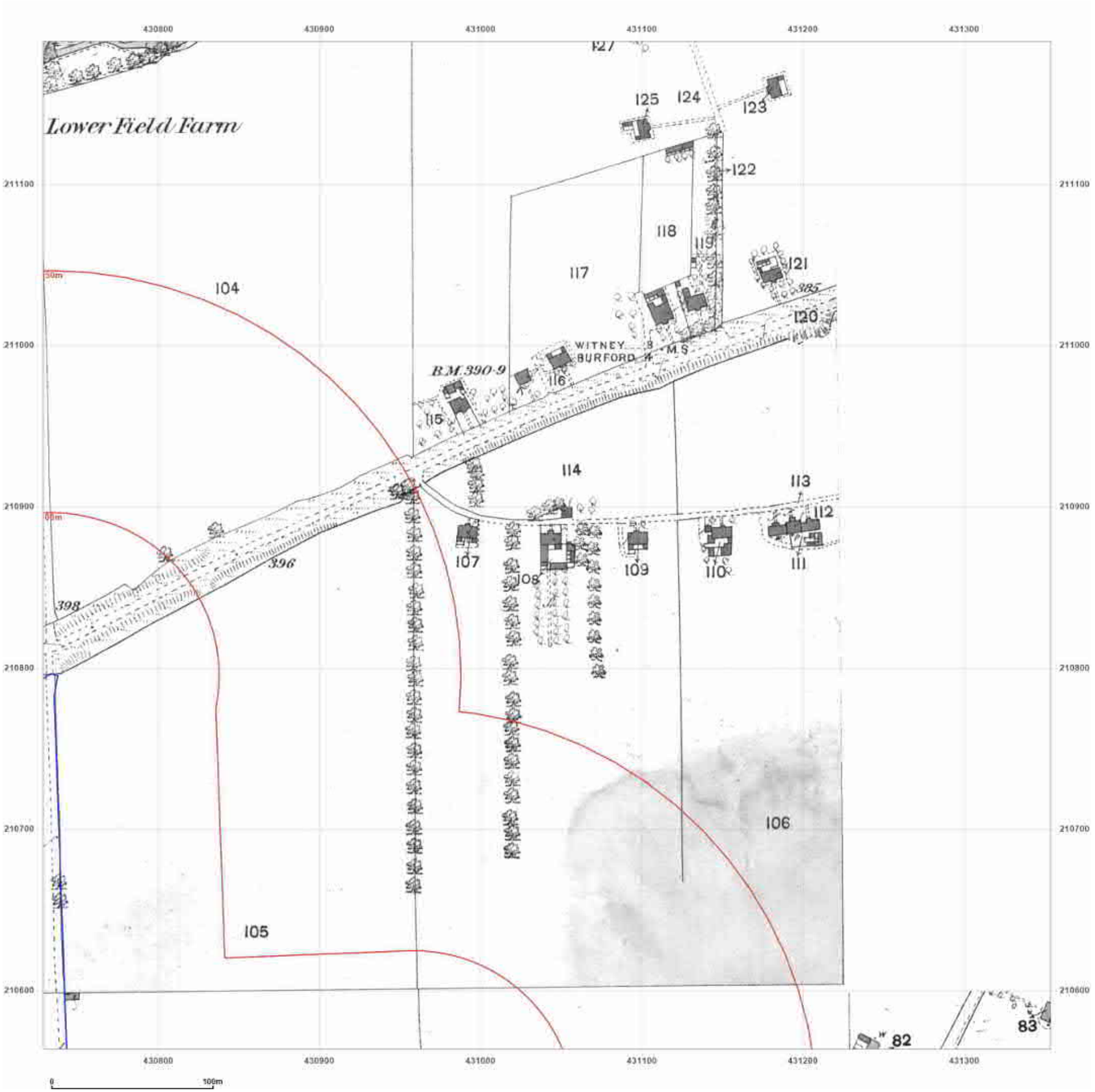

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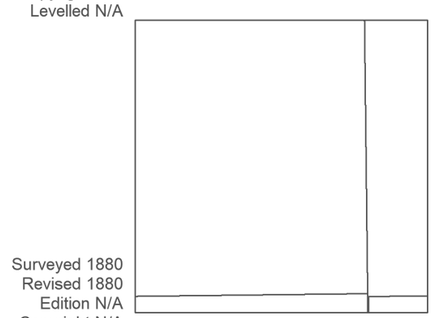
Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: County Series
Map date: **1880-1881**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1881
Revised 1881
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1880
Revised 1880
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1880
Revised 1880
Edition N/A
Copyright N/A
Levelled N/A

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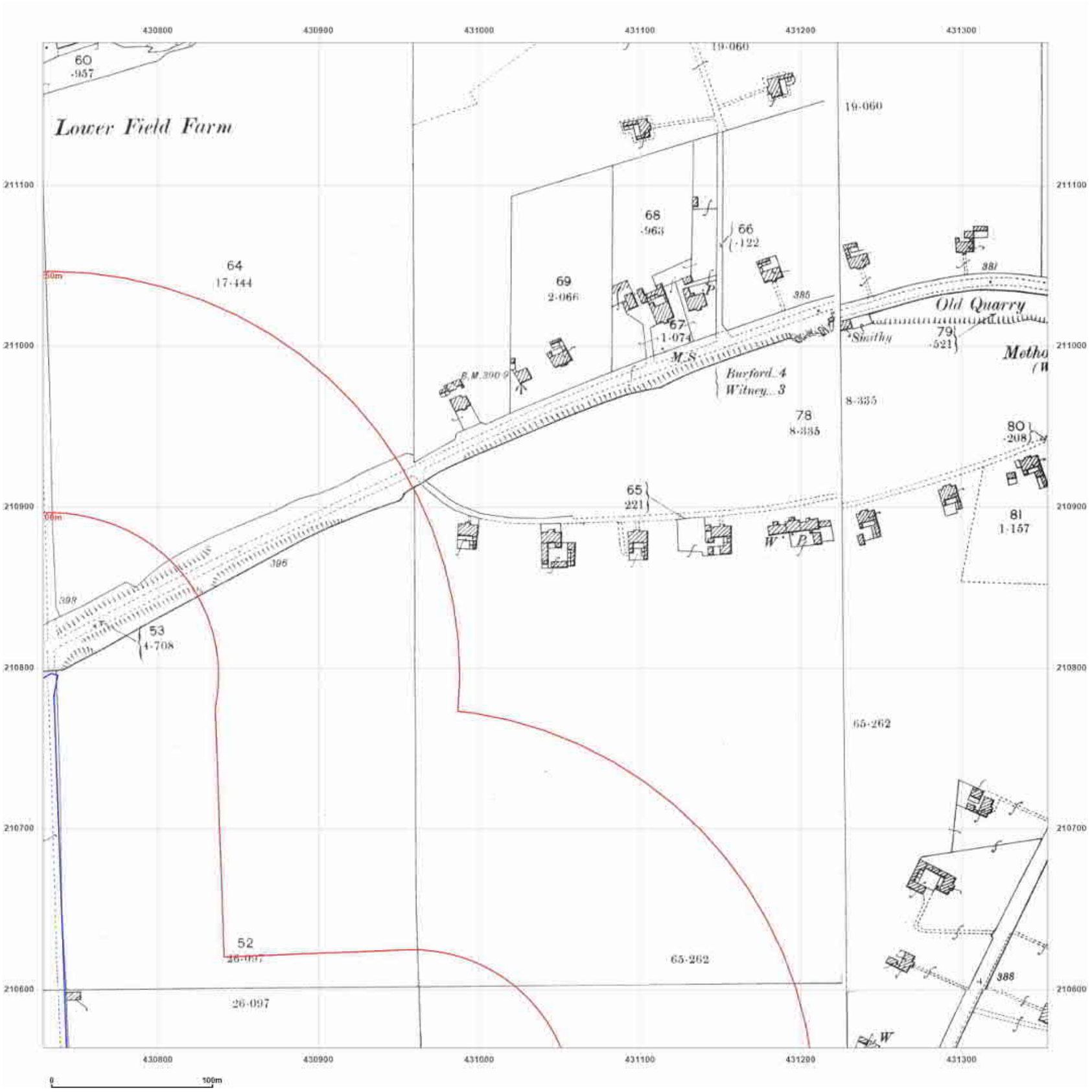

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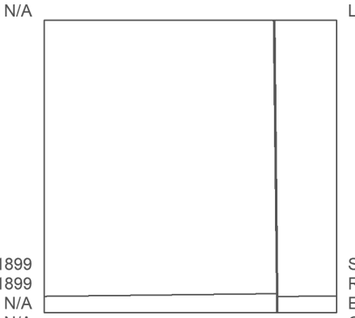
Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: County Series
Map date: **1899**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

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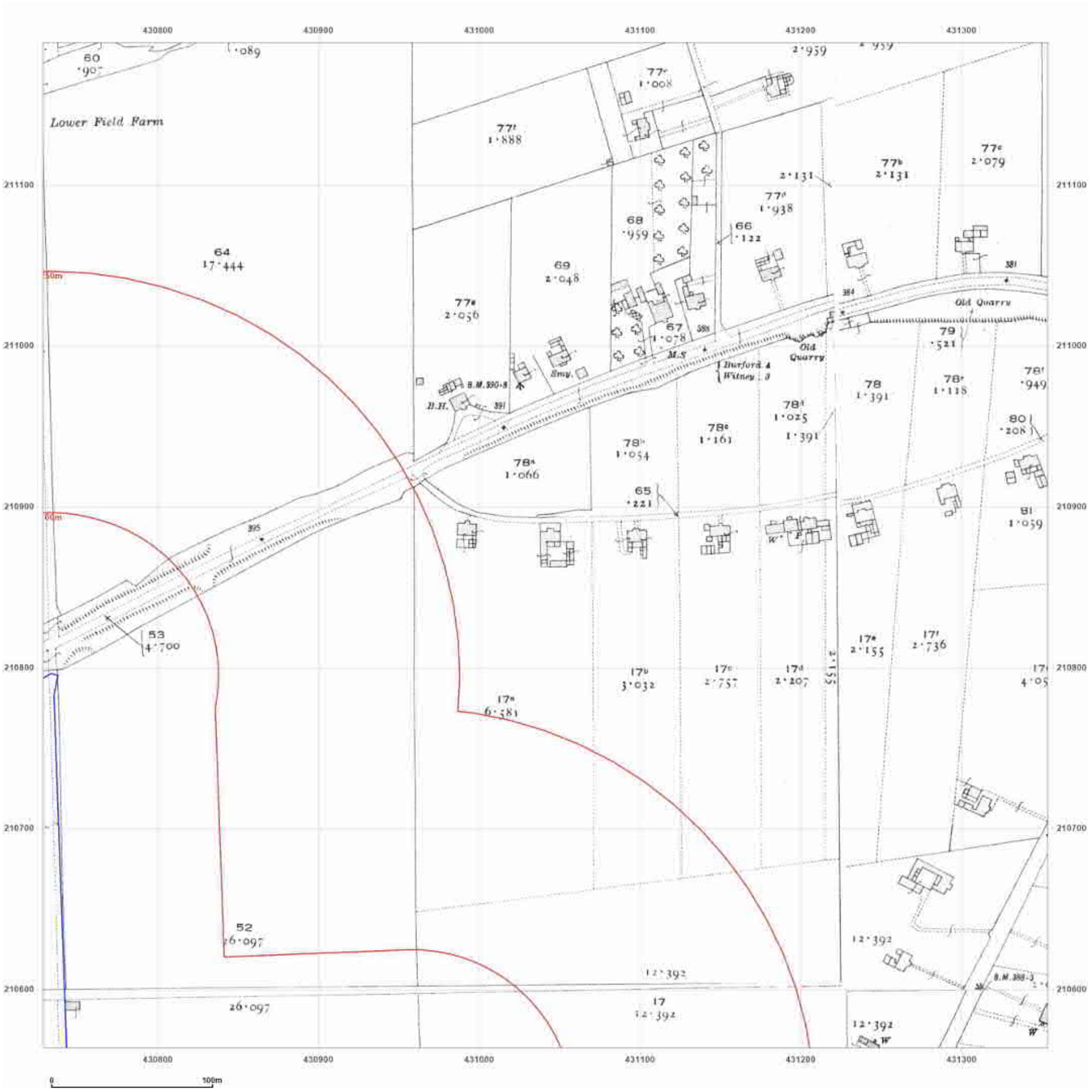


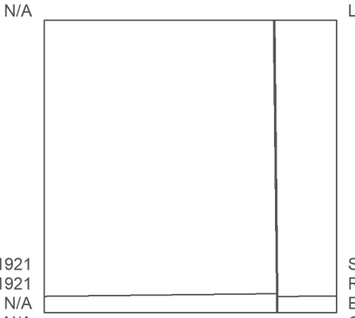
Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: County Series
Map date: **1921**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1921
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1921
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1921
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: National Grid

Map date: **1974-1975**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1973
Revised 1973
Edition N/A
Copyright 1975
Levelled 1969

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

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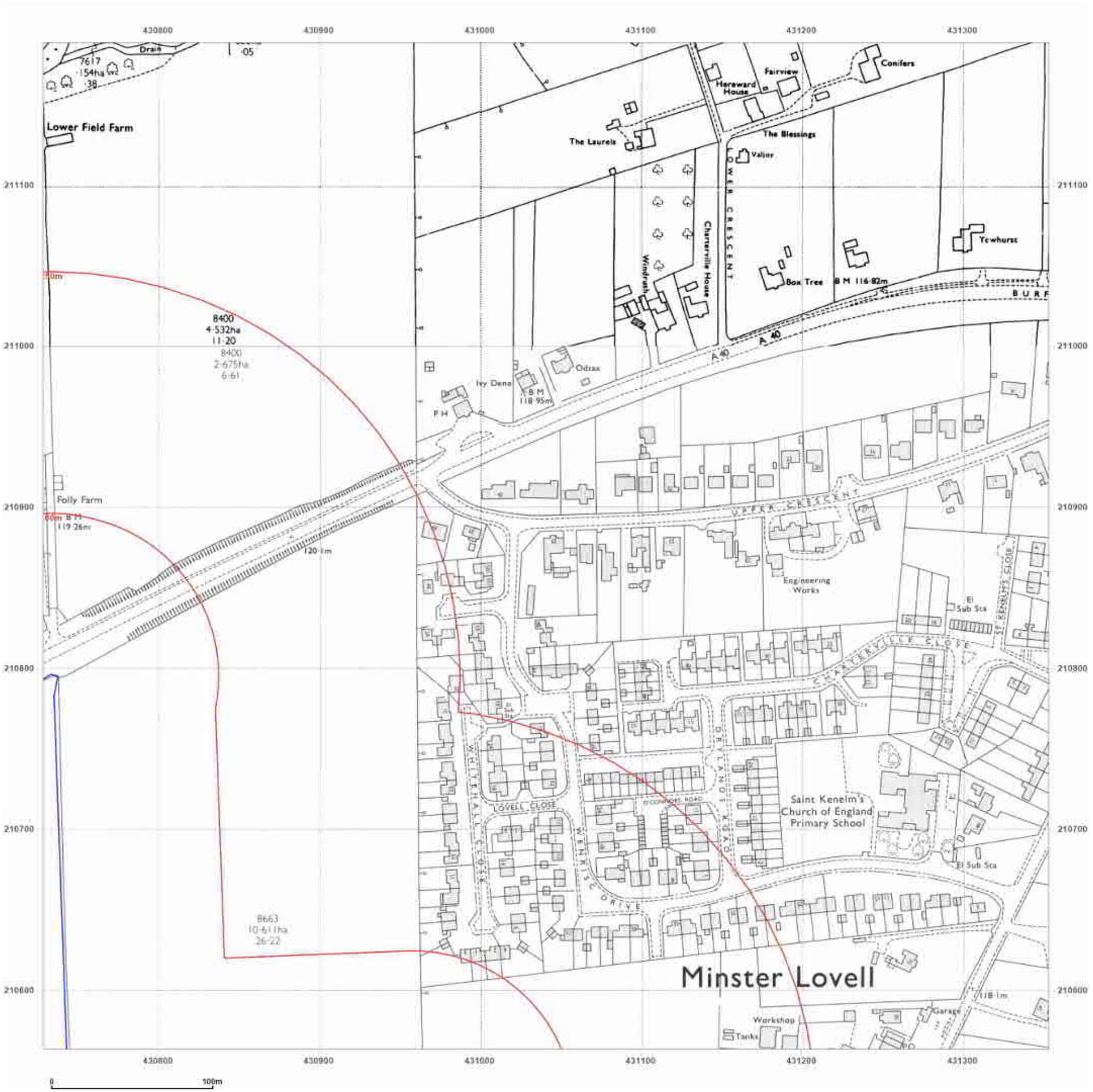

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: National Grid
Map date: **1975**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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

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

Surveyed 1973
Revised 1973
Edition N/A
Copyright 1975
Levelled 1969

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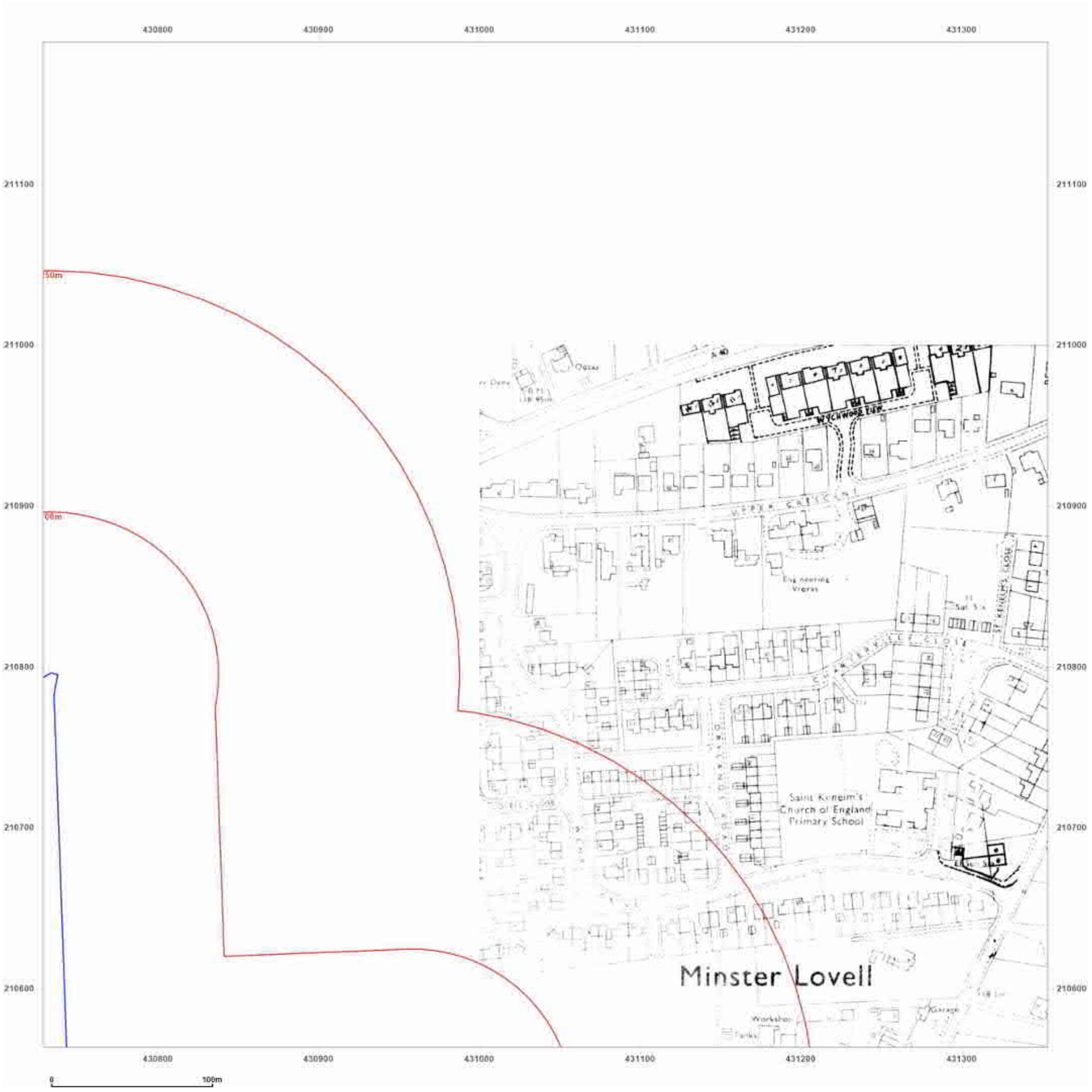

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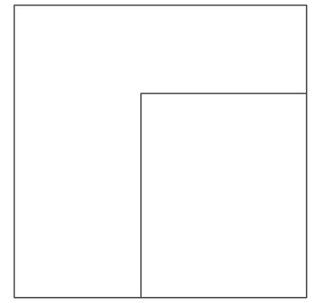
Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: National Grid
Map date: **1975**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S



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

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: National Grid
Map date: **1975**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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

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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

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Production date: 25 July 2022

Map legend available at:
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Site Details:

Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

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

N
W E
S

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

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

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

Surveyed 1973
Revised 1989
Edition N/A
Copyright 1989
Levelled 1973

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Client Ref: EMS_798145_989745
Report Ref: EMS-798145_1028414_LS_2_2
Grid Ref: 431041, 210876

Map Name: National Grid

Map date: **1990-1995**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

Surveyed 1973
Revised 1990
Edition N/A
Copyright 1990
Levelled 1973

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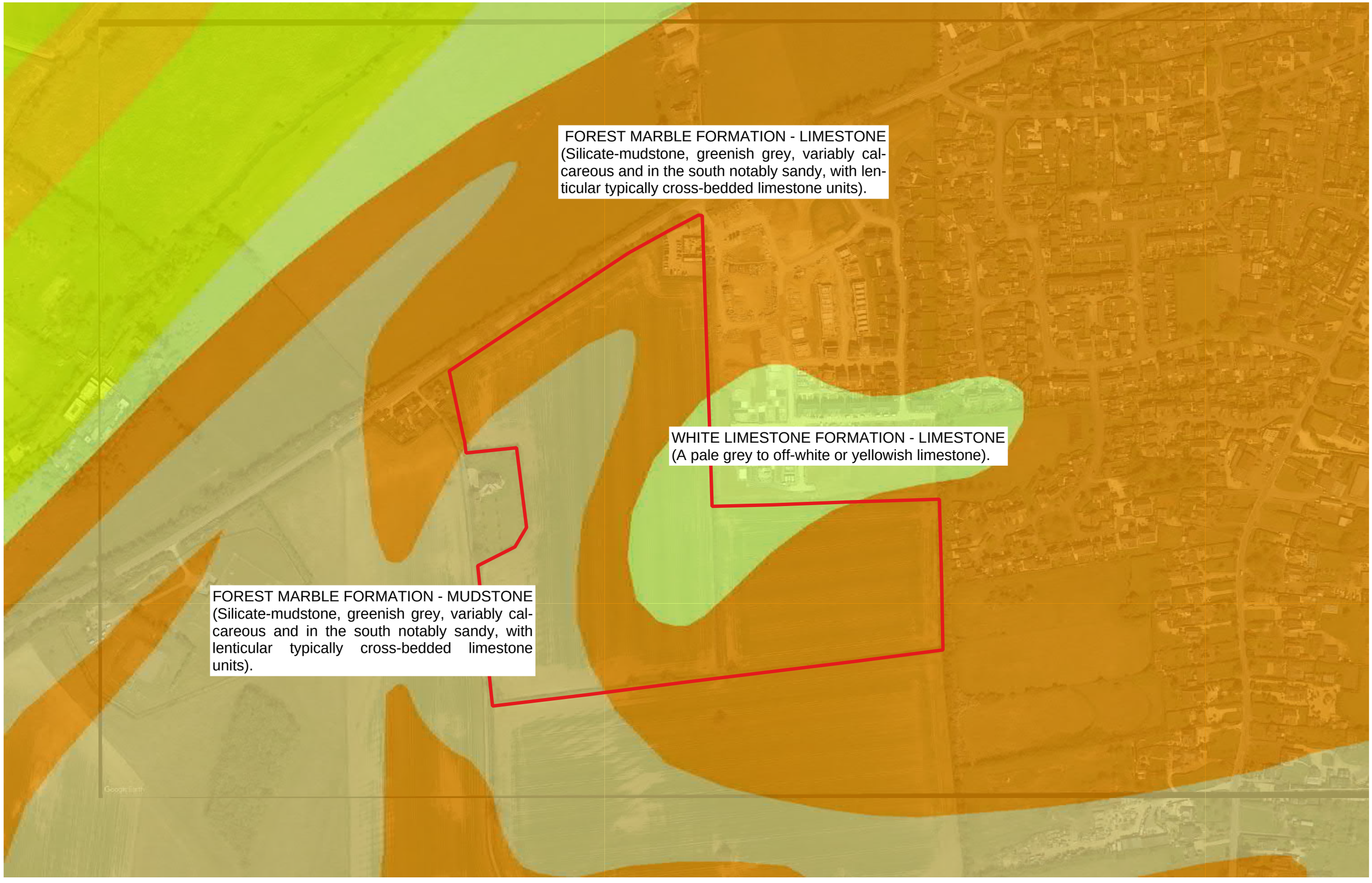
APPENDIX F



NOTES:

CLIENT: **Catesby Strategic Land Ltd**

PROJECT: **Land South of Burford Road, Minster Lovell**

TITLE: **Geology Plan**

PROJECT No:	DATE:	DESIGN/DRAWN:
P10086	08/2022	PW

DRAWING NUMBER:	ISSUE:
003	Final

GRM Development Solutions Ltd
Tel: 01283 551 249
mail@grm-uk.com www.grm-uk.com

APPENDIX G

RECORD of WELL or BORING

236

Survey No. W
1" N.S.
1" O.S.

at (house or farm) Whitehall SP31/12
Town, Village, &c. Minster Lovell County Oxon Six-inch map 31 NW/E
Exact site (unless a tracing from a map is supplied, give distance and direction from parish church, cross-roads or other object shown on maps). SP 3055 1009 Popular Edition of one-inch map Sheet Square 176
Surface level of ground ft. above Ordnance Datum. Well or Bore commenced at ft. below surface level of ground
Sunk ft., diameter ft. Bored ft.; diameter of boring; at top 6 in., at bottom 5 in.
Details of lining tubes (internal diameters preferred) 21' x 4½"; 37' x 5"
SP 31 SW/6
Water struck at depths of (feet)
Rest-level of water below / above top of Well or bore ft. Pumping level ft. Time of recovery hours
Suction at ft. depth. Yield : (i) on test c400 galls. per h, (ii) normal galls per
Quality (attach copy of analysis if available)
Made by H. J. Godwin, Ltd. for Messrs Leigh & Son Date of boring 1933
Information from H. J. Godwin, Ltd. Witney

GEOLOGICAL CLASSIFICATION (For survey use only)	NATURE OF STRATA (and any additional remarks)	THICKNESS Feet	THICKNESS Inches	DEPTH Feet	DEPTH Inches
F.M	Top done	4		4	
	Clay	23		27	
	White stone	13		40	
	do	6		46	
GO White	Blue clay	1		47	
	White stone	8		55	
	Blue clay	2		57	
	White stone	13		70	
	Blue clay	2		72	
	White stone	1	6	73	6

WHITE HALL, Minster Lovell.

Occupier now Mr. H. Brodtman, who stated the well on the tracing attached overleaf. Covering letter dated 26.VI.42 on file 9509/37.

ALB. 3.VII.42.

Sited on 6" Oxon 31/NW/E

Visited. Used for house and farm. —pigs etc. Electric automatic pump. O.D. 403.

10-4-57. ASR

APPENDIX H

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo
Insight

Order Details

Date: 25/07/2022

Your ref: EMS_798145_989745

Our Ref: EMS-798145_1028415

Site Details

Location: 430699 210515

Area: 11.54 ha

Authority: West Oxfordshire District Council

Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	Historical industrial land uses	0	1	0	7	-
14	1.2	Historical tanks	0	0	1	8	-
15	1.3	Historical energy features	0	0	1	2	-
15	1.4	Historical petrol stations	0	0	0	1	-
15	1.5	Historical garages	0	0	0	7	-
16	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
17	2.1	Historical industrial land uses	0	2	0	7	-
18	2.2	Historical tanks	0	0	1	9	-
19	2.3	Historical energy features	0	0	3	6	-
19	2.4	Historical petrol stations	0	0	0	2	-
20	2.5	Historical garages	0	0	0	10	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	4	-
23	3.6	Licensed waste sites	0	0	0	2	-
24	3.7	Waste exemptions	0	0	2	0	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
25	4.1	Recent industrial land uses	0	2	5	-	-
26	4.2	Current or recent petrol stations	0	0	0	1	-
26	4.3	Electricity cables	0	0	0	0	-
26	4.4	Gas pipelines	0	0	0	0	-
27	4.5	Sites determined as Contaminated Land	0	0	0	0	-

27	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
27	4.7	Regulated explosive sites	0	0	0	0	-
27	4.8	Hazardous substance storage/usage	0	0	0	0	-
27	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
28	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
28	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
28	4.12	Radioactive Substance Authorisations	0	0	0	0	-
28	**4.13**	**Licensed Discharges to controlled waters**	0	1	0	4	-
29	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
29	4.15	Pollutant release to public sewer	0	0	0	0	-
30	4.16	List 1 Dangerous Substances	0	0	0	0	-
30	4.17	List 2 Dangerous Substances	0	0	0	0	-
30	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
30	4.19	Pollution inventory substances	0	0	0	0	-
30	4.20	Pollution inventory waste transfers	0	0	0	0	-
31	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
32	**5.1**	**Superficial aquifer**	Identified (within 500m)				
34	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
36	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
37	**5.4**	**Groundwater vulnerability- soluble rock risk**	Identified (within 0m)				
37	5.5	Groundwater vulnerability- local information	None (within 0m)				
39	**5.6**	**Groundwater abstractions**	0	0	0	1	8
42	**5.7**	**Surface water abstractions**	0	0	0	2	6
44	**5.8**	**Potable abstractions**	0	0	0	2	4
45	5.9	Source Protection Zones	0	0	0	0	-
45	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
46	**6.1**	**Water Network (OS MasterMap)**	0	3	0	-	-

47	6.2	Surface water features	0	1	0	-	-
47	6.3	WFD Surface water body catchments	2	-	-	-	-
48	6.4	WFD Surface water bodies	0	0	0	-	-
48	6.5	WFD Groundwater bodies	1	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
49	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
49	7.2	Historical Flood Events	0	0	0	-	-
49	7.3	Flood Defences	0	0	0	-	-
50	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
50	7.5	Flood Storage Areas	0	0	0	-	-
51	7.6	Flood Zone 2	None (within 50m)				
51	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding	
52	8.1	Surface water flooding	1 in 30 year, 0.3m - 1.0m (within 50m)

Page	Section	Groundwater flooding	
54	9.1	Groundwater flooding	Low (within 50m)

Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
55	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	1
56	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
56	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
56	10.4	Special Protection Areas (SPA)	0	0	0	0	0
56	10.5	National Nature Reserves (NNR)	0	0	0	0	0
57	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
57	10.7	Designated Ancient Woodland	0	0	1	0	4
57	10.8	Biosphere Reserves	0	0	0	0	0
58	10.9	Forest Parks	0	0	0	0	0
58	10.10	Marine Conservation Zones	0	0	0	0	0
58	10.11	Green Belt	0	0	0	0	0
58	10.12	Proposed Ramsar sites	0	0	0	0	0

58	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
59	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
59	10.15	Nitrate Sensitive Areas	0	0	0	0	0
59	**10.16**	**Nitrate Vulnerable Zones**	3	0	0	0	1
60	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
61	**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
62	11.1	World Heritage Sites	0	0	0	-	-
63	**11.2**	**Area of Outstanding Natural Beauty**	0	1	0	-	-
63	11.3	National Parks	0	0	0	-	-
63	**11.4**	**Listed Buildings**	0	0	1	-	-
64	11.5	Conservation Areas	0	0	0	-	-
64	11.6	Scheduled Ancient Monuments	0	0	0	-	-
64	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
65	**12.1**	**Agricultural Land Classification**	Grade 3b (within 250m)				
66	12.2	Open Access Land	0	0	0	-	-
66	12.3	Tree Felling Licences	0	0	0	-	-
67	**12.4**	**Environmental Stewardship Schemes**	2	1	0	-	-
67	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
68	**13.1**	**Priority Habitat Inventory**	0	0	2	-	-
69	**13.2**	**Habitat Networks**	1	0	2	-	-
69	13.3	Open Mosaic Habitat	0	0	0	-	-
69	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
70	**14.1**	**10k Availability**	Identified (within 500m)				
71	14.2	Artificial and made ground (10k)	0	0	0	0	-
72	14.3	Superficial geology (10k)	0	0	0	0	-

72	14.4	Landslip (10k)	0	0	0	0	-
73	14.5	Bedrock geology (10k)	0	0	0	0	-
73	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
74	**15.1**	**50k Availability**	Identified (within 500m)				
75	**15.2**	**Artificial and made ground (50k)**	0	0	0	1	-
76	15.3	Artificial ground permeability (50k)	0	0	-	-	-
77	**15.4**	**Superficial geology (50k)**	0	0	0	2	-
78	15.5	Superficial permeability (50k)	None (within 50m)				
78	15.6	Landslip (50k)	0	0	0	0	-
78	15.7	Landslip permeability (50k)	None (within 50m)				
79	**15.8**	**Bedrock geology (50k)**	3	0	4	1	-
80	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				
80	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
81	**16.1**	**BGS Boreholes**	0	0	1	-	-
Page	Section	Natural ground subsidence					
82	**17.1**	**Shrink swell clays**	Low (within 50m)				
83	**17.2**	**Running sands**	Negligible (within 50m)				
84	**17.3**	**Compressible deposits**	Negligible (within 50m)				
85	**17.4**	**Collapsible deposits**	Very low (within 50m)				
86	**17.5**	**Landslides**	Very low (within 50m)				
87	**17.6**	**Ground dissolution of soluble rocks**	Very low (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
89	18.1	Natural cavities	0	0	0	0	-
90	**18.2**	**BritPits**	0	1	0	0	-
90	**18.3**	**Surface ground workings**	0	2	0	-	-
90	18.4	Underground workings	0	0	0	0	0
91	18.5	Historical Mineral Planning Areas	0	0	0	0	-

91	18.6	Non-coal mining	0	0	0	0	0
91	18.7	Mining cavities	0	0	0	0	0
91	18.8	JPB mining areas	None (within 0m)				
91	18.9	Coal mining	None (within 0m)				
92	18.10	Brine areas	None (within 0m)				
92	18.11	Gypsum areas	None (within 0m)				
92	18.12	Tin mining	None (within 0m)				
92	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
93	**19.1**	**Radon**	Between 1% and 3% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
95	**20.1**	**BGS Estimated Background Soil Chemistry**	8	4	-	-	-
96	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
96	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
97	21.1	Underground railways (London)	0	0	0	-	-
97	21.2	Underground railways (Non-London)	0	0	0	-	-
97	21.3	Railway tunnels	0	0	0	-	-
97	21.4	Historical railway and tunnel features	0	0	0	-	-
97	21.5	Royal Mail tunnels	0	0	0	-	-
98	21.6	Historical railways	0	0	0	-	-
98	21.7	Railways	0	0	0	-	-
98	21.8	Crossrail 1	0	0	0	0	-
98	21.9	Crossrail 2	0	0	0	0	-
98	21.10	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 24/08/2019

Site Area: 11.54ha

Recent site history - 2018 aerial photograph

Capture Date: 28/06/2018

Site Area: 11.54ha

Recent site history - 2015 aerial photograph

Capture Date: 26/09/2015

Site Area: 11.54ha

Recent site history - 2006 aerial photograph

Capture Date: 29/10/2006

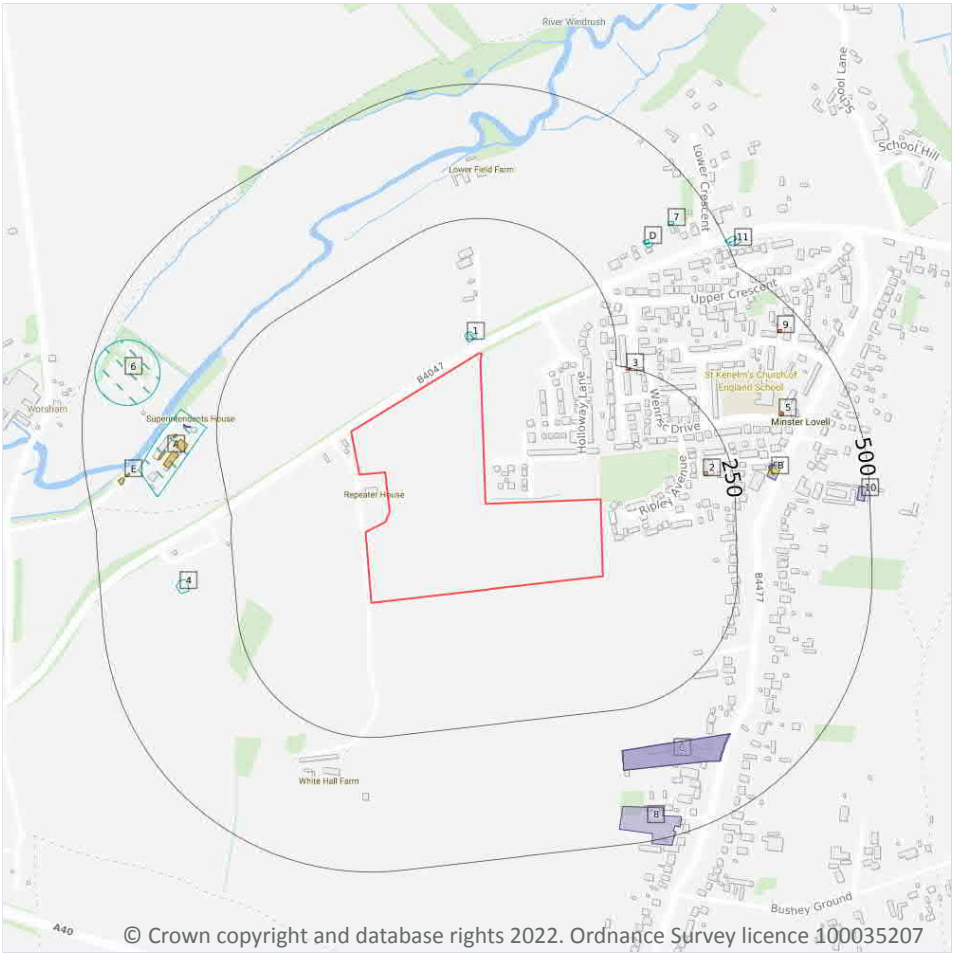
Site Area: 11.54ha

Recent site history - 1999 aerial photograph

Capture Date: 30/07/1999

Site Area: 11.54ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical petrol stations

Historical garages

1.1 Historical industrial land uses

Records within 500m	8

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 13**

ID	Location	Land use	Dates present	Group ID
1	27m NW	Unspecified Quarry	1922	1848257

ID	Location	Land use	Dates present	Group ID
A	269m W	Unspecified Works	1976	1771025
4	336m W	Unspecified Heap	1955	1755887
D	364m NE	Smithy	1922	1779278
D	365m NE	Smithy	1955	1779277
6	369m W	Old Gravel Pit	1955	1778678
7	420m NE	Smithy	1922	1779279
11	498m NE	Unspecified Old Quarry	1922 - 1955	1799029

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**9**

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
2	198m E	Tanks	1973	286305
A	304m W	Settling Tanks	1973	285722
A	323m W	Settling Tanks	1973	285723
A	325m W	Tanks	-	279729
A	325m W	Tanks	1994 - 1995	289724
A	325m W	Fluoride Tanks	1973	288250
A	346m W	Filter Tanks	1973	288119
E	418m W	Tanks	1995	286303
E	430m W	Tanks	1995	286304

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	3

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
3	247m N	Electricity Substation	1973 - 1990	184573
5	369m NE	Electricity Substation	1973 - 1990	186384
9	453m NE	Electricity Substation	1973 - 1990	181027

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	1

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
B	318m E	Filling Station	1989 - 1990	3190

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	7

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
A	298m W	Garages	1973	54914
B	312m E	Garage	1973	57120
B	318m E	Garage	1989 - 1990	59140
C	326m S	Commercial Vehicle Repair Depot	1973	55593
C	326m S	Commercial Vehicle Repair Depot	1989 - 1990	57991
8	429m S	Motor Cycle Repair Works	1971	54990
10	476m E	Garage	1989 - 1990	58605

This data is sourced from Ordnance Survey / Groundsure.

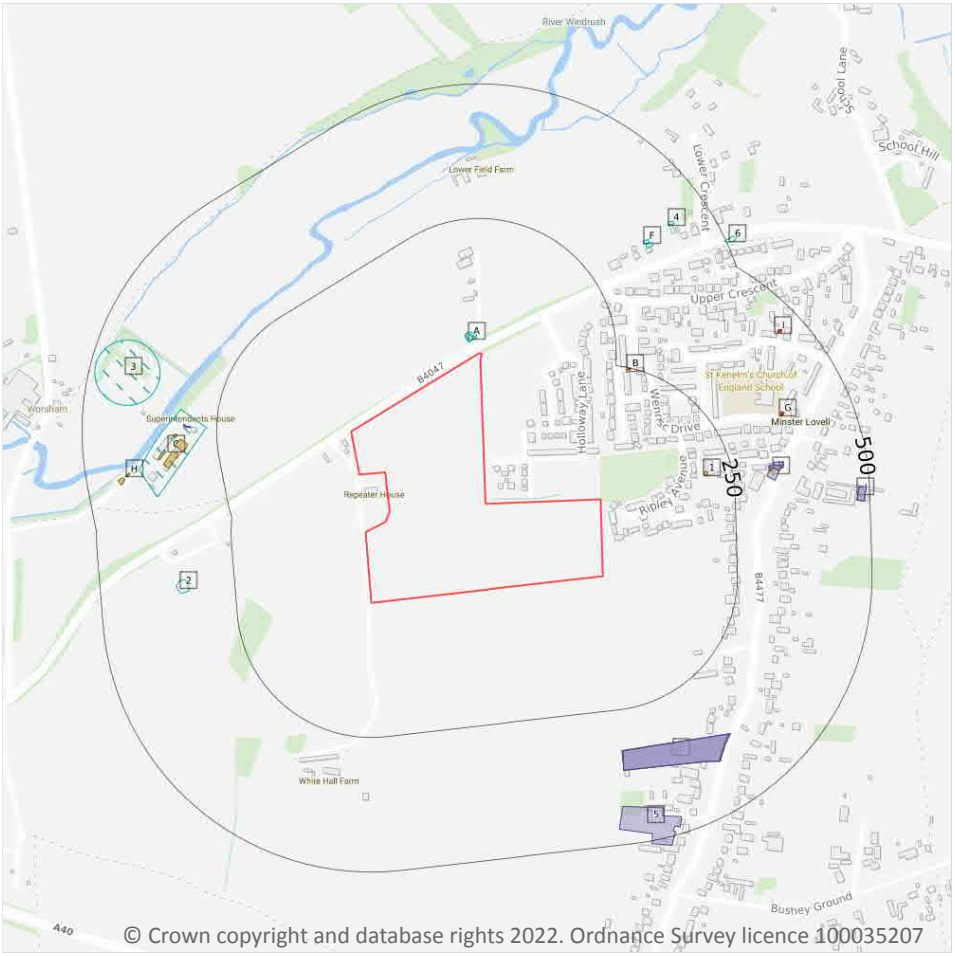
1.6 Historical military land

Records within 500m	**0**

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

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

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical petrol stations

Historical garages

2.1 Historical industrial land uses

Records within 500m	9

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 17**

ID	Location	Land Use	Date	Group ID
A	27m NW	Unspecified Quarry	1922	1848257
A	28m NW	Unspecified Quarry	1922	1848257
C	269m W	Unspecified Works	1976	1771025

ID	Location	Land Use	Date	Group ID
2	336m W	Unspecified Heap	1955	1755887
F	364m NE	Smithy	1922	1779278
F	365m NE	Smithy	1955	1779277
3	369m W	Old Gravel Pit	1955	1778678
4	420m NE	Smithy	1922	1779279
6	498m NE	Unspecified Old Quarry	1922	1799029

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**10**

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 17**

ID	Location	Land Use	Date	Group ID
1	198m E	Tanks	1973	286305
C	304m W	Settling Tanks	1973	285722
C	323m W	Settling Tanks	1973	285723
C	325m W	Tanks	1995	289724
C	325m W	Tanks	1994	289724
C	325m W	Tanks	-	279729
C	325m W	Fluoride Tanks	1973	288250
C	346m W	Filter Tanks	1973	288119
H	418m W	Tanks	1995	286303
H	430m W	Tanks	1995	286304

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	9

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 17**

ID	Location	Land Use	Date	Group ID
B	247m N	Electricity Substation	1990	184573
B	247m N	Electricity Substation	1989	184573
B	247m N	Electricity Substation	1973	184573
G	369m NE	Electricity Substation	1973	186384
G	370m NE	Electricity Substation	1990	186384
G	370m NE	Electricity Substation	1989	186384
I	453m NE	Electricity Substation	1990	181027
I	453m NE	Electricity Substation	1989	181027
I	454m NE	Electricity Substation	1973	181027

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	2

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'.

Features are displayed on the Past land use - un-grouped map on **page 17**

ID	Location	Land Use	Date	Group ID
D	318m E	Filling Station	1990	3190
D	318m E	Filling Station	1989	3190

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	10

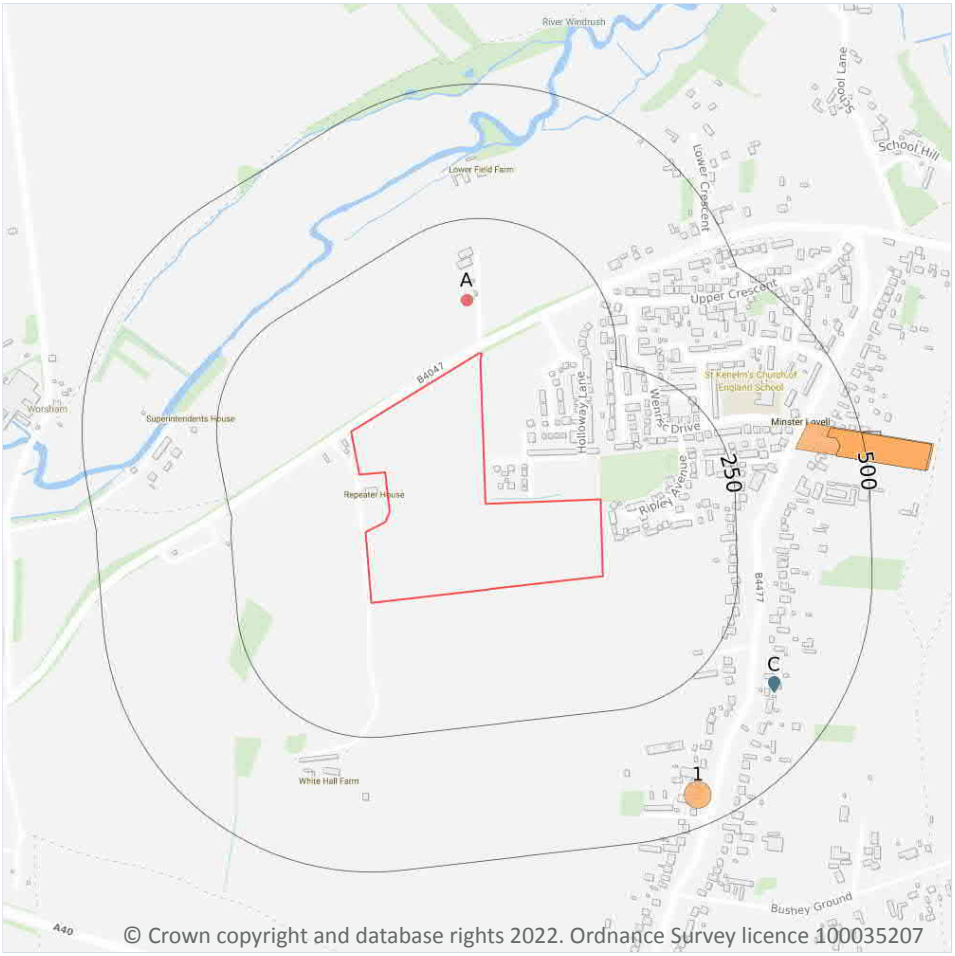
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17**

ID	Location	Land Use	Date	Group ID
C	298m W	Garages	1973	54914
D	312m E	Garage	1973	57120
D	318m E	Garage	1990	59140
D	318m E	Garage	1989	59140
E	326m S	Commercial Vehicle Repair Depot	1973	55593
E	326m S	Commercial Vehicle Repair Depot	1990	57991
E	326m S	Commercial Vehicle Repair Depot	1989	57991
5	429m S	Motor Cycle Repair Works	1971	54990
J	476m E	Garage	1990	58605
J	476m E	Garage	1989	58605

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	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	4

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

Features are displayed on the Waste and landfill map on **page 21**

ID	Location	Address	Further Details	Date
B	373m E	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1973
1	417m SE	Site Address: B&E Waste Recycling and Transf, 115 Brize Norton Road, Minster Lovell, Witney, Oxfordshire, OX29 0SQ	Type of Site: Waste Transfer Station Planning application reference: 16/01686/CM Description: Scheme comprises construction of new building in place of the one approved under permission 08/0220/P/CM to accommodate waste processing operations at B and E Waste Recycling and Transfer Facility. Scheme also includes Polycarbonate. Data source: Historic Planning Application Data Type: Point	10/03/2017
B	436m E	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1990

ID	Location	Address	Further Details	Date
B	436m E	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1989

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

3.6 Licensed waste sites

Records within 500m	**2**

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

Features are displayed on the Waste and landfill map on **page 21**

ID	Location	Details		
C	376m SE	Site Name: Brize Norton Transfer Station Site Address: Mr & Mrs A W Ebsworth, 115, Brize Norton Road, Minster Lovell, Oxon, OX29 0SQ Correspondence Address: Mr & Mrs A W Ebsworth, 115, Brize Norton Road, Minster Lovell, Oxon, OX8 5SQ	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EBS001 EPR reference: - Operator: Mr & Mrs A W Ebsworth Waste Management licence No: 86223 Annual Tonnage: 24999	Issue Date: 30/04/1999 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
C	376m SE	Site Name: B & E Waste Transfer Station Site Address: Mr & Mrs A W Ebsworth, 115, Brize Norton Road, Minster Lovell, Witney, Oxfordshire, OX29 0SQ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EBS001 EPR reference: EA/EPR/YP3299EV/V003 Operator: Ebworth Dorothy Jean Waste Management licence No: 86223 Annual Tonnage: 24999	Issue Date: 30/04/1999 Effective Date: - Modified: 24/08/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

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

3.7 Waste exemptions

Records within 500m	2

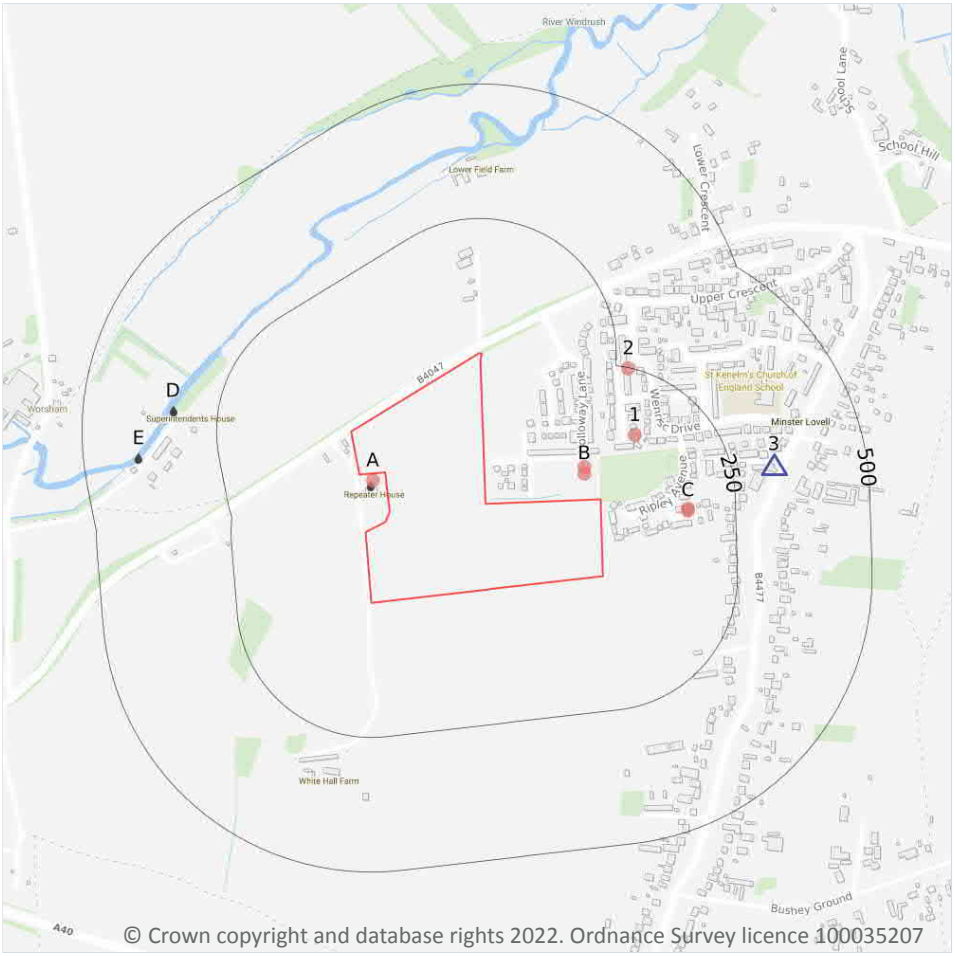
Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 21**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	100m N	FOLLY FARM, BURFORD ROAD, MINSTER LOVELL, WITNEY, OX29 0RZ	WEX036753	Disposing of waste exemption	On a farm	Burning waste in the open
A	100m N	Folly Farm Burford Road WITNEY Oxfordshire OX29 0RZ	EPR/TE5986MX/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Current or recent petrol stations

Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m	7

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 25**

ID	Location	Company	Address	Activity	Category
A	13m S	Repeater House	Oxfordshire, OX29	Telecommunications Features	Infrastructure and Facilities
B	49m N	Sewage Pumping Station	Oxfordshire, OX29	Waste Storage, Processing and Disposal	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
B	61m N	Electricity Sub Station	Oxfordshire, OX29	Electrical Features	Infrastructure and Facilities
1	135m NE	Oak Mill	8, Whitehall Close, Minster Lovell, Oxfordshire, OX29 0SB	Garden Goods	Consumer Products
C	161m E	Pumping Station	Oxfordshire, OX29	Water Pumping Stations	Industrial Features
C	161m E	Sewage Pumping Station	Oxfordshire, OX29	Waste Storage, Processing and Disposal	Infrastructure and Facilities
2	249m N	Electricity Sub Station	Oxfordshire, OX29	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**1**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 25**

ID	Location	Company	Address	LPG	Status
3	328m E	OBSOLETE	58, Brize Norton Road, Minster Lovell, Witney, Oxfordshire, OX29 0RY	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	5

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 25**

ID	Location	Address	Details	
A	22m S	THE OLD REPEATER STATION, BURFORD R, THE OLD REPEATER STATION BURFOR, D ROAD MINSTER LOVELL OXFORDSH, IRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: CNTW.0987 Permit Version: 1 Receiving Water: FOREST MARBLE CLY WTH LIMESTNE	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 08/03/1991 Effective Date: 08/03/1991 Revocation Date: 01/10/1996

ID	Location	Address	Details	
D	333m W	FORMER WATER TREATMENT WORKS, WATER WORKS, WORSHAM, WITNEY, OXFORDSHIRE, OX29 0RX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: CAWM.1395 Permit Version: 1 Receiving Water: THE RIVER WINDRUSH	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 20/10/2006 Effective Date: 01/10/2006 Revocation Date: 12/03/2017
D	333m W	FORMER WATER TREATMENT WORKS, WATER WORKS, WORSHAM, WITNEY, OXFORDSHIRE, OX29 0RX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: CAWM.1395 Permit Version: 2 Receiving Water: THE RIVER WINDRUSH	Status: VARIED UNDER EPR 2010 Issue date: 13/03/2017 Effective Date: 13/03/2017 Revocation Date: -
E	398m W	Worsham, Combined Effluent via Lago, Worsham, Combined Effluent via Lagoon	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - WATER COMPANY (WTW) Permit Number: TEMP.3080 Permit Version: 1 Receiving Water: WINDRUSH	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 12/09/1989 Effective Date: 12/09/1989 Revocation Date: 03/03/2009
E	398m W	WORSHAM WTW, WORSHAM, WITNEY, OXON, WORSHAM WTW WORSHAM WITNEY OX, ON	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CSSC.1459 Permit Version: 1 Receiving Water: RIVER WINDRUSH	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 10/10/1985 Effective Date: 10/10/1985 Revocation Date: 03/03/2009

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	0

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

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

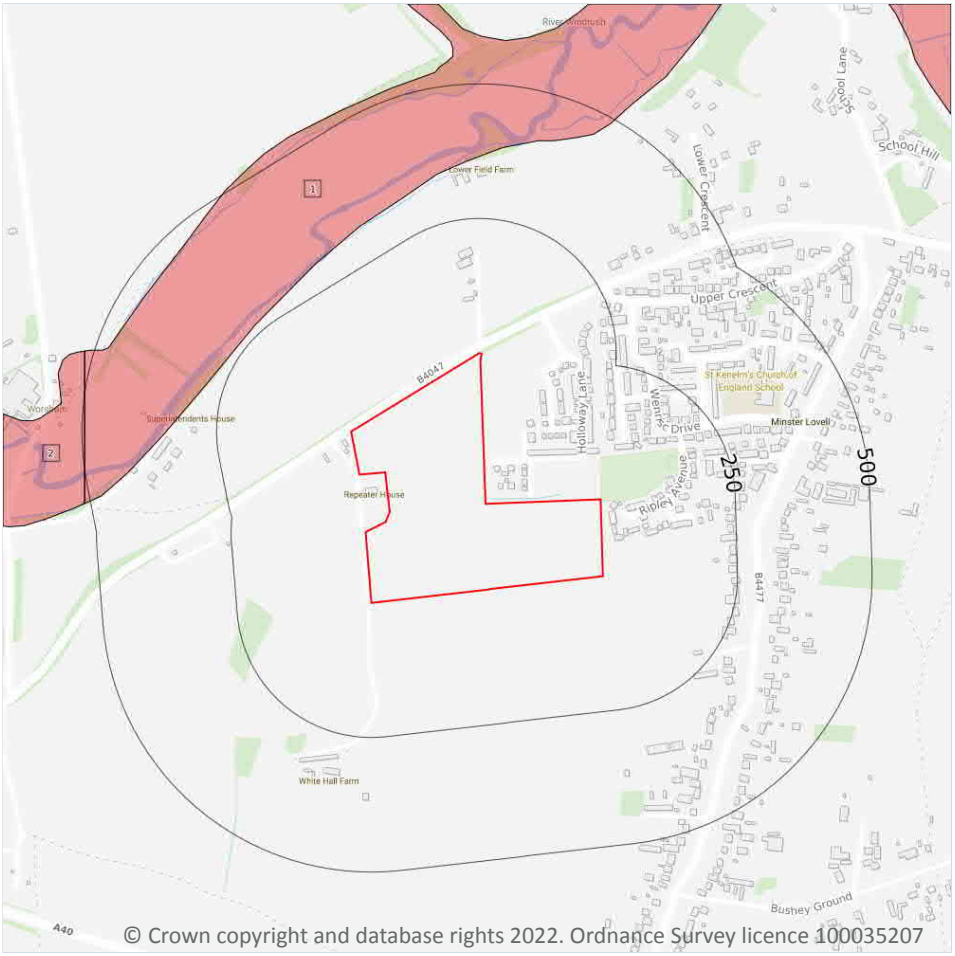
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	2

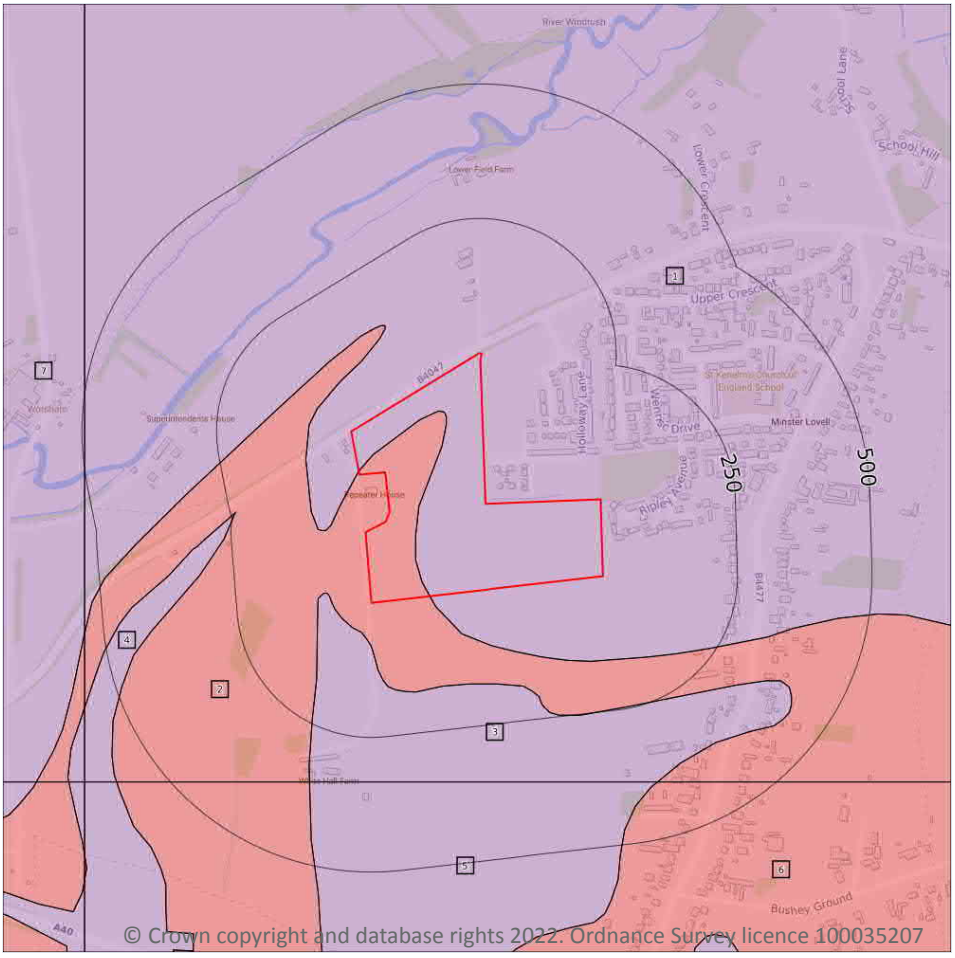
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 32**

ID	Location	Designation	Description
1	263m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	495m 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



5.2 Bedrock aquifer

Records within 500m	7

Aquifer status of groundwater held within bedrock geology.

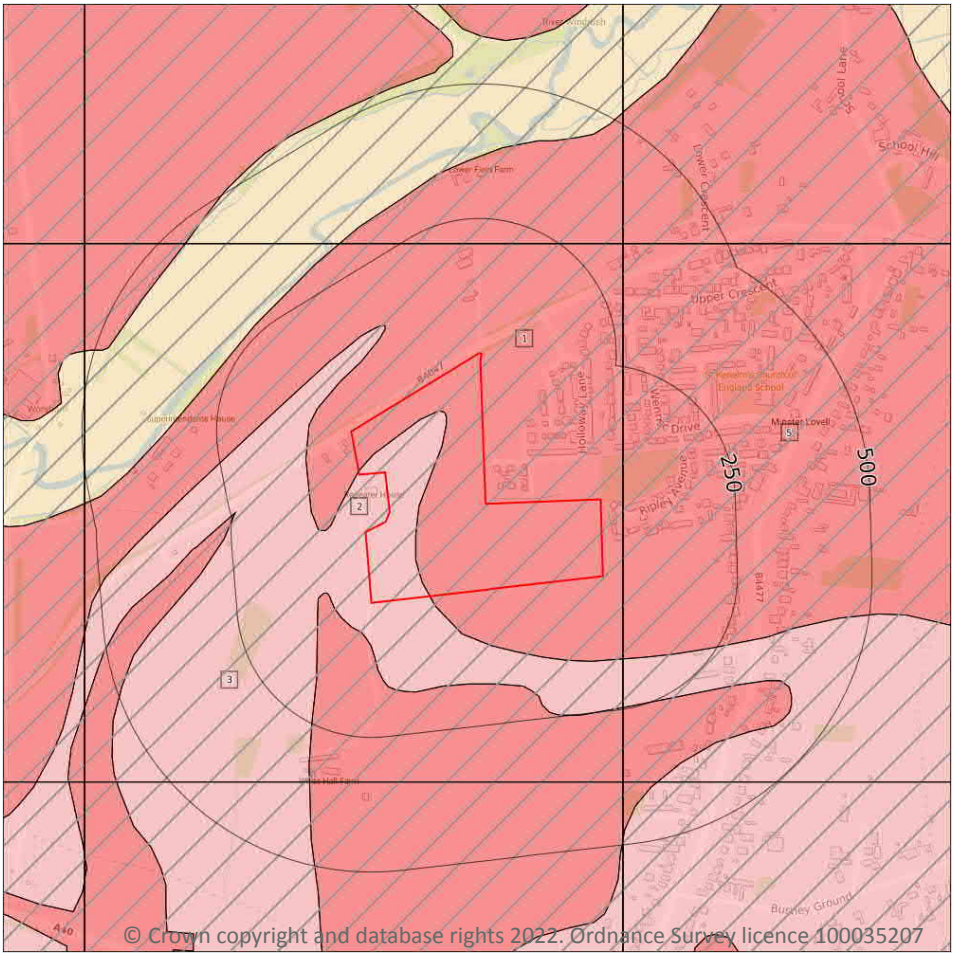
Features are displayed on the Bedrock aquifer map on **page 34**

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ID	Location	Designation	Description
3	57m SW	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
4	241m W	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
5	333m S	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
6	352m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
7	495m W	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

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

Bedrock vulnerability

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

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	3

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

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

Features are displayed on the Groundwater vulnerability map on **page 36**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures**
3	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
5	37m E	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal 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	**1**

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
2	**Significant soluble rocks are likely to be present. Low possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow.**	**10.0%**

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

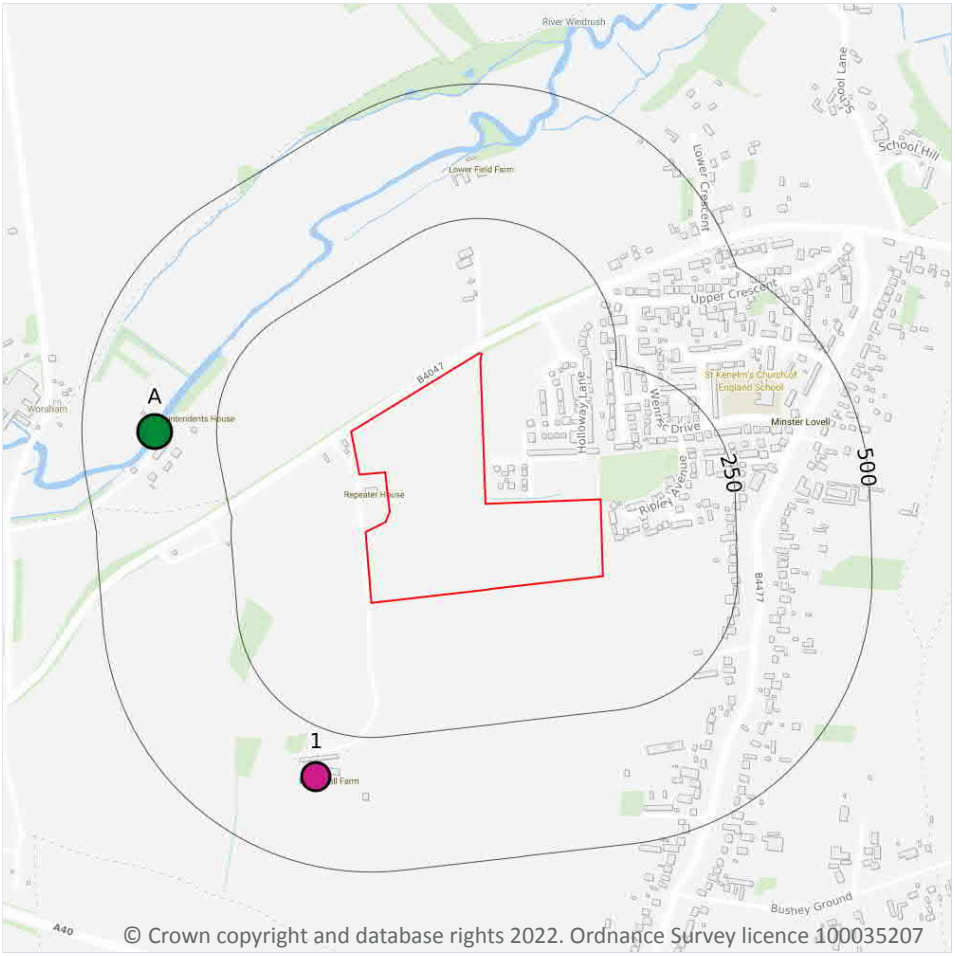
5.5 Groundwater vulnerability- local information

Records on site	**0**

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

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	9

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 39**

ID	Location	Details	
1	338m S	Status: Historical Licence No: 28/39/09/0037 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: WHITE HALL, MINSTER LOVELL, OXON Data Type: Point Name: MORTEZAEE Easting: 430430 Northing: 210010	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 101 Version Start Date: 09/09/1999 Version End Date: -
-	1406m NW	Status: Historical Licence No: 28/39/10/0056 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: ASTHALL FARM, BURFORD (A) Data Type: Point Name: S WALKER & SONS Easting: 429200 Northing: 211200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 13/06/1989 Version End Date: -
-	1605m NW	Status: Historical Licence No: 28/39/10/0175 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: SWINBROOK ESTATE - POINT D - WELL Data Type: Point Name: SWINBROOK ESTATE Easting: 429280 Northing: 211700	Annual Volume (m^3): 8601 Max Daily Volume (m^3): 32.4 Original Application No: - Original Start Date: 19/08/2002 Expiry Date: - Issue No: 1 Version Start Date: 17/12/2014 Version End Date: -
-	1605m NW	Status: Historical Licence No: 28/39/10/0175 Details: General Use Relating To Secondary Category (High Loss) Direct Source: THAMES GROUNDWATER Point: SWINBROOK ESTATE - POINT D - WELL Data Type: Point Name: SWINBROOK ESTATE Easting: 429280 Northing: 211700	Annual Volume (m^3): 8601 Max Daily Volume (m^3): 32.4 Original Application No: - Original Start Date: 19/08/2002 Expiry Date: - Issue No: 1 Version Start Date: 17/12/2014 Version End Date: -
-	1638m SE	Status: Historical Licence No: 28/39/10/0176 Details: Spray Irrigation - Storage Direct Source: THAMES GROUNDWATER Point: WITNEY GOLF CLUB, DOWNS ROAD, WITNEY - BOREHOLE Data Type: Point Name: WITNEY LAKES RESORT LIMITED Easting: 432381 Northing: 209562	Annual Volume (m^3): 8500 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 31/01/2003 Expiry Date: 31/03/2015 Issue No: 2 Version Start Date: 20/08/2013 Version End Date: -

ID	Location	Details	
-	1638m SE	Status: Active Licence No: 28/39/10/0176/R01 Details: Spray Irrigation - Storage Direct Source: THAMES GROUNDWATER Point: WITNEY GOLF CLUB, DOWNS ROAD, WITNEY - BOREHOLE Data Type: Point Name: WITNEY LAKES RESORT LIMITED Easting: 432381 Northing: 209562	Annual Volume (m^3): 8,500 Max Daily Volume (m^3): 25 Original Application No: NPS/WR/016891 Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2015 Version End Date: -
-	1638m SE	Status: Historical Licence No: 28/39/10/0176 Details: Spray Irrigation - Storage Direct Source: THAMES GROUNDWATER Point: WITNEY GOLF CLUB, DOWNS ROAD, WITNEY - BOREHOLE Data Type: Point Name: WITNEY GOLF CLUB LTD Easting: 432380 Northing: 209560	Annual Volume (m^3): 8500 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 31/01/2003 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -
-	1737m W	Status: Historical Licence No: 28/39/10/0145 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: ASTHALL FARM, BURFORD B/H A Data Type: Point Name: WORSDELL Easting: 428800 Northing: 210200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 02/02/1989 Expiry Date: - Issue No: 101 Version Start Date: 16/07/2002 Version End Date: -
-	1737m W	Status: Historical Licence No: 28/39/10/0145 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: ASTHALL FARM, BURFORD B/H A Data Type: Point Name: WORSDELL Easting: 428800 Northing: 210200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 02/02/1989 Expiry Date: - Issue No: 101 Version Start Date: 16/07/2002 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**8**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 39**

ID	Location	Details	
A	365m W	Status: Historical Licence No: 28/39/10/0040 Details: Potable Water Supply - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: WORSHAM WATERWORKS POINT A Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 430130 Northing: 210650	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/11/1966 Version End Date: -
A	365m W	Status: Historical Licence No: 28/39/10/0131 Details: Potable Water Supply - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: WORSHAM WATERWORKS POINT A Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 430130 Northing: 210650	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 04/07/1977 Expiry Date: - Issue No: 100 Version Start Date: 04/07/1977 Version End Date: -
-	1104m NE	Status: Active Licence No: TH/039/0010/002 Details: Hydroelectric Power Generation Direct Source: THAMES SURFACE WATER - NON TIDAL Point: HYDRO SCHEME-RIVER WINDRUSH Data Type: Point Name: Solkin Easting: 431734 Northing: 211311	Annual Volume (m^3): 28,401,840 Max Daily Volume (m^3): 129,600 Original Application No: NPS/WR/005835 Original Start Date: 30/09/2011 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/12/2014 Version End Date: -
-	1222m NE	Status: Active Licence No: TH/039/0010/004 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: THAMES SURFACE WATER - NON TIDAL Point: TRANSFER LICENCE ON RIVER WINDRUSH Data Type: Point Name: Solkin Easting: 431659 Northing: 211598	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/WR/007931 Original Start Date: 30/09/2011 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 30/09/2011 Version End Date: -

ID	Location	Details	
-	1405m NW	Status: Historical Licence No: 28/39/10/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER WINDRUSH AT SWINBROOK, BURFORD Data Type: Point Name: SWINBROOK ESTATE Easting: 429450 Northing: 211590	Annual Volume (m^3): 8601 Max Daily Volume (m^3): 32.4 Original Application No: - Original Start Date: 12/12/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2012 Version End Date: -
-	1405m NW	Status: Historical Licence No: 28/39/10/0070 Details: General Use Relating To Secondary Category (High Loss) Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER WINDRUSH AT SWINBROOK, BURFORD Data Type: Point Name: SWINBROOK ESTATE Easting: 429450 Northing: 211590	Annual Volume (m^3): 8601 Max Daily Volume (m^3): 32.4 Original Application No: - Original Start Date: 12/12/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2012 Version End Date: -
-	1590m NW	Status: Historical Licence No: 28/39/10/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES SURFACE WATER - NON TIDAL Point: SWINBROOK ESTATE, BURFORD (D) Data Type: Point Name: SWINBROOK ESTATE Easting: 429300 Northing: 211700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 12/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/04/1991 Version End Date: -
-	1590m NW	Status: Historical Licence No: 28/39/10/0070 Details: General use relating to Secondary Category (High Loss) Direct Source: THAMES SURFACE WATER - NON TIDAL Point: SWINBROOK ESTATE, BURFORD (D) Data Type: Point Name: SWINBROOK ESTATE Easting: 429300 Northing: 211700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 12/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/04/1991 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	6

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 39**

ID	Location	Details	
A	365m W	Status: Historical Licence No: 28/39/10/0040 Details: Potable Water Supply - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: WORSHAM WATERWORKS POINT A Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 430130 Northing: 210650	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/11/1966 Version End Date: -
A	365m W	Status: Historical Licence No: 28/39/10/0131 Details: Potable Water Supply - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: WORSHAM WATERWORKS POINT A Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 430130 Northing: 210650	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 04/07/1977 Expiry Date: - Issue No: 100 Version Start Date: 04/07/1977 Version End Date: -
-	1405m NW	Status: Historical Licence No: 28/39/10/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER WINDRUSH AT SWINBROOK, BURFORD Data Type: Point Name: SWINBROOK ESTATE Easting: 429450 Northing: 211590	Annual Volume (m^3): 8601 Max Daily Volume (m^3): 32.4 Original Application No: - Original Start Date: 12/12/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2012 Version End Date: -
-	1590m NW	Status: Historical Licence No: 28/39/10/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES SURFACE WATER - NON TIDAL Point: SWINBROOK ESTATE, BURFORD (D) Data Type: Point Name: SWINBROOK ESTATE Easting: 429300 Northing: 211700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 12/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/04/1991 Version End Date: -

ID	Location	Details	
-	1605m NW	Status: Historical Licence No: 28/39/10/0175 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: SWINBROOK ESTATE - POINT D - WELL Data Type: Point Name: SWINBROOK ESTATE Easting: 429280 Northing: 211700	Annual Volume (m^3): 8601 Max Daily Volume (m^3): 32.4 Original Application No: - Original Start Date: 19/08/2002 Expiry Date: - Issue No: 1 Version Start Date: 17/12/2014 Version End Date: -
-	1737m W	Status: Historical Licence No: 28/39/10/0145 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: ASTHALL FARM, BURFORD B/H A Data Type: Point Name: WORSDELL Easting: 428800 Northing: 210200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 02/02/1989 Expiry Date: - Issue No: 101 Version Start Date: 16/07/2002 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m	**0**

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

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

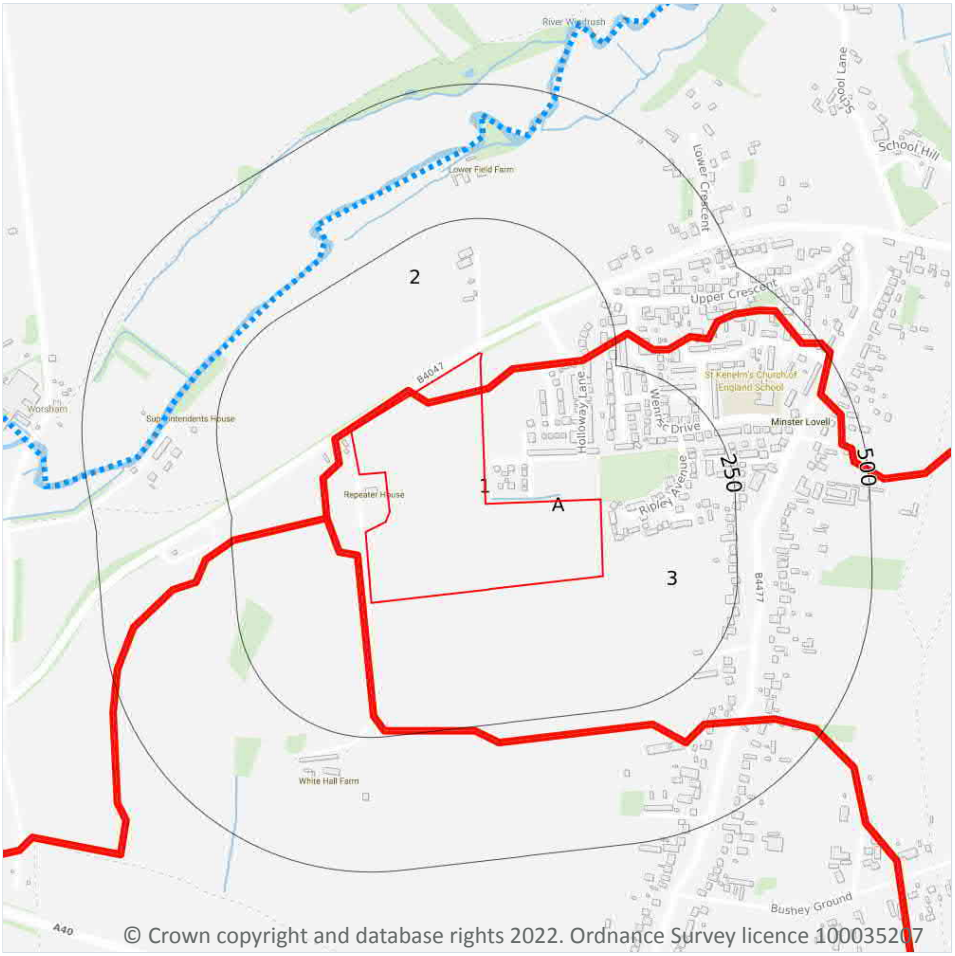
5.10 Source Protection Zones (confined aquifer)

Records within 500m	**0**

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	3

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 46**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	5m 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
A	6m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	6m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	1

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 46**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	2

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 46**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
2	**On site**	**River**	**Windrush and tributaries (Little Rissington to Thames)**	**GB106039030440**	**Windrush**	**Cotswolds**
3	**On site**	**River**	**Radcot Cut**	**GB106039030231**	**Windrush**	**Cotswolds**

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

6.4 WFD Surface water bodies

Records identified	2

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

Features are displayed on the Hydrology map on **page 46**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	277m NW	River	Windrush and tributaries (Little Rissington to Thames)	GB106039030440	Moderate	Fail	Moderate	2019
-	9445m S	River	Radcot Cut	GB106039030231	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 46**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	**On site**	**Burford Jurassic**	**GB40601G600400**	**Poor**	**Poor**	**Good**	**2019**

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

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

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

7.2 Historical Flood Events

Records within 250m	0

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

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

7.3 Flood Defences

Records within 250m	0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

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

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

7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

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

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

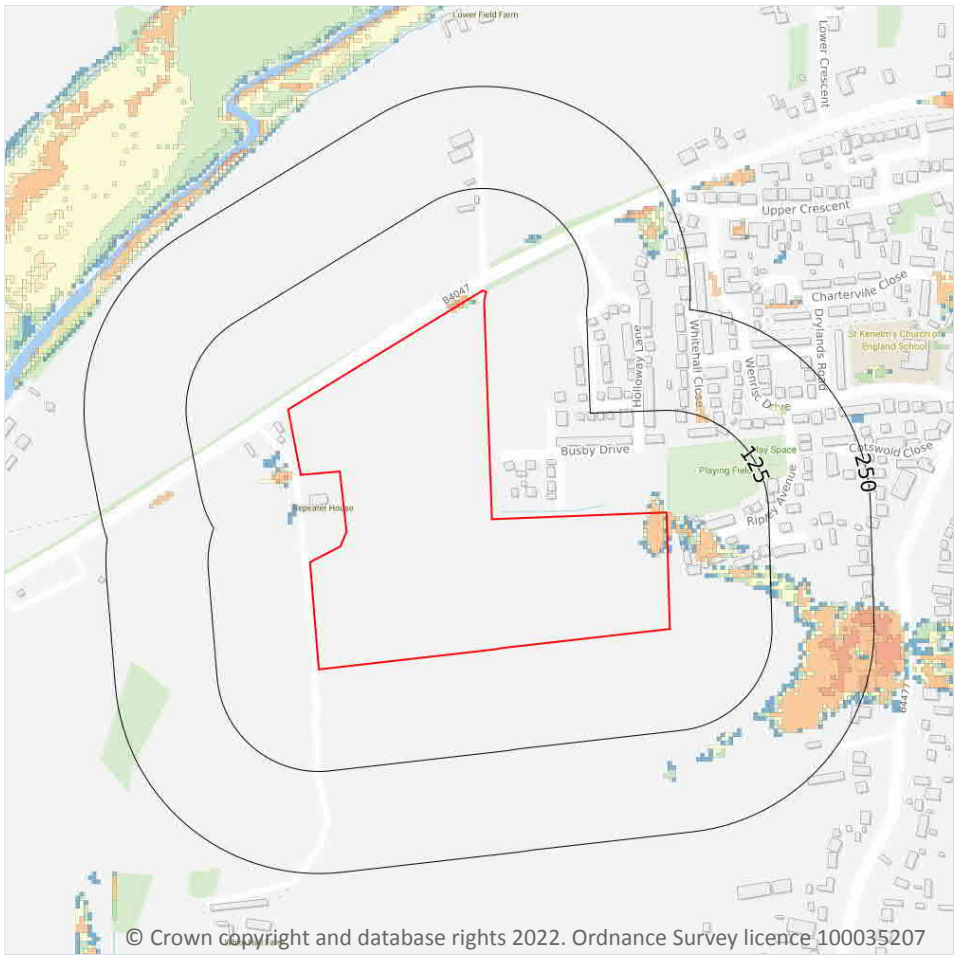
7.7 Flood Zone 3

Records within 50m	0

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

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

8 Surface water flooding



Site Outline
Search buffers in metres (m)

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

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

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

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

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
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 52**

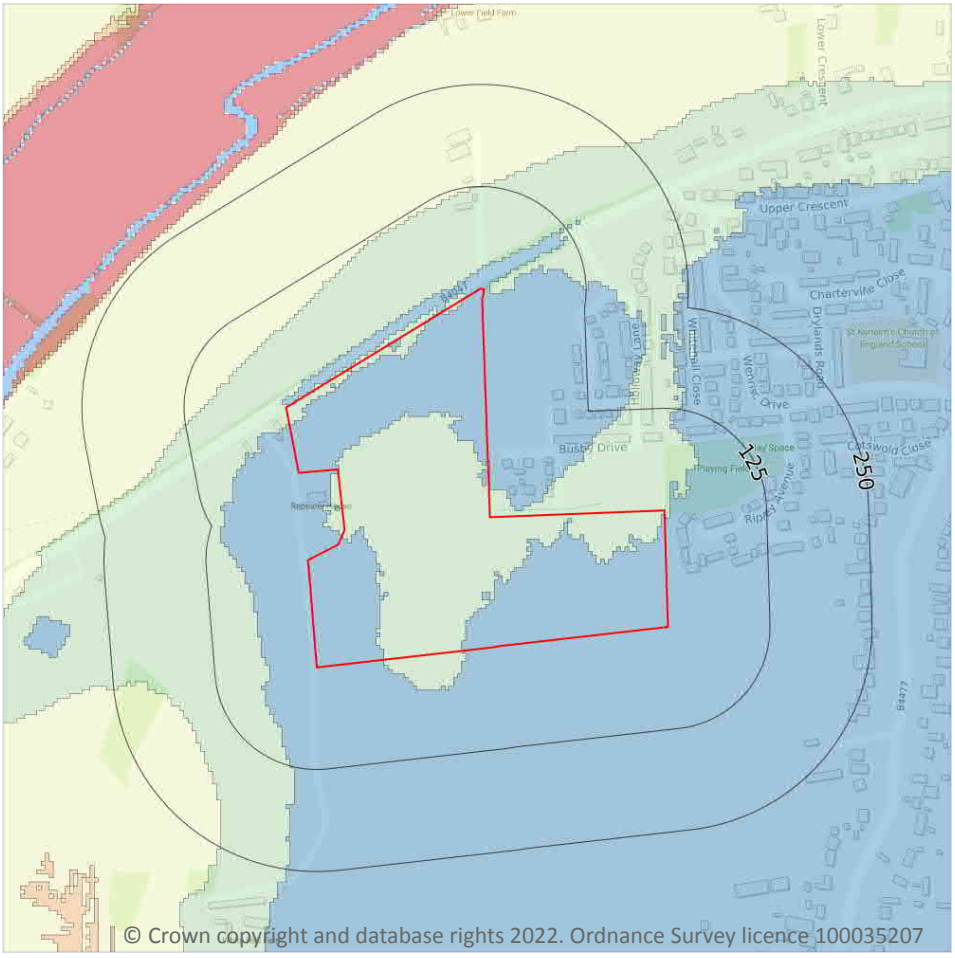
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

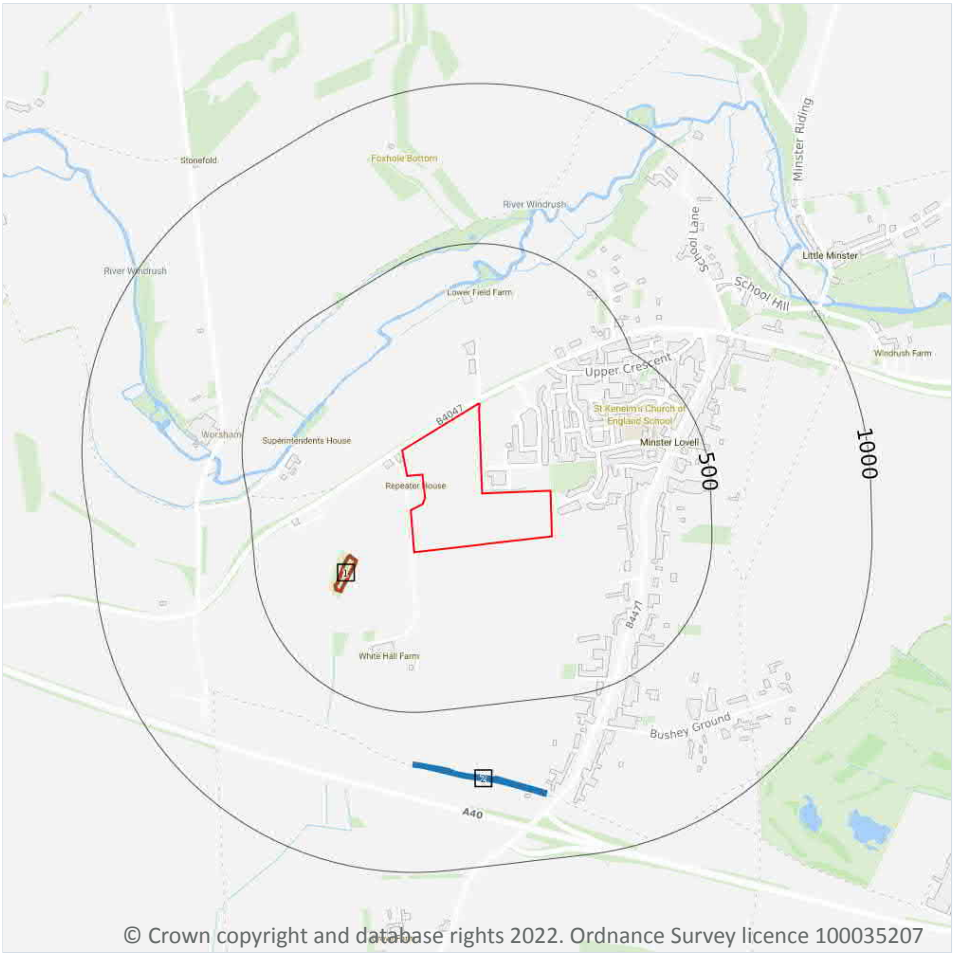
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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

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

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

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 55**

ID	Location	Name	Data source
2	660m S	Worsham Lane	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	0

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

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

10.7 Designated Ancient Woodland

Records within 2000m	5

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

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

ID	Location	Name	Woodland Type
1	184m W	Unknown	Ancient & Semi-Natural Woodland
-	1615m NE	Standridge Copse	Ancient & Semi-Natural Woodland
-	1618m N	The Grove	Ancient & Semi-Natural Woodland
-	1994m N	Wisdom's Copse	Ancient & Semi-Natural Woodland
-	1994m N	Stockley Copse	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

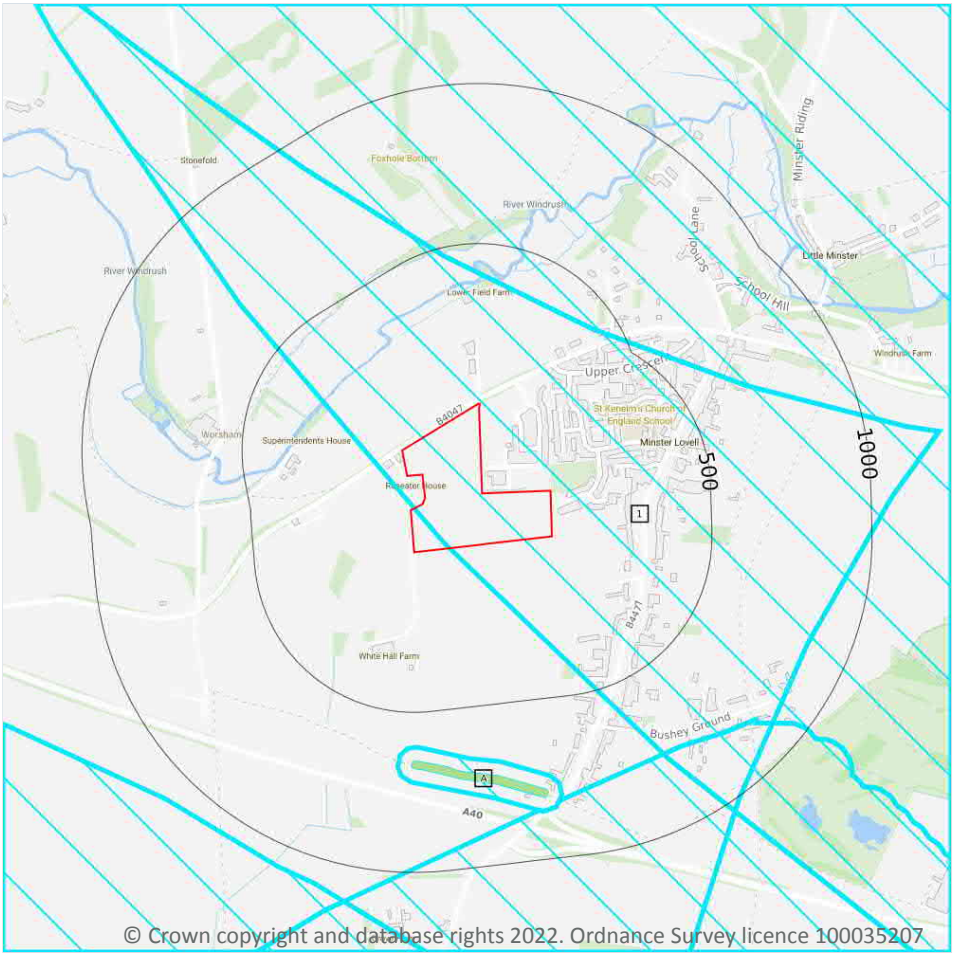
Records within 2000m	4

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	**Windrush and tributaries (Little Rissington to Thames) NVZ**	**Surface Water**	**483**	**Existing**
On site	**Cotswold Jurassic**	**Groundwater**	**83**	**Existing**
On site	**Great brook (Shill Brook to Thames) NVZ**	**Surface Water**	**471**	**Existing**
1685m SW	Cotswold Jurassic	Groundwater	83	Existing

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

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

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

10.17 SSSI Impact Risk Zones

Records on site	1

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

Features are displayed on the SSSI Impact Zones and Units map on **page 60**

ID	Location	Type of developments requiring consultation
1	**On site**	**Minerals, Oil and Gas - Oil & gas exploration/extraction.**

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.

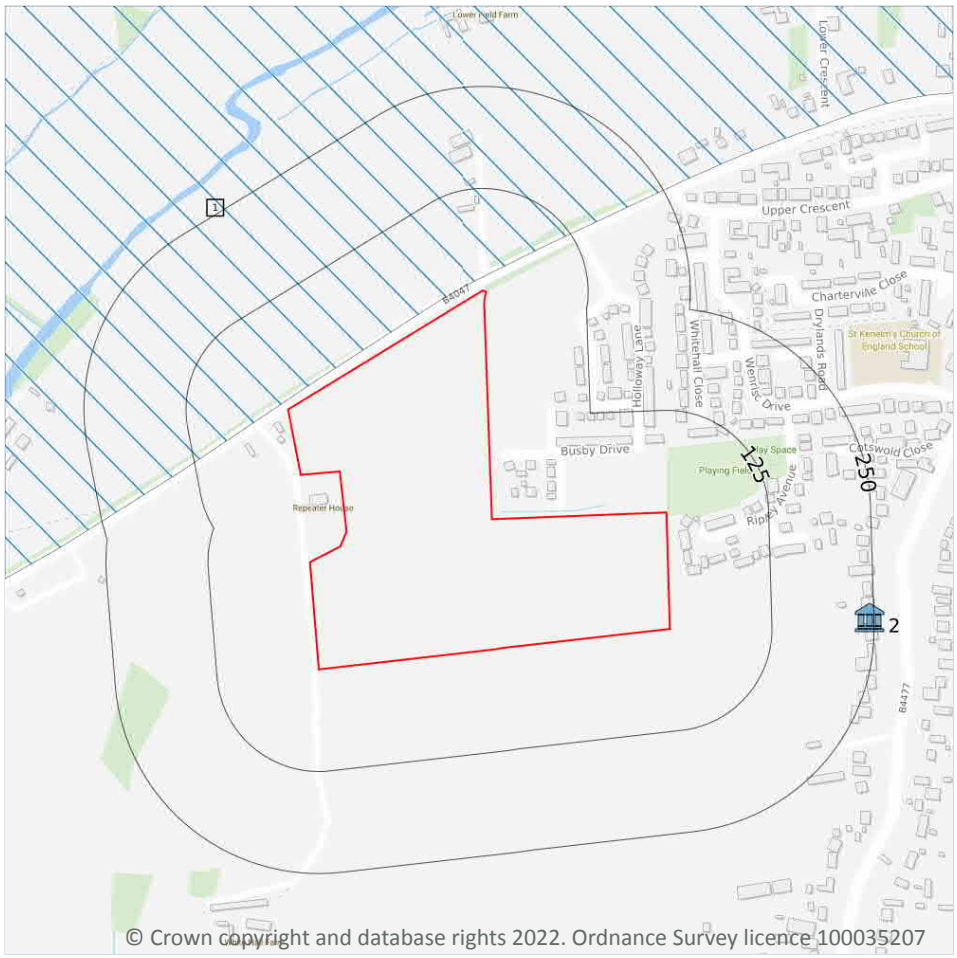
Features are displayed on the SSSI Impact Zones and Units map on **page 60**

ID: A
Location: 660m S
SSSI name: Worsham Lane
Unit name: Worsham Lane
Broad habitat: Boundary And Linear Features
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Stachys germanica, Downy Woundwort	Favourable	29/06/2014

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

11 Visual and cultural designations



Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	1

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.

Features are displayed on the Visual and cultural designations map on **page 62**

ID	Location	NAME	Data Source
1	10m NW	Cotswolds	Natural England

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	1

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

Features are displayed on the Visual and cultural designations map on **page 62**

ID	Location	Name	Grade	Reference Number	Listed date
2	244m E	86, Brize Norton Road, Minster Lovell, West Oxfordshire, Oxfordshire, OX29	II	1200264	07/07/1977

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

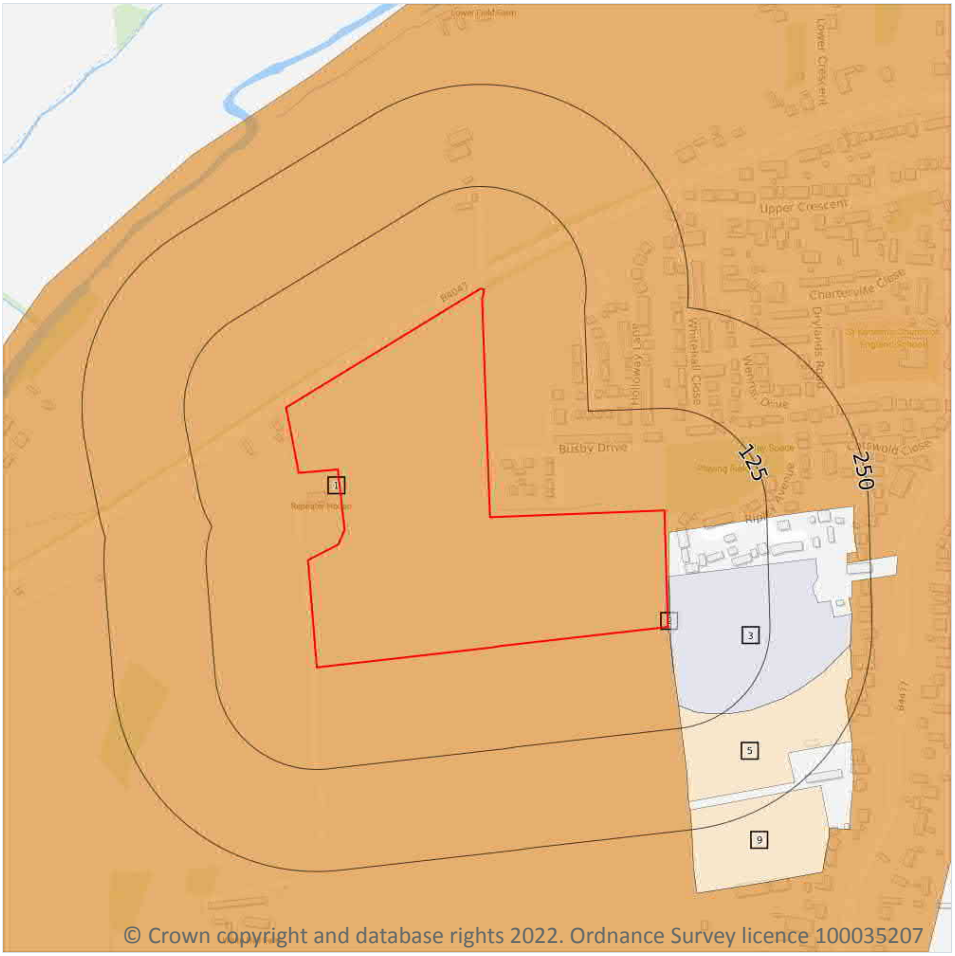
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

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

12.1 Agricultural Land Classification

Records within 250m	5

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

Features are displayed on the Agricultural designations map on **page 65**

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

ID	Location	Classification	Description
2	1m E	Grade 4	Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.
3	3m E	Grade 4	Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.
5	97m S	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
9	225m S	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

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

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

12.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	3

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

Location	Reference	Scheme	Start Date	End date
On site	**AG00422360**	**Entry Level plus Higher Level Stewardship**	**01/10/2013**	**30/09/2023**
On site	**AG00422360**	**Entry Level plus Higher Level Stewardship**	**01/10/2013**	**30/09/2023**
20m NW	AG00602374	Entry Level Stewardship	01/09/2014	31/08/2019

This data is sourced from Natural England.

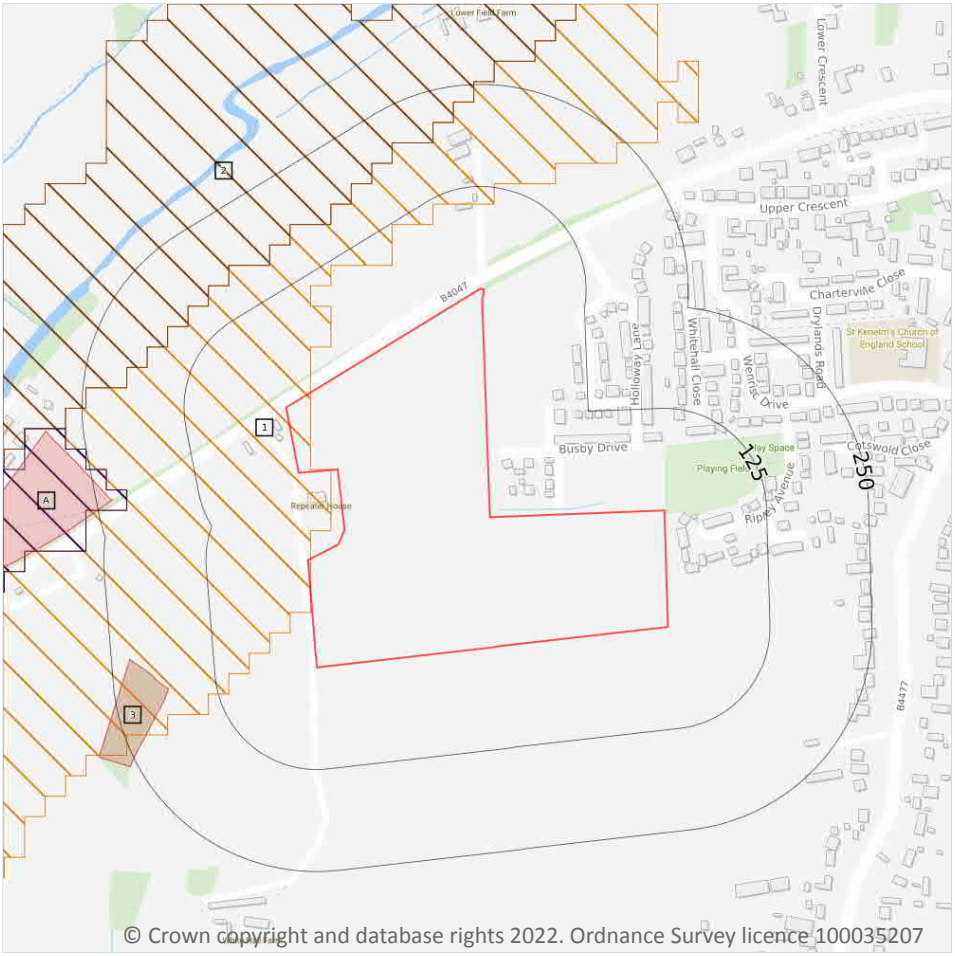
12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

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

13.1 Priority Habitat Inventory

Records within 250m	2

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 68**

ID	Location	Main Habitat	Other habitats
3	184m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	231m W	Lowland calcareous grassland	Main habitat: LCGRA (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	3

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.

Features are displayed on the Habitat designations map on **page 68**

ID	Location	Type	Habitat
1	**On site**	**Network Enhancement Zone 1**	**Not specified**
2	156m NW	Network Enhancement Zone 2	Not specified
A	211m W	Primary Habitat	Lowland calcareous grassland

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

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

This data is sourced from Natural England.

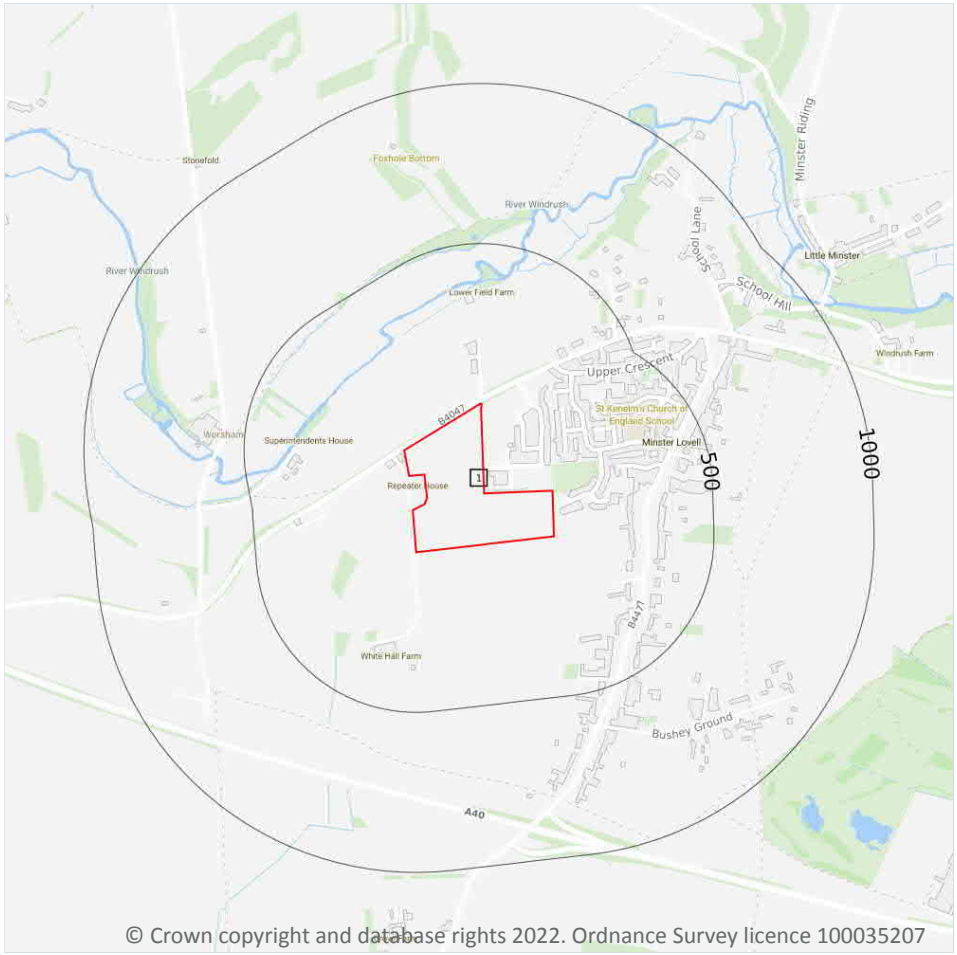
13.4 Limestone Pavement Orders

Records within 250m	0

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 70**

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

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

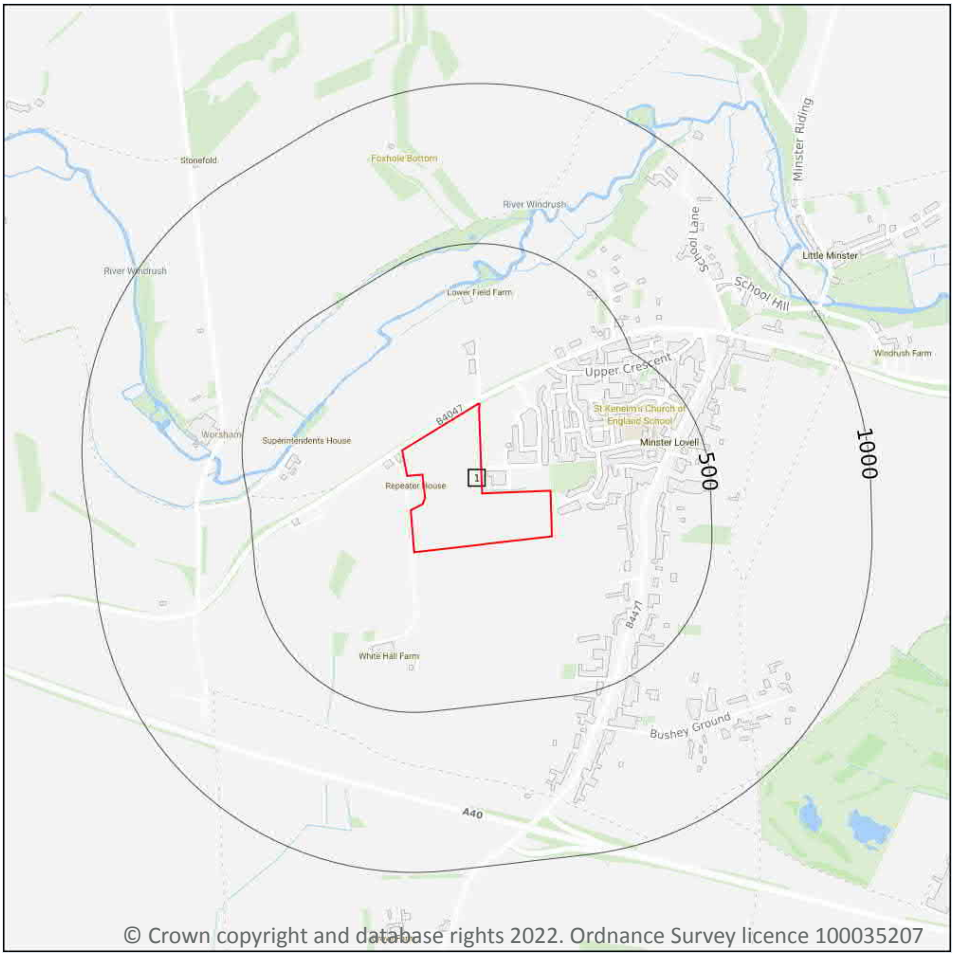
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

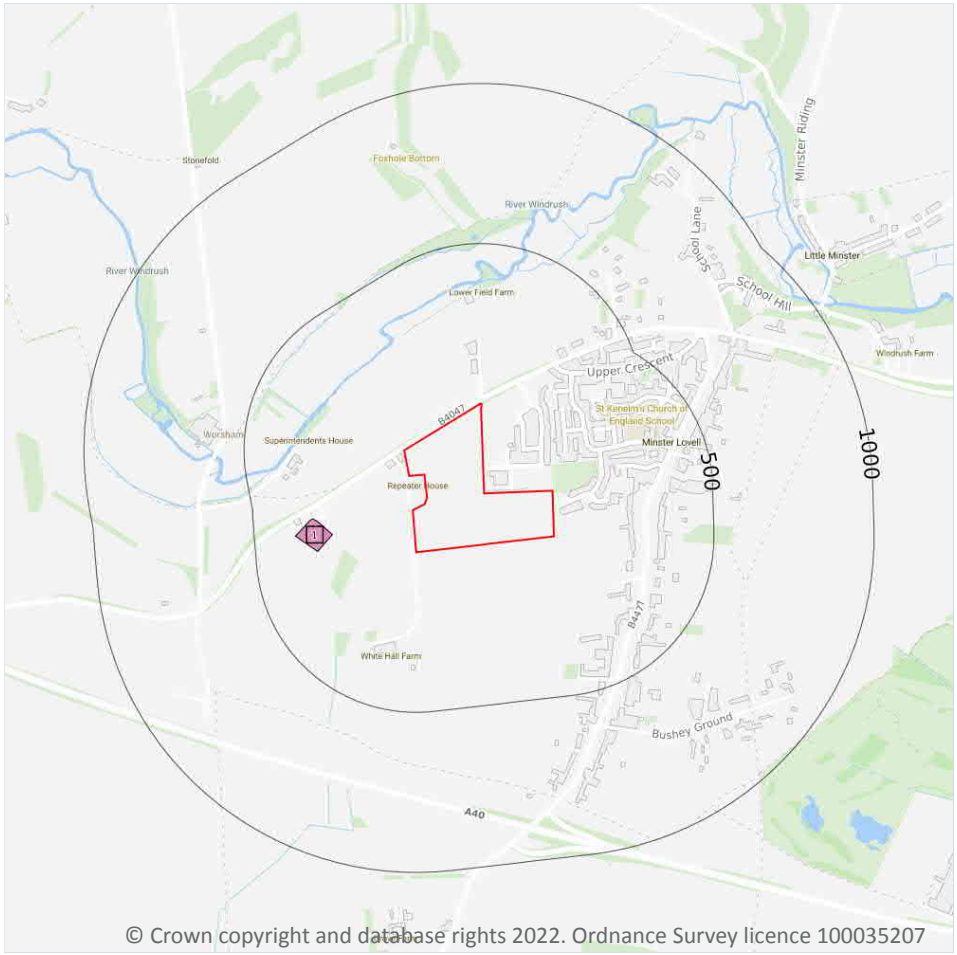
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 74**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW236_witney_v4**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

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

15.2 Artificial and made ground (50k)

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 75**

ID	Location	LEX Code	Description	Rock description
1	256m W	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.

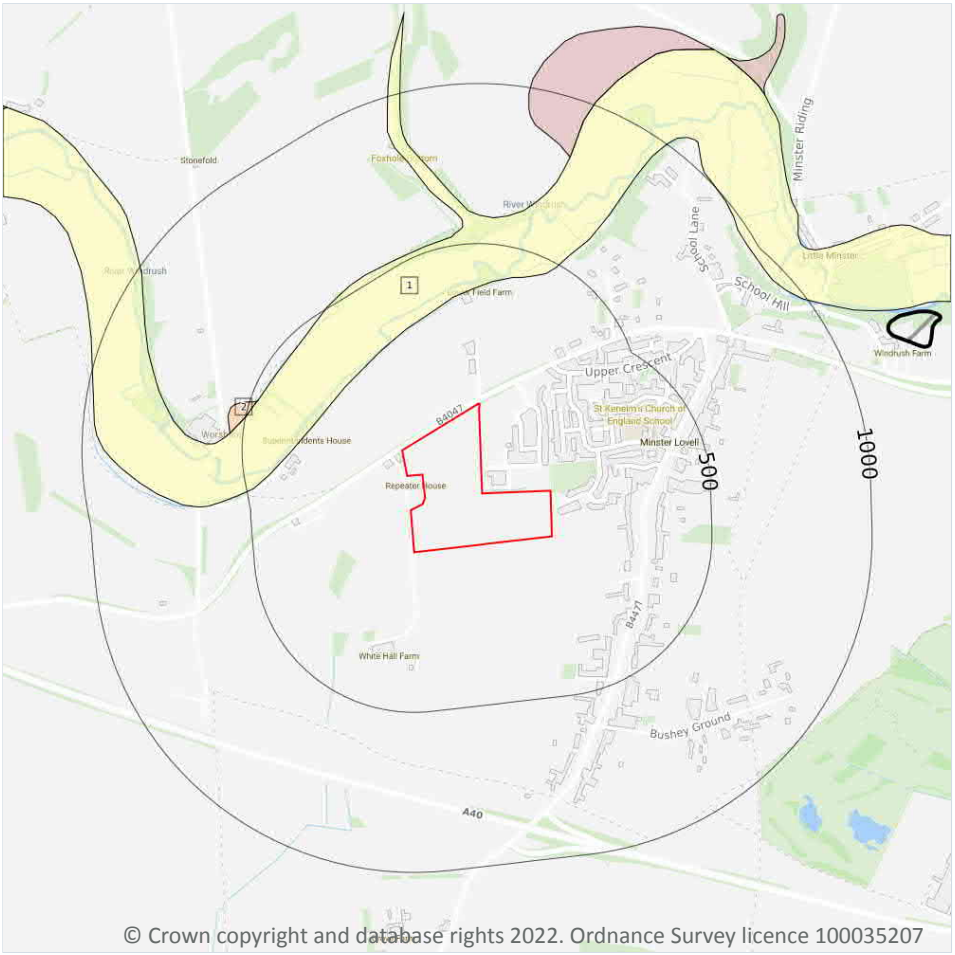
15.3 Artificial ground permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m	2

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 77**

ID	Location	LEX Code	Description	Rock description
1	263m NW	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
2	477m W	RTD1-XSV	RIVER TERRACE DEPOSITS, 1	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

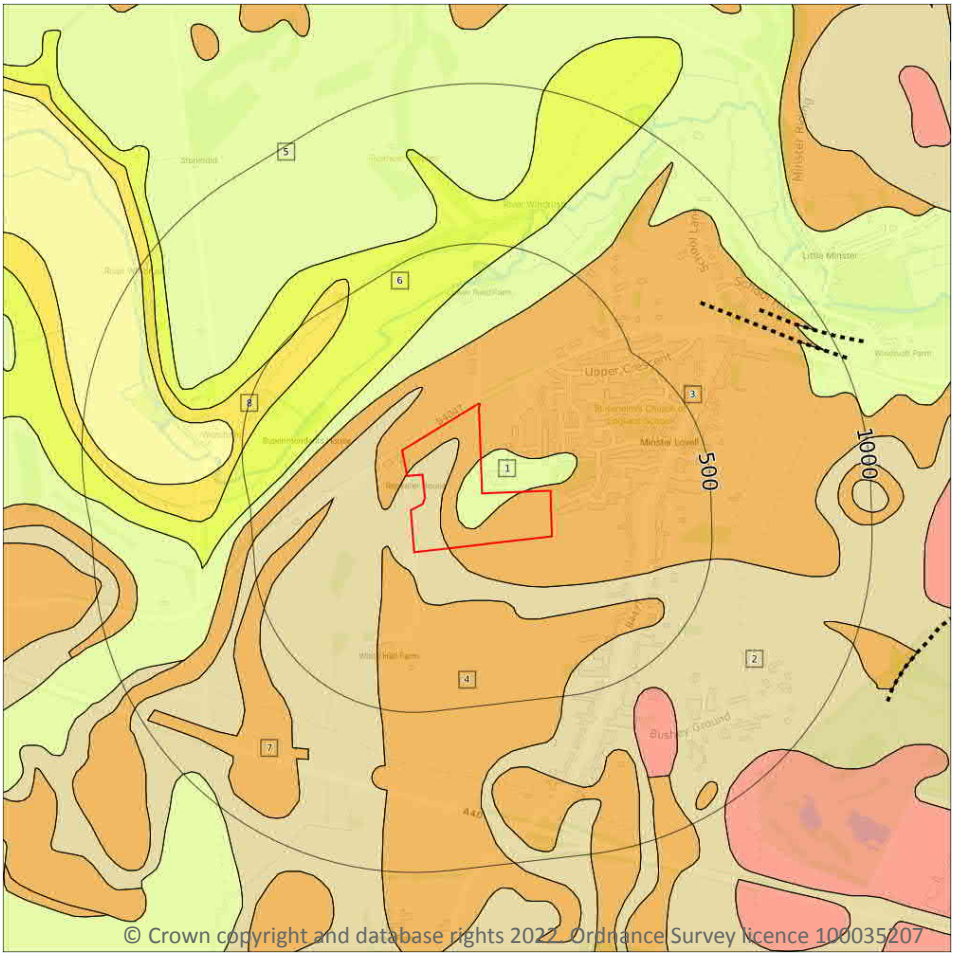
15.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m **8**

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 79**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**WHL-LMST**	**WHITE LIMESTONE FORMATION - LIMESTONE**	**BATHONIAN**
2	**On site**	**FMB-MDST**	**FOREST MARBLE FORMATION - MUDSTONE**	**BATHONIAN**
3	**On site**	**FMB-LMST**	**FOREST MARBLE FORMATION - LIMESTONE**	**BATHONIAN**
4	57m SW	FMB-LMST	FOREST MARBLE FORMATION - LIMESTONE	BATHONIAN

ID	Location	LEX Code	Description	Rock age
5	174m NW	WHL-LMST	WHITE LIMESTONE FORMATION - LIMESTONE	BATHONIAN
6	223m NW	HMB-LMST	HAMPEN FORMATION - LIMESTONE	BATHONIAN
7	241m W	FMB-LMST	FOREST MARBLE FORMATION - LIMESTONE	BATHONIAN
8	394m NW	TY-LMOOL	TAYNTON LIMESTONE FORMATION - LIMESTONE, OOIDAL	BATHONIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**3**

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**	**Very High**	**Very High**
On site	**Fracture**	**Very High**	**High**
On site	**Fracture**	**Low**	**Very Low**

This data is sourced from the British Geological Survey.

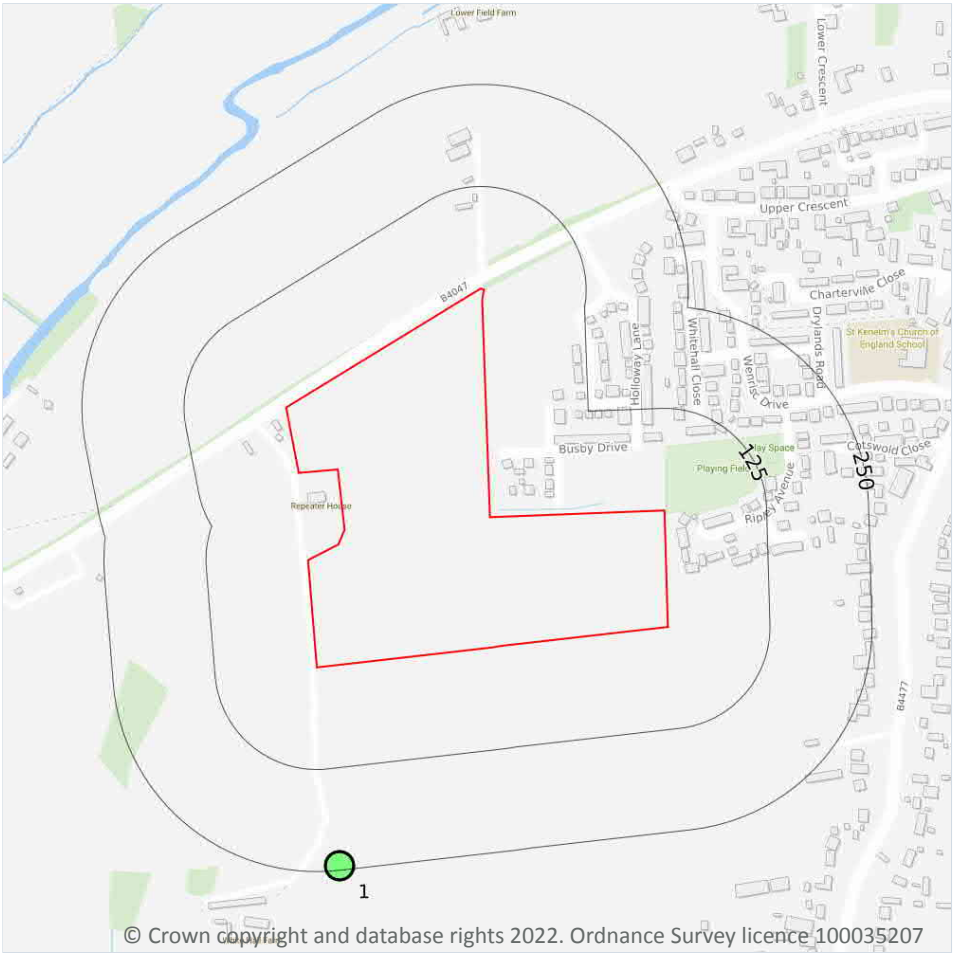
15.10 Bedrock faults and other linear features (50k)

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



Site Outline

Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m	1

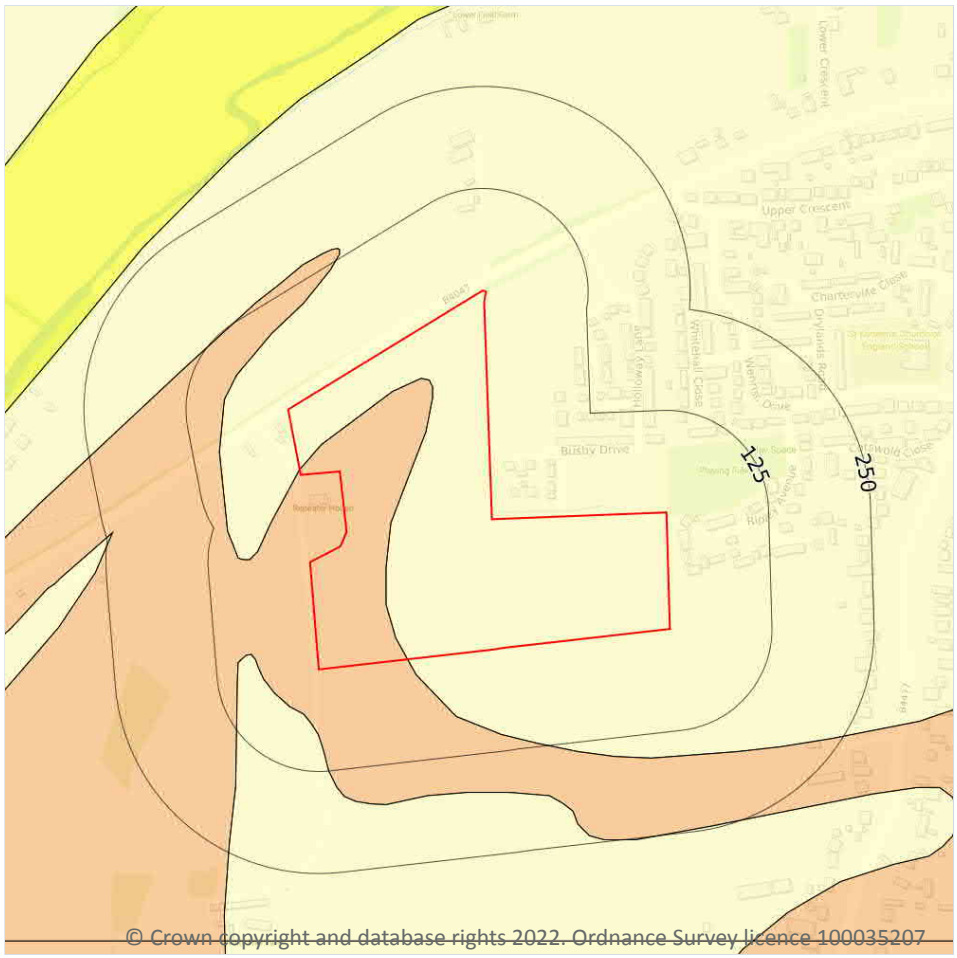
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several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

Features are displayed on the Boreholes map on **page 81**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	244m S	430560 210090	WHITEHALL MINSTER LOVELL OXON	22.25	N	320046

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	2

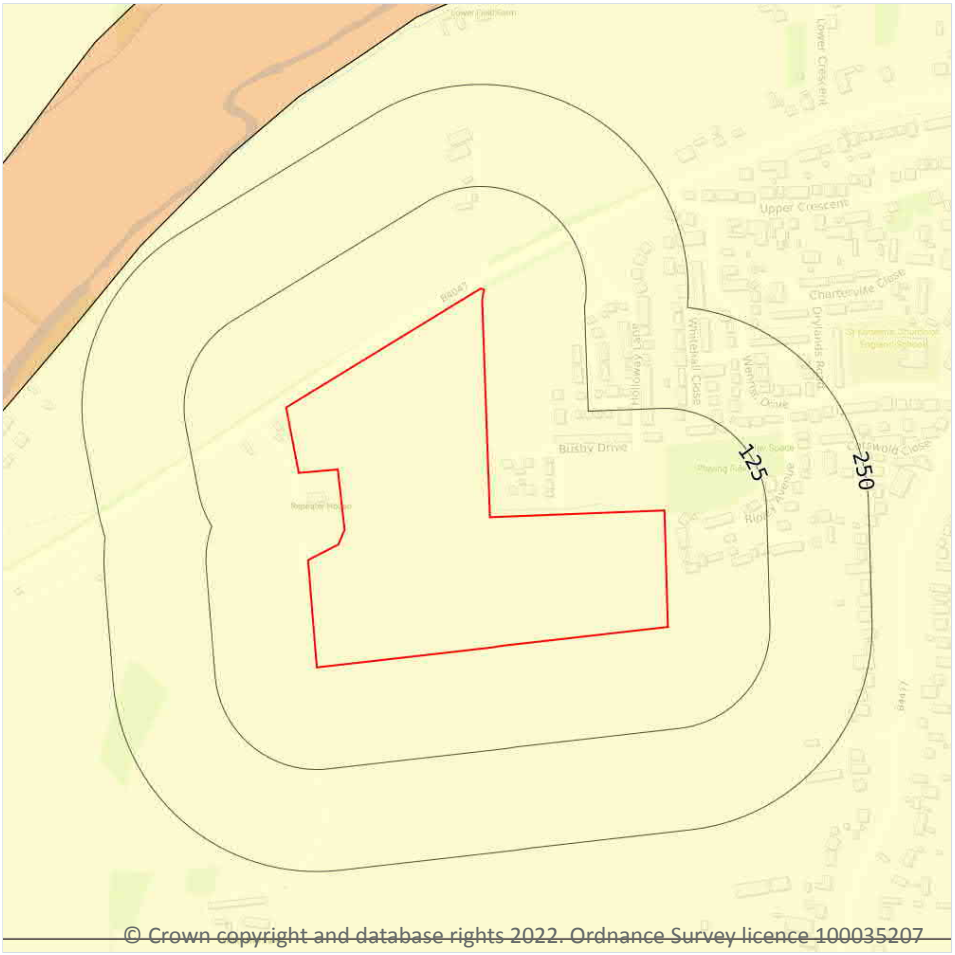
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 82**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
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

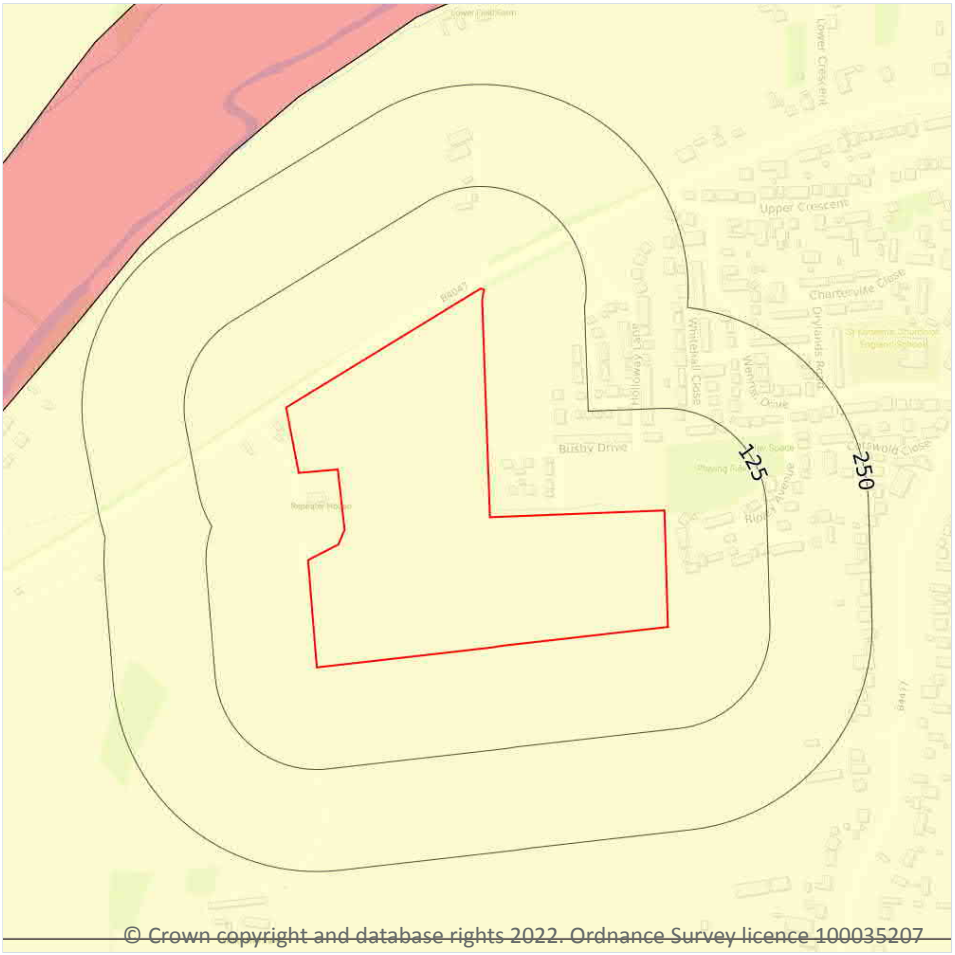
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 83**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	1

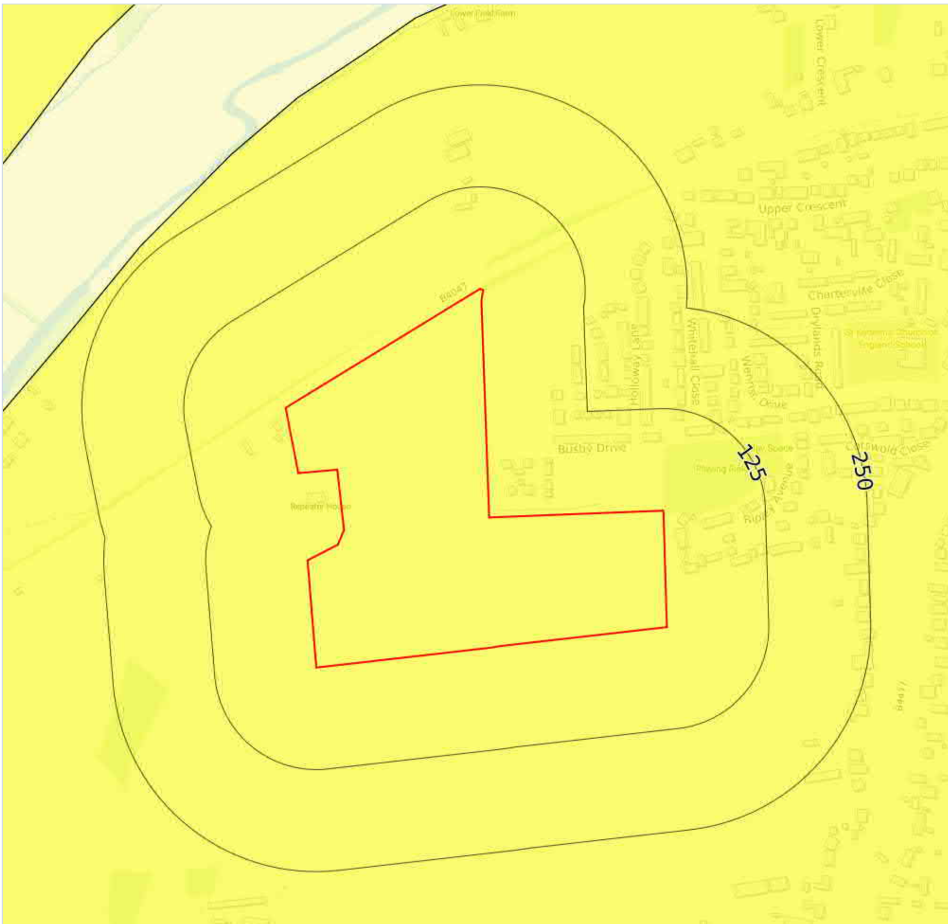
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 84**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	1

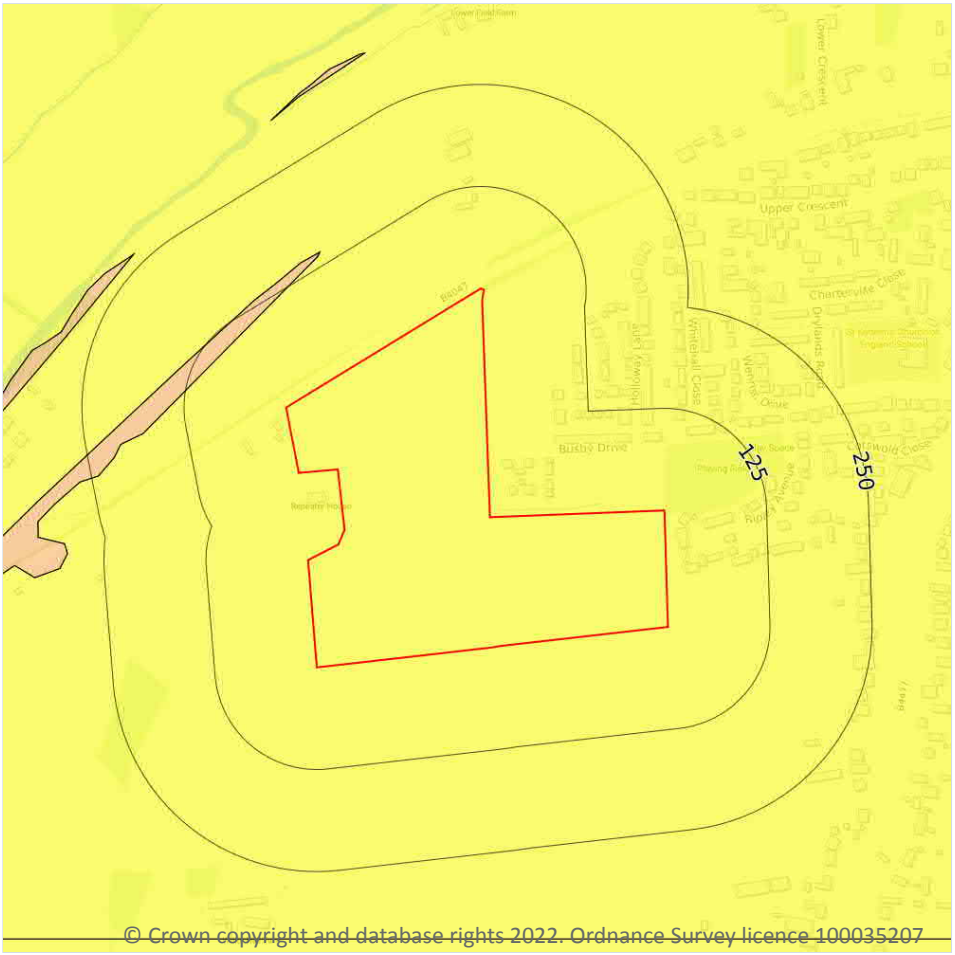
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 85**

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

17.5 Landslides

Records within 50m	1

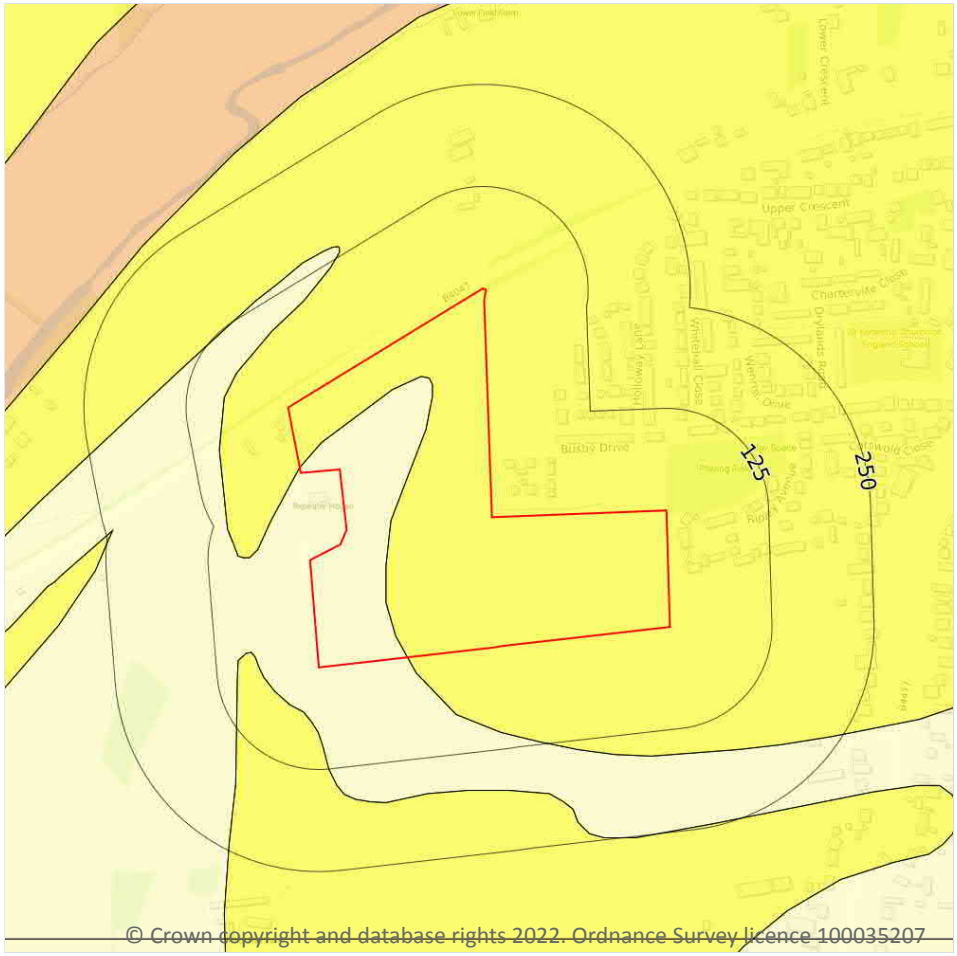
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 86**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	2

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

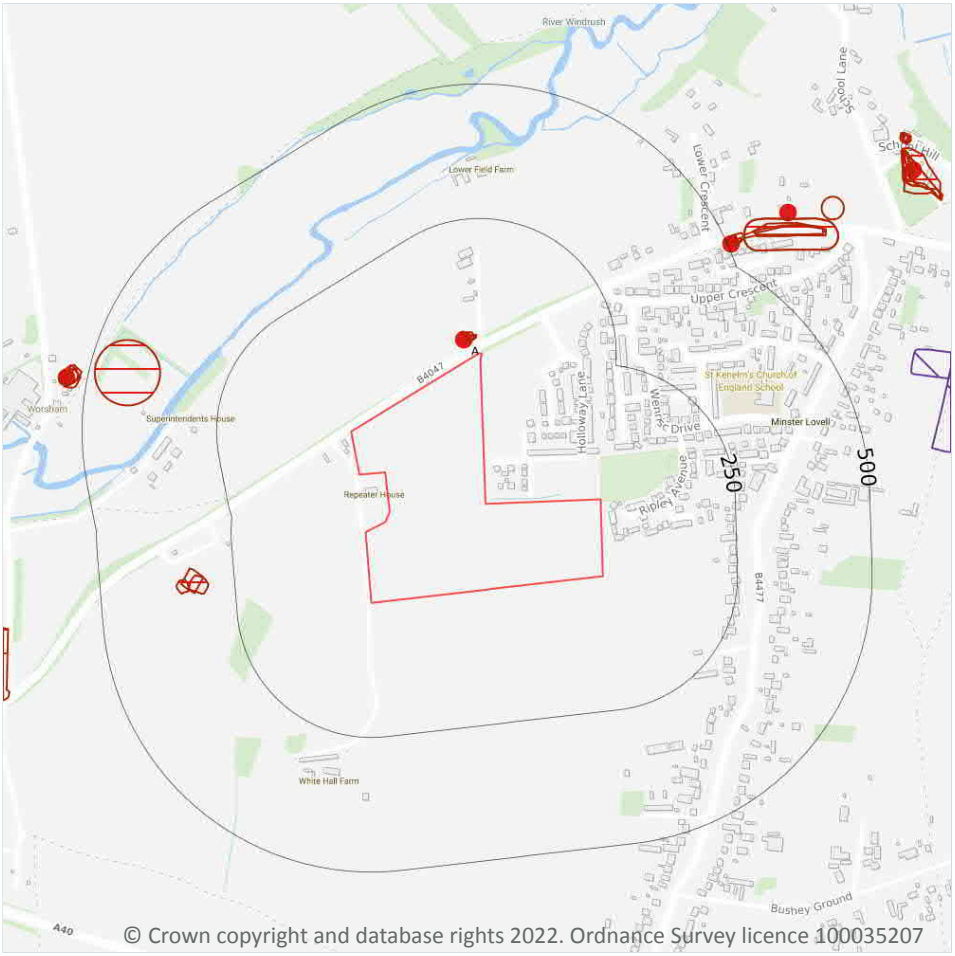
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 87**

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.**

Location	Hazard rating	Details
On site	**Very low**	**Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.**

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m	1

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining, ground workings and natural cavities map on **page 89**

ID	Location	Details	Description
A	37m NW	Name: Little Minster Address: Minster Lovell, WITNEY, Oxfordshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	2

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 89**

ID	Location	Land Use	Year of mapping	Mapping scale
A	27m NW	Unspecified Quarry	1922	1:10560
A	28m NW	Unspecified Quarry	1922	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 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 is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

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

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0

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

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

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

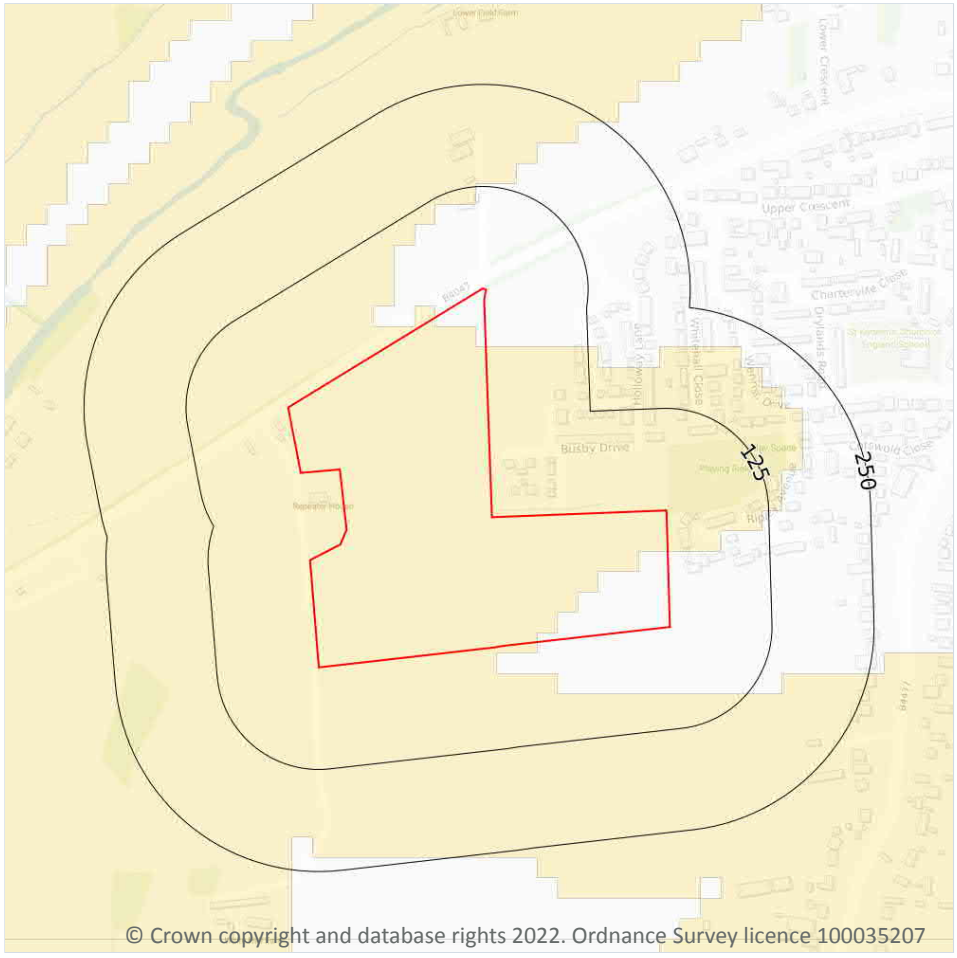
18.13 Clay mining

Records on site	0

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

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

19 Radon



Site Outline

Search buffers in metres (m)

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

19.1 Radon

Records on site	2

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 93**

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

This data is sourced from the British Geological Survey and Public Health England.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	12

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
15m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
22m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
37m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
41m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects

21.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

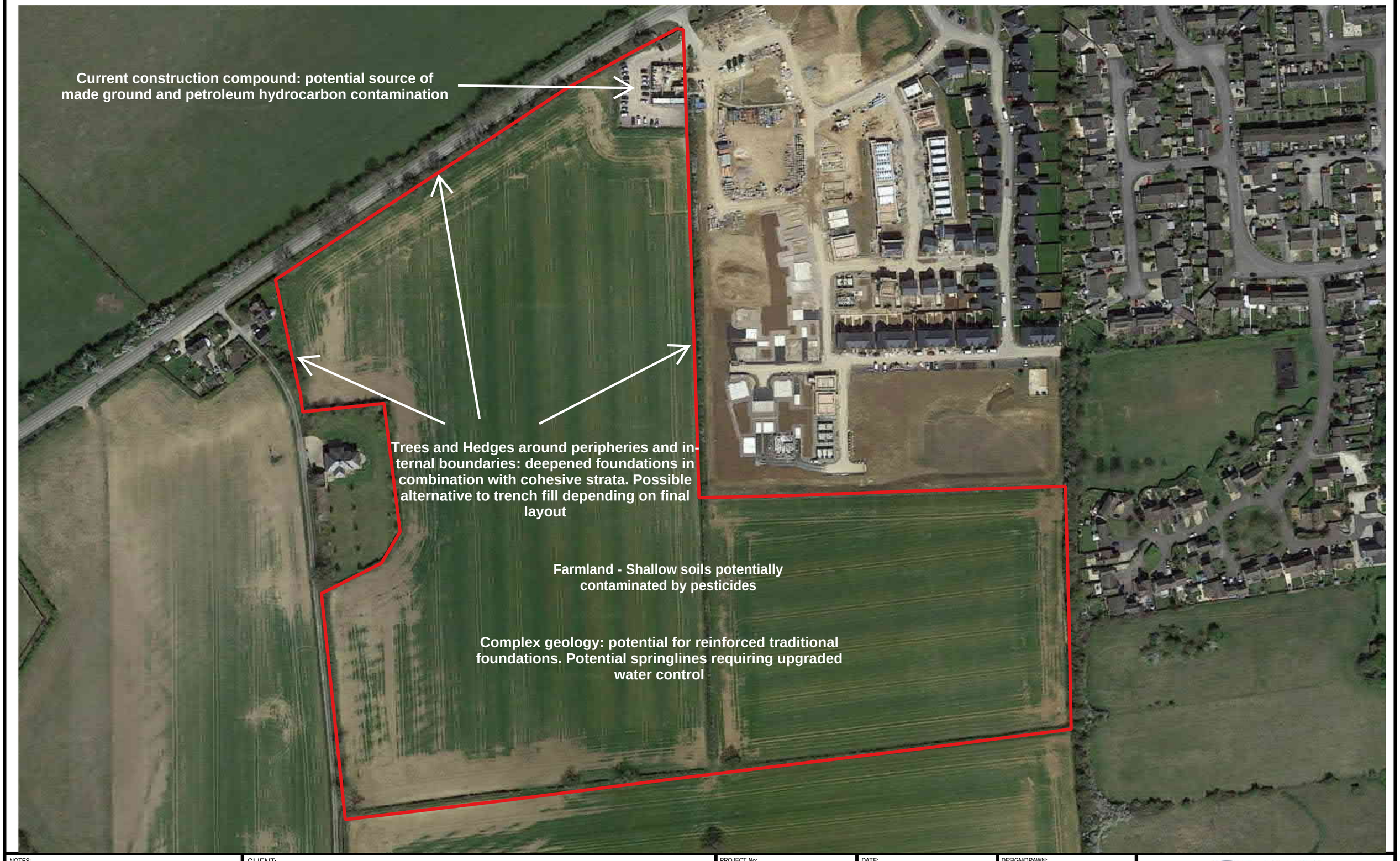
Data providers

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

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.

APPENDIX I



NOTES:

NOTES

CLIENT:

Catesby Strategic Land Ltd

PROJECT:

Land South of Burford Road, Minter Lovell

TITLE:

Phase I Ground Hazard Plan

PROJECT No:	DATE:	DESIGN/DRAWN:
P10086	08/2022	PW

DRAWING NUMBER:	ISSUE:
004	Final

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