Land Contamination Preliminary Risk Assessment

Chicken Shed, Sir Robert's Farm, Goose Green Lane, Pulborough, West Sussex, RH20 2LW

June 2022

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07/06/2022

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9961	Chicken Shed, Sir Robert's Farm, Goose Green Lane, Pulborough, West Sussex, RH20 2LW

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Appendix B – Historic Maps

Appendix C – Qualitative Risk Assessment

Appendix D – Site Photos

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1. Introduction

1.1 Phlorum Ltd has been commissioned by Peter Isherwood to undertake a Phase 1 Preliminary Risk Assessment (PRA), land contamination desk study assessment, of the proposed redevelopment at Sir Robert's Farm, Goose Green Lane, Pulborough, National Grid Reference (NGR) TQ 11922 18417.

1.2 It is understood that the study site comprises of five individual dwellings and an area of open land. We have been made aware that there are plans to redevelop one of the existing barns, known as the Chicken Shed, into new a residential dwelling.

1.3 Contamination assessments are undertaken in three phases. The results of this Phase 1 (PRA) should provide sufficient information to enable a Phase 2 intrusive site investigation and risk assessment to be effectively undertaken, if necessary. The Phase 2 can sometimes be done in stages. Depending on the results of the Phase 2, a risk management and site remediation (Phase 3) could then subsequently be undertaken, if necessary.

1.4 This report involved the following:

- a visit of the site, undertaken by Phlorum, on 24th May 2022;
- review of data from the Environment Agency (EA), local authority[1] and British Geological Survey (BGS) for the site;
- review of geological and hydro-geological maps of the site;
- review of publicly available map data; and
- Enviro-Insight and Geo-Insight reports produced by Groundsure were also obtained. A copy of the Groundsure data is shown in Appendix A.

1.5 This report outlines the findings of the Phase 1 contaminated land desk study assessment. This report is based on the end use of the site being a redeveloped barn, into a residential dwelling.

[1] Local authority for the study site is Horsham District Council.

2. Site Sensitivity

2.1 The aim of this section is to review the main potential receptors and pathways for any contaminants on site. The main source of information was obtained from the Groundsure reports of the site.

Site Location and Adjacent Land Uses

2.2 The site is located in the east of Pulborough, approximately 7,563m east of Pulborough train station and 2,735m north-west from A24.

2.3 The site is located in a mixed residential and agricultural setting and is surrounded by few residential dwellings and large areas of agricultural land. The site is accessed via Goose Green Lane, which lies to the south.

Geology

2.4 The report is based on the BGS data provided via the Geology of Britain Viewer[2] and from 1:50,000 scale BGS Geological mapping. The bedrock beneath the site is comprised of Weald Clay Formation- Mudstone. This bedrock was formed approximately 126 to 134 million years ago in the Cretaceous period. It suggests that the local environment was previously dominated by swamps, estuaries, and deltas.

2.5 There is one record relating to permeability of bedrock ground within the site, this is as follows:

- On site; Flow Type: Fracture; Permeability: between Low and Very Low.

2.6 There is one record of a geological faults recorded 384m north-east of the site, Category: fault; Description: fault, inferred, displacement unknown.

2.7 The site has no superficial deposits recorded beneath the site and one within 300m of the study site boundary. This is a Head- Clay, Silt, Sand and Gravel deposit formed up to 3 million years ago in the Quaternary period, where the local environment was previously dominated by subaerial slopes.

[2] Accessed at http://mapapps.bgs.ac.uk/geologyofbritain/home.html on 10th May 2022.

Hydrogeology

Groundwater Resources

2.8 The Groundwater Vulnerability Map provided by Groundsure is based on Environment Agency Data, which indicates that the bedrock on site is classed as an unproductive, described as layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

Source Protection Zones

2.9 There are no Source Protection Zones within 2,000m of the study site.

Surface Water Abstractions

2.10 There are no Surface Water Abstraction Licenses within 2,000m of the study site.

Ground Water Abstractions

2.11 There is one Groundwater Abstraction Licences within 2,000m of the study site, but none within 500m. This is located 1999m south-west of the site, with Licence No. 25/097/R01. For further details please refer to Appendix A.

Potable Water Abstraction Licences

2.12 There are no Potable Water Abstraction Licences within 2,000m of the study site.

Water Discharges Consents

2.13 There are two records of licensed discharge consent within 500m of the site:

- 266m south-west; Address: CROSSWAYS, CRAYS LANE, THAKEHAM, PULBOROUGH WEST SUSSEX, Effluent Type described as Treated Sewage received into a Freshwater River. Permit No. P06020. Issued on 19.12.1995. Revoked 31.03.1997.
- 266m north-west; Address: THE WARREN, GOOSE GREEN, THE WARREN GOOSE GREEN LANE, GOOSE GREEN, PULBOROUGH, WEST SUSSEX, RH20 2LW, Effluent Type described as Treated Sewage received into land. Permit No. N03154. Issued on 18.05.1979. Not revoked.

Groundwater Vulnerability and Soil Leaching Potential

2.14 There are two instances where the EA gives the information on groundwater vulnerability and soil leaching potential on site, both show the same information:

- On site; Classification: Unproductive aquifer with a Low infiltration value: 40-70%.

Mineral Deposits and Mining

2.15 There is one record of Non-Coal Mining Cavities onsite and five more within 2,000m of the site. The onsite record is a Class B with the commodity being sand/building stone. The likelihood is that localised small scale underground mining may have occurred. Potential for difficult ground conditions is unlikely or localised and are at a level where they need not be considered.

2.16 There are nine records of surface ground workings within 250m form the study site. These are 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. None of these features have been recorded on site. The closest record off-site is a brick works, dated 1946 and located 211m north-west of the site.

2.17 There are five records of BritPits within 250m of the site. 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. The closest record is 346m west of the site, named Goose Green Brickworks, where the commodity was clay and shale.

2.18 There are no records of the flowing mining activities within 2,000m from the study site:

- Natural cavities;
- Underground workings;
- Mining cavities;
- JPB mining areas (data source Johnson Poole Bloomer);
- Coal mining;
- Brine areas;
- Gypsum areas;
- Tin mining; and
- Clay mining.

3. Published Records

3.1 The aim of this section is to review the published records of sensitive areas and potentially hazardous activities on, under or around the site. The main source of information was the Groundsure reports for the site.

Current and Recent Industrial Data

3.2 There are no records of current industrial land uses within 500m from the site.

3.3 The closest current petrol station is located >2,400m south-east of the site at London Road, Ashington, Pulborough RH20 3AT.

3.4 There are no sites determined as Contaminated Land under the Environment Agency (2020) Land Contamination Risk Management (LCRM) documentation within 500m of the site.

3.5 There are no records of the following current industrial infrastructure within 500m of the study site:

- National Grid High Voltage Underground Electricity Transmission Cables; and
- National Grid High Pressure Gas Transmission Pipelines.

Environmental Permits and Pollution Incidents

3.6 There is one record of a Pollution Incident within 500m of the site; located 455m north-west of the site, dated 15/08/2022, Identification No. 24347 described as Inert Materials and Wastes to have had Minor effect (Category 3) on Water.

3.7 There is one record of Control of Major Accident Hazards (COMAH) 431m north-west of the site under the company name Ibstock Brick LTD, address: Ibstock Brick Ltd, Laybrook Works, Goose Green Lane, Goose Green, Pulborough, RH20 2LW, with the operational status Historical NIHHS (Notification of Installations Handling Hazardous Substances) Site.

3.8 There are no records of industrial sites holding the following licenses and/or authorisations within 500m from the study site:

- Notification of Installation Handling Hazardous Substances (NIHHS);
- Regulated explosive sites;
- Hazardous substance storage/usage;
- Historic IPC authorisations;
- Part A (1) and IPPC Authorised Activities;

- Part A (2)/B Licensed Industrial Activities;
- Category 3 or 4 Radioactive Substances Authorisations;
- Red List Discharge Consents (potentially harmful discharges to controlled waters);
- Water Industry Referrals (potentially harmful discharges to the public sewer);
- List 1 Dangerous Substances Inventory Sites;
- List 2 Dangerous Substance Inventory Sites;
- Pollution inventory substances;
- Pollution inventory waste transfers; and
- Pollution inventory radioactive waste.

Landfill and Waste Sites

3.9 There are two records of Waste exemptions within 500m of the study site. A waste exemption is needed for activities involving storage, treatment, use or disposal of waste that are exempt from needing a permit. Both records are 336m east of the site, named Bowford Farm, Billingshurst Road, RH20 2LP and categorised as using a waste exemption on a farm/ for agricultural and non-agricultural waste. For further details please refer to Appendix A.

3.10 There are no records of the following Landfill or Waste sites within 500m of the study site:

- Active or recent landfill;
- Historical landfill (BGS records);
- Historical landfill (LA/mapping records);
- Historical landfill (EA/NRW records);
- Historical waste sites; and
- Licensed waste sites.

Historical Land Uses

3.11 The systematic analysis of data extracted from High Detailed 1:10,000 and 1:10,560 scale historical maps indicate 13 records of historical industrial land uses. Two of these are within 250m of the site, the others within 500m and none are onsite. The two closest records lie 207m north-west and 211m north-west of the site, labelled as unspecified disused works and brick works respectively.

3.12 The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps indicate three records of Historical Tank Features within 500m of the search boundary. None of them recorded on site, with the closest recorded 475m north-west of the site in 1993. For full details please see Appendix A of this report.

3.13 The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps revealed no records of the following historical industrial sites with 500m of the study site:

- Historical Energy Features;
- Historical Petrol Stations;
- Historical Garages, and;
- Historical Military Sites.

Natural Hazardous Findings

3.14 The maximum **Shrink-Swell** hazard rating identified on the study site is **Low**. Ground conditions predominantly medium plasticity.

3.15 The maximum **Running Sand** hazard rating identified on the study site is **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.

3.16 The maximum **Compressible Ground** hazard rating identified on the study site is **Negligible**. Compressible strata are not thought to occur.

3.17 The maximum **Collapsible Rocks** hazard rating identified on the study site is **Very Low**. Deposits with potential to collapse when loaded and saturated are unlikely to be present.

3.18 The maximum **Landslide** hazard rating identified on the study site is **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.

3.19 The maximum **Soluble Rocks** hazard rating identified on the study site is **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.

Radon

3.20 The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level, therefore, no Radon protective measures are necessary under publication BR211 by the Building Research Establishment.

Environmental Designations

3.21 There are 12 records of designated Ancient Woodland within 2,000m of the study site. The closest is located 226m south of the site from the site, recorded as ancient and semi-natural woodland. No name is recorded. Further records are included in Appendix A of this report.

3.22 There is a Priority Habitat onsite, labelled as Deciduous woodland. Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

3.23 There is one Site of Special Scientific Interest (SSSI) Impact Risk Zone classified onsite and requires the following developments to undergo consultation to identify any adverse impacts: Infrastructure - Airports, helipads and other aviation proposals, Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3,500t.

3.24 There are no records of the following Designated Environmentally Sensitive Sites within 2,000m of the study site:

- Sites of Special Scientific Interest (SSSI)
- Ramsar sites;
- Special Areas of Conservation (SAC);
- Special Protection Areas (SPA);
- National Nature Reserves (NNR);
- Local Nature Reserves (LNR);
- Biosphere Reserves;
- Forest parks;
- Marine Conservation Zones;
- Proposed RAMSAR Sites, and;
- Nitrate Sensitive Areas.

Visual and Cultural Designations

3.25 There is one listed building within 50m of the site, noted 44m south-west. Name: Bucks Farm, Thakeham, Horsham, RH20, Grade: II, Reference: 1027243, Listed Date: 09/05/1980.

3.26 There are no records of the following Visual and Cultural Designation within 250m of the study site:

- World Heritage Sites;
- Area of Outstanding Beauty;

- National Park;
- Conservation Areas;
- Scheduled Ancient Monuments; and
- Registered Parks and Gardens.

Borehole Records

3.27 There are no records of boreholes within 250m of the site boundary according to BGS Borehole Records.

4. Historic Records

4.1 This section is based on historic maps (scales: 1:2,500, 1:1,250, 1:10,560, 1:10,000) of the area dating back to 1868, and aerial photography publicly available for the site. The maps are included in Appendix B. All measurements are approximate.

The Site and within 100m of the Study Site

4.2 The site was historically comprised within agricultural fields, c.1875-1876. A review of historical mapping available for the site revealed that from the earliest available maps (1875-1876) Sir Roberts Barn had already been constructed, to the west of the site. Goose Green Lane is also present, running south of the site.

4.3 A sparce area of land to the west of site is labelled Goose Green. This area remains untouched to the present.

4.4 There are few small dwellings visible on the first map in 1875 which remain unnamed until 1897, in which they are labelled under Mount Pleasant. In 1939 this name changes to Little Mount and then again in 1974 to Bucks Farm, which it remains to the present day. The number of structures in this area also increased in the 1939 map and again in the 1974 map. All structures from the 1974 map are still present today.

4.5 To north-east of the site, within and beyond the 100m area, is an area names Sir Robert's Copse, this can be defined as a thicket of small trees or bushes. This area remains the same to the present day.

4.6 Besides the above mentioned, the area within 100m of the study site remains agricultural land from the first available map to the present day.

The Surrounding Area within 250m of the Study Site

4.7 The aforementioned Goose Green obtains a dwelling to its west, on the map dated 1939, named The Warren. Then later in 1974 a further structure becomes visible to the east of The Warren, labelled Sir Robert's Poultry Farm. Both structures remain in the most recent map dated 2003.

4.8 Some small dwellings are located, scattered to the east of the site, in the earliest available map. Some of this lead on to become named Bowford Cottages, Beaconsfield and The Cabin from 1897.

4.9 The rest of the land within 250m of the study site remains undeveloped, agricultural land.

The Surrounding Area within 500m of the Study Site

4.10 Historically, the further surrounding area within 500m of the site was predominantly covered by agricultural land.

4.11 Bacon's Copse is named in the earliest map, dated 1875, approximately 300m to the south of the site.

4.12 Peacocks Lane can be seen to the south-west of the site in 1875 and remains to the present day.

4.13 Two small brick works can be noted in the map dated 1946, to the west of the site. These areas then become a large wetland area named Laybrook Ponds, and a Works in 1980.

4.14 Paddock Green Farm becomes present in the map dated 2010, just south of the works which are no longer labelled. Bucks House and A Summer Place are also newly present in this map.

5. Site Walkover

5.1 A member of Phlorum staff conducted a site walkover of the external areas of the site on 24th May 2022 in order to assess any contamination issues. The weather conditions during the survey were sunny and dry.

5.2 The photos of the site taken during the walkover are included as Appendix D and observations in the text are included as Target Notes and on Figure 1 in Appendix E.

5.3 The wider site comprises of five structures, including the Chicken Shed, a bungalow, a cottage, two further barns and locked garages. However, this site focused just on the Chicken Shed.

5.4 The bungalow is currently inhabited by a tenant, the other buildings appear to be vacant.

5.5 The rest of the site, to the north-east, is open agricultural land and at the time of the survey included a small campsite.

5.6 The entry to site consisted of hardstanding and gravel which appeared to be in average repair with no obvious signs of contamination (TN1).

5.7 An oil tank was located to the south of the locked garages, Phlorum was informed that this tank was cleaned before placement on the site 20 years ago (TN2).

5.8 Due to the campsite currently being onsite there were outdoor shower facilities and gas canasters located in the smaller field to the west. However, this is a seasonal feature and is unlikely to be the source of any land contamination onsite.

5.9 A small mound of wooden material was located to the north of the bungalow and a large plastic, empty container was located to the north of the larger field.

5.10 The contents of the structures onsite are unknown and were not accessed during the survey. They may require further internal investigation (TN3).

5.11 The roofing of the Chicken Shed and Dutch Barn appeared to be asbestos (TN4).

5.12 Due to the likelihood of the roofing being made of asbestos, a demolition asbestos survey may be recommended, prior to any demolition or conversion works being undertaken.

Summary

5.13 The site was visited on 24th May 2022, and the external areas of the site were surveyed for evidence of contamination when the weather was sunny and dry.

5.14 The major potential sources of contamination observed during the visit are associated with the potential asbestos roofing, general debris and the unknown building contents.

5.15 An asbestos survey is recommended to assess the presence of asbestos in buildings if demolition works are planned.

6. Contamination Risk Assessment

General

6.1 Based on the previous information reviewed and obtained for this report an initial qualitative risk assessment can be undertaken. This assessment is based on the development of an appropriate conceptual model in accordance with current UK guidelines set out within the Environment Agency (2020) Land Contamination Risk Management (LCRM) framework and BS 10175:2011+A2:2017 Investigation of potentially contaminated sites Code of practice.

6.2 For environmental risk to be present there must be three conditions simultaneously coexisting, namely:

- A source is a contaminant or potential pollutant which has the potential to cause harm, or to cause pollution of controlled waters;
- A receptor (e.g. end-user, off-site water abstraction) which can be harmed by the site conditions; and
- A plausible pathway is a route or means of connecting the source and receptor such that the harm could actually occur.

6.3 The relationship between a contaminant source and receptor, by means of a pathway, is termed a "pollutant linkage". A "pollutant linkage" is only considered to exist if all three elements of the linkage are present (i.e. source, pathway and receptor). Where one of these conditions is absent, there is, by definition, no risk. The risk is itself considered in terms of its significance and this is qualitatively assessed on the basis of magnitude of harm that may occur and likelihood of that harm occurring.

Potential Sources of Contamination

6.4 The site comprises of a number of buildings including a residential bungalow and a barn. The following potential sources of contamination have been identified from the desk study and site walkover of external areas:

- Potential asbestos roofing of the Chicken Shed and Dutch Barn;
- potential leakage from vehicles driving to, across and from the site;
- unknown contents of locked barns;
- general debris found at the site.

Potential Pathways

6.5 The site lies over an unproductive stratum for the bedrock geology. Normally the higher the organic matter and clay content within soil, the greater the adsorption of organic compounds and the lower their mobility. However, other properties of the soil, such as water and organic content will also influence the migration potential of contaminants.

6.6 The following potential pathways have been identified in the context of the current site condition:

- Leaching of localised mobile inorganic and organic contamination into ground water;
- buried pipes and services;
- soil ingestion, dermal contact, inhalation;
- demolition of existing buildings could spread asbestos fibres (if present);
- plant uptake;
- migration of volatile contaminants through the ground; and
- chemical attack.

Potential Receptors

6.1 The risk of contamination exposure to any future ground workers can generally be mitigated via the use of appropriate Health & Safety Risk Assessments and PPE. The following potential receptors have been identified:

- Demolition/Construction workers;
- future site users;
- neighbouring site users;
- ground/surface water;
- Landscaping areas (vegetation); and
- services.

7. Conclusions

7.1 The geological records indicate that the geology of the site is Weald Clay Formation- Mudstone, with no superficial deposits. The actual presence of contamination in, on, or under the ground can only be confirmed by an intrusive site investigation.

7.2 The site was found in good condition with no obvious signs of ground contamination. The main potential contamination sources on the site are from the potential asbestos roofing on several of the existing structures, general debris and the unknown contents of the locked barns and Chicken Shed.

7.3 No major off-site sources of contamination were recorded immediately adjacent to the site.

7.4 The historic and current use of the site agricultural land, partial residential housing and vacant structures are considered to be a **Very Low** risk as a potential contamination source to current site users, off-site users, future users and construction workers and also a **Very Low** risk to water bodies and physical structures.

7.5 The future use of the site as a redeveloped residential structure, existing structures and open land is considered to be a **Very Low** risk as a potential contamination source to current site users, off-site users, future users and construction workers and physical structures; and also a **Very Low** risk to waterbodies. This is assuming the site will comprise of a redeveloped residential dwelling and surrounding structures and open land.

7.6 The **High** risk of Asbestos inhalation is very likely to be reduced by further surveying and best practice management of the construction and refurbishment process.

7.7 On the basis of the above we consider the risk of contamination at the site is **Low** in regard to land contamination. As mentioned above, this risk assessment is based on the assumption that the proposed land use will include a redeveloped residential dwelling surrounded by existing structures and open green space.

7.8 An asbestos survey is recommended to assess the presence of asbestos in the buildings planned for development.

7.9 Site investigation with analysis of soil samples would confirm whether the site comes with a legacy of land contamination due to its historic uses and its associated liability.

8. References

8.1 Environment Agency (2020) Land Contamination Risk Management (LCRM)

8.2 REP 211 Radon (2015): guidance on protective measures for new buildings

8.3 BS 10175:2011+A2:2017 Investigation of potentially contaminated sites. Code of practice. Code of practice.

Site Walkover Figure

Legend

Target Notes
Points
Site boundary
Lines

Figure 1: Sir Roberts Farm, Goose Green Lane, RH20 2LW

Scale: NTS
Job no.: 9961
Drawn by: EF
Printed at: 13/06/2022
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Appendix A

Groundsure Report

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

SIR ROBERTS FARM, GOOSE GREEN LANE, GOOSE GREEN, RH20 2LW

Order Details

Date: 10/05/2022

Your ref: 9961

Our Ref: GS-8734042

Client: Elena Francis

Site Details

Location: 511951 118418

Area: 1.08 ha

Authority: Horsham District Council

Summary of findings p. 2

OS MasterMap site plan p.13

Aerial image p. 8

groundsure.com/insightuserguide

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

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	**1.1**	**Historical industrial land uses**	0	0	2	10	-
15	**1.2**	**Historical tanks**	0	0	0	3	-
16	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	Historical garages	0	0	0	0	-
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	0	2	11	-
18	**2.2**	**Historical tanks**	0	0	0	3	-
18	2.3	Historical energy features	0	0	0	0	-
19	2.4	Historical petrol stations	0	0	0	0	-
19	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
20	3.1	Active or recent landfill	0	0	0	0	-
20	3.2	Historical landfill (BGS records)	0	0	0	0	-
21	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
21	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
21	3.5	Historical waste sites	0	0	0	0	-
21	3.6	Licensed waste sites	0	0	0	0	-
21	**3.7**	**Waste exemptions**	0	0	0	2	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
23	4.1	Recent industrial land uses	0	0	0	-	-
23	4.2	Current or recent petrol stations	0	0	0	0	-
24	4.3	Electricity cables	0	0	0	0	-
24	4.4	Gas pipelines	0	0	0	0	-
24	4.5	Sites determined as Contaminated Land	0	0	0	0	-

24	**4.6**	**Control of Major Accident Hazards (COMAH)**	0	0	0	1	-
25	4.7	Regulated explosive sites	0	0	0	0	-
25	4.8	Hazardous substance storage/usage	0	0	0	0	-
25	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
25	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
25	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
26	4.12	Radioactive Substance Authorisations	0	0	0	0	-
26	**4.13**	**Licensed Discharges to controlled waters**	0	0	0	2	-
26	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
27	4.15	Pollutant release to public sewer	0	0	0	0	-
27	4.16	List 1 Dangerous Substances	0	0	0	0	-
27	4.17	List 2 Dangerous Substances	0	0	0	0	-
27	**4.18**	**Pollution Incidents (EA/NRW)**	0	0	0	1	-
28	4.19	Pollution inventory substances	0	0	0	0	-
28	4.20	Pollution inventory waste transfers	0	0	0	0	-
28	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
29	**5.1**	**Superficial aquifer**	Identified (within 500m)				
31	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
32	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
33	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
33	5.5	Groundwater vulnerability- local information	None (within 0m)				
34	**5.6**	**Groundwater abstractions**	0	0	0	0	1
35	5.7	Surface water abstractions	0	0	0	0	0
35	5.8	Potable abstractions	0	0	0	0	0
35	5.9	Source Protection Zones	0	0	0	0	-
36	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
37	**6.1**	**Water Network (OS MasterMap)**	0	0	4	-	-

38	**6.2**	**Surface water features**	0	0	3	-	-
38	**6.3**	**WFD Surface water body catchments**	2	-	-	-	-
39	**6.4**	**WFD Surface water bodies**	0	0	0	-	-
39	6.5	WFD Groundwater bodies	0	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
40	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
40	7.2	Historical Flood Events	0	0	0	-	-
40	7.3	Flood Defences	0	0	0	-	-
41	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
41	7.5	Flood Storage Areas	0	0	0	-	-
42	7.6	Flood Zone 2	None (within 50m)				
42	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding	
43	8.1	Surface water flooding	Negligible (within 50m)

Page	Section	Groundwater flooding	
44	**9.1**	**Groundwater flooding**	Negligible (within 50m)

Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
45	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
46	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
46	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
46	10.4	Special Protection Areas (SPA)	0	0	0	0	0
46	10.5	National Nature Reserves (NNR)	0	0	0	0	0
47	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
47	**10.7**	**Designated Ancient Woodland**	0	0	1	0	11
48	10.8	Biosphere Reserves	0	0	0	0	0
48	10.9	Forest Parks	0	0	0	0	0
48	10.10	Marine Conservation Zones	0	0	0	0	0
48	10.11	Green Belt	0	0	0	0	0
48	10.12	Proposed Ramsar sites	0	0	0	0	0

49	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
49	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
49	10.15	Nitrate Sensitive Areas	0	0	0	0	0
49	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
50	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
51	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
52	11.1	World Heritage Sites	0	0	0	-	-
53	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
53	11.3	National Parks	0	0	0	-	-
53	**11.4**	**Listed Buildings**	0	1	0	-	-
54	11.5	Conservation Areas	0	0	0	-	-
54	11.6	Scheduled Ancient Monuments	0	0	0	-	-
54	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
55	**12.1**	**Agricultural Land Classification**	Grade 3 (within 250m)				
56	12.2	Open Access Land	0	0	0	-	-
56	**12.3**	**Tree Felling Licences**	0	0	1	-	-
56	12.4	Environmental Stewardship Schemes	0	0	0	-	-
57	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
58	**13.1**	**Priority Habitat Inventory**	1	1	6	-	-
59	13.2	Habitat Networks	0	0	0	-	-
59	**13.3**	**Open Mosaic Habitat**	0	0	1	-	-
59	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
61	**14.1**	**10k Availability**	Identified (within 500m)				
62	14.2	Artificial and made ground (10k)	0	0	0	0	-
63	**14.3**	**Superficial geology (10k)**	0	0	1	2	-

64	14.4	Landslip (10k)	0	0	0	0	-
65	14.5	Bedrock geology (10k)	1	0	0	1	-
66	14.6	Bedrock faults and other linear features (10k)	0	0	0	1	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
67	15.1	50k Availability	Identified (within 500m)				
68	15.2	Artificial and made ground (50k)	0	0	0	0	-
68	15.3	Artificial ground permeability (50k)	0	0	-	-	-
69	15.4	Superficial geology (50k)	0	0	1	1	-
70	15.5	Superficial permeability (50k)	None (within 50m)				
70	15.6	Landslip (50k)	0	0	0	0	-
70	15.7	Landslip permeability (50k)	None (within 50m)				
71	15.8	Bedrock geology (50k)	1	0	0	1	-
72	15.9	Bedrock permeability (50k)	Identified (within 50m)				
72	15.10	Bedrock faults and other linear features (50k)	0	0	0	1	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
73	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
74	17.1	Shrink swell clays	Low (within 50m)				
75	17.2	Running sands	Negligible (within 50m)				
76	17.3	Compressible deposits	Negligible (within 50m)				
77	17.4	Collapsible deposits	Very low (within 50m)				
78	17.5	Landslides	Very low (within 50m)				
79	17.6	Ground dissolution of soluble rocks	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
80	18.1	Natural cavities	0	0	0	0	-
81	18.2	BritPits	0	0	0	5	-
82	18.3	Surface ground workings	0	0	9	-	-
82	18.4	Underground workings	0	0	0	0	0
82	18.5	Historical Mineral Planning Areas	0	0	2	0	-

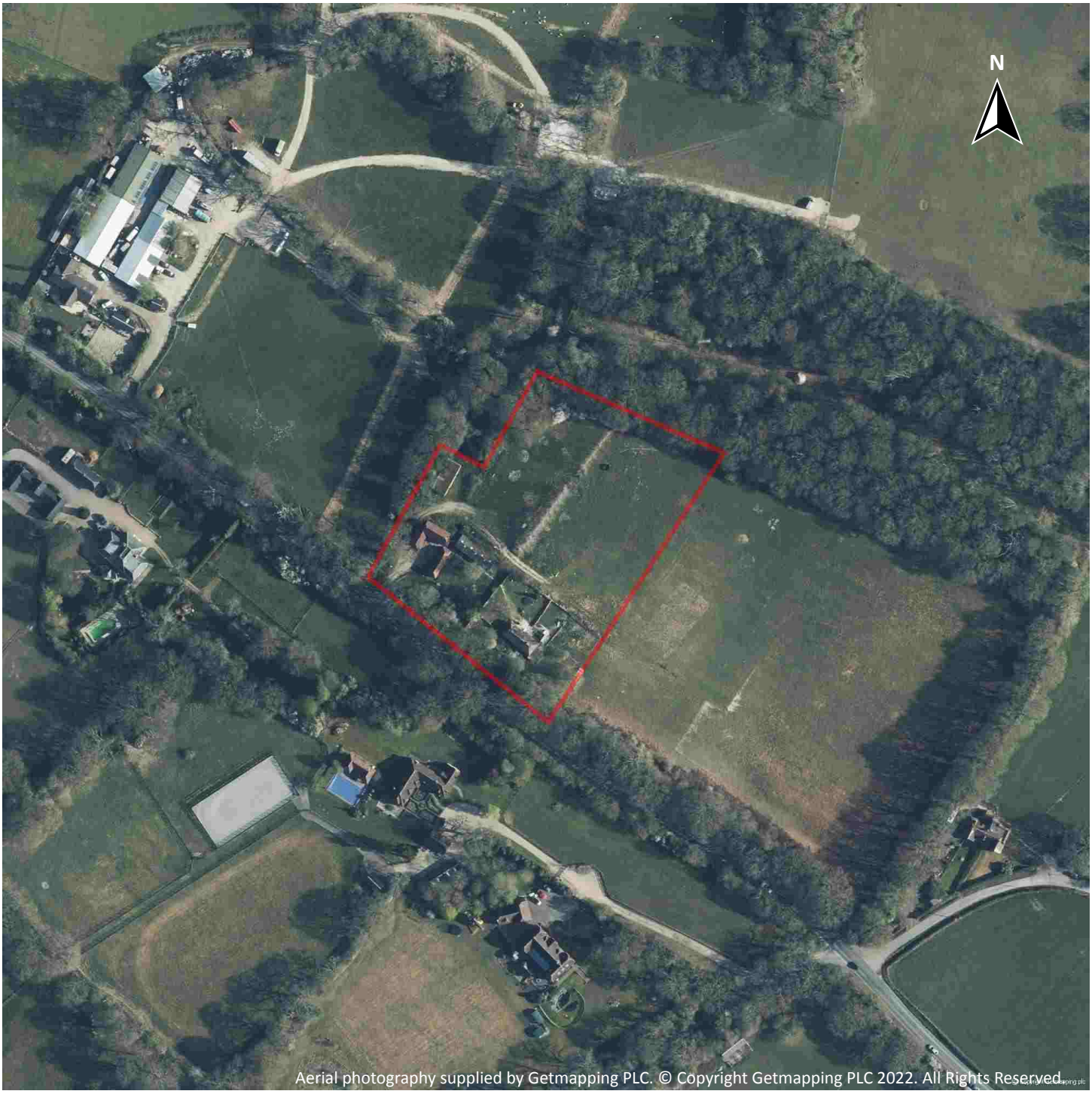
83	**18.6**	**Non-coal mining**	1	0	0	1	4
84	18.7	Mining cavities	0	0	0	0	0
84	18.8	JPB mining areas	None (within 0m)				
84	18.9	Coal mining	None (within 0m)				
84	18.10	Brine areas	None (within 0m)				
84	18.11	Gypsum areas	None (within 0m)				
85	18.12	Tin mining	None (within 0m)				
85	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
86	**19.1**	**Radon**	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
87	**20.1**	**BGS Estimated Background Soil Chemistry**	2	2	-	-	-
87	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
87	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
88	21.1	Underground railways (London)	0	0	0	-	-
88	21.2	Underground railways (Non-London)	0	0	0	-	-
88	21.3	Railway tunnels	0	0	0	-	-
88	21.4	Historical railway and tunnel features	0	0	0	-	-
88	21.5	Royal Mail tunnels	0	0	0	-	-
89	21.6	Historical railways	0	0	0	-	-
89	21.7	Railways	0	0	0	-	-
89	21.8	Crossrail 1	0	0	0	0	-
89	21.9	Crossrail 2	0	0	0	0	-
89	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 22/04/2021

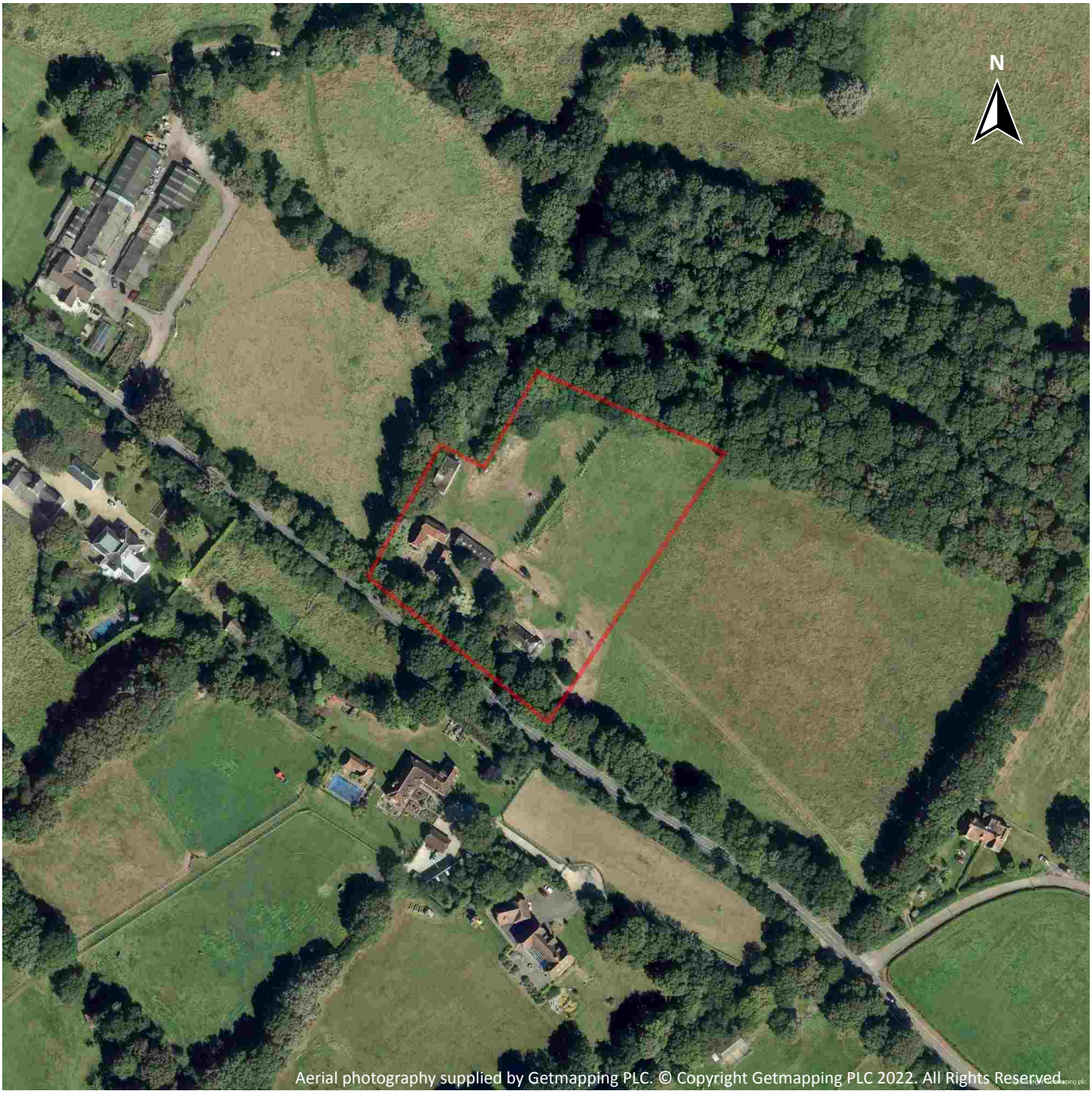
Site Area: 1.08ha

Recent site history - 2018 aerial photograph

Capture Date: 26/06/2018

Site Area: 1.08ha

Recent site history - 2012 aerial photograph



Capture Date: 13/09/2012

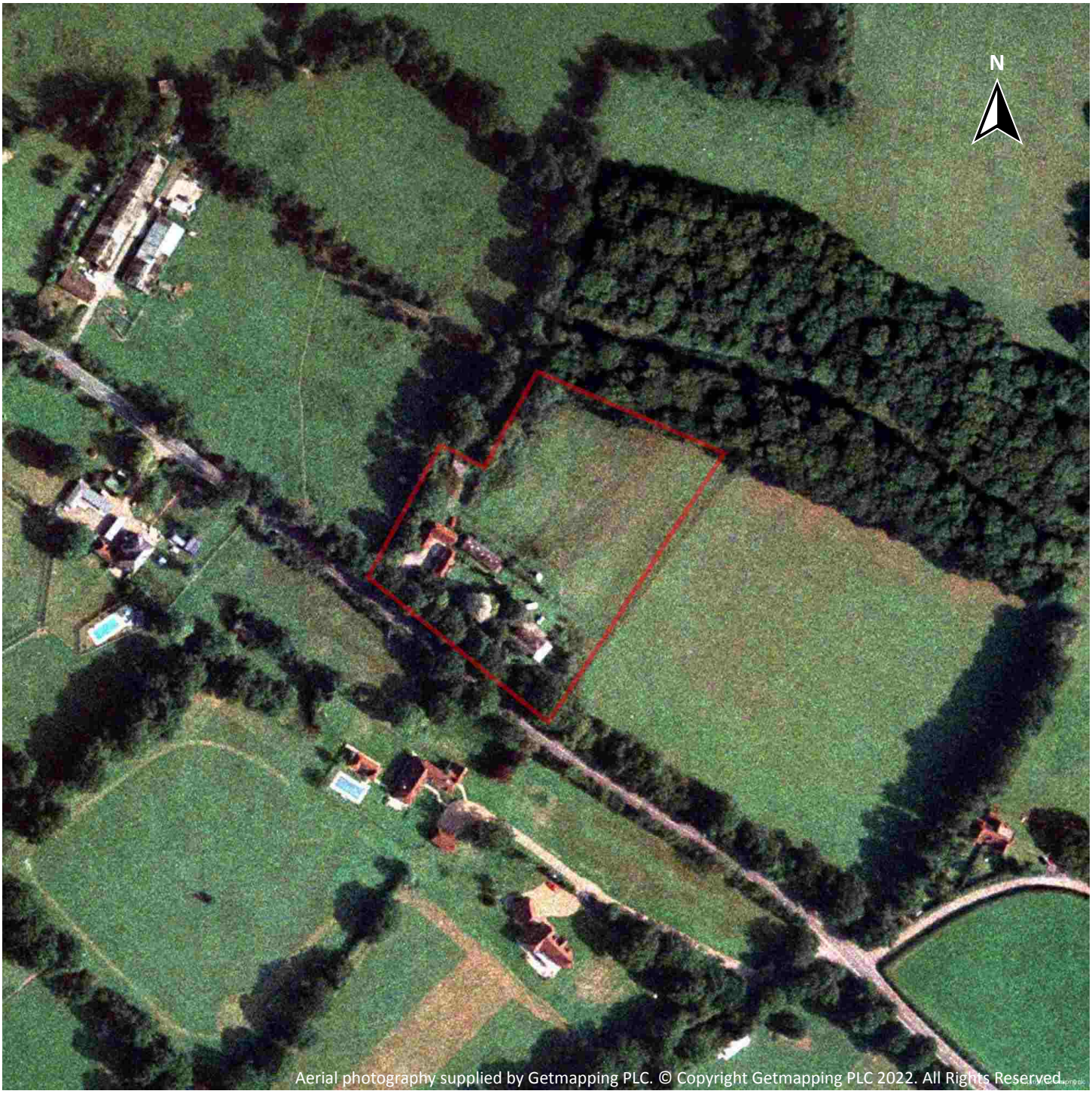
Site Area: 1.08ha

Recent site history - 2009 aerial photograph

Capture Date: 22/08/2009

Site Area: 1.08ha

Recent site history - 1999 aerial photograph



Capture Date: 29/08/1999

Site Area: 1.08ha

OS MasterMap site plan

Site Area: 1.08ha

1 Past land use

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

1.1 Historical industrial land uses

Records within 500m	12

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

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

ID	Location	Land use	Dates present	Group ID
A	207m NW	Unspecified Disused Works	1980	2142906

ID	Location	Land use	Dates present	Group ID
A	211m NW	Brick Works	1946	2147592
B	275m NW	Brick Works	1946	2147591
B	278m NW	Unspecified Commercial/Industrial	1957	2130608
C	311m NW	Unspecified Pit	1946	2290206
C	314m NW	Unspecified Pit	1957	2276054
1	344m N	Brick Works	1980	2147593
B	344m NW	Railway Sidings	1957	2128555
B	344m NW	Unspecified Pit	1957	2223399
2	349m N	Clay Pipe Works	1980	2165935
3	453m NW	Unspecified Pit	1946 - 1957	2282528
B	497m NW	Unspecified Pit	1946 - 1957	2198008

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**3**

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

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

ID	Location	Land use	Dates present	Group ID
B	475m NW	Tanks	1993	381004
B	477m NW	Tanks	1984	381623
B	481m NW	Tanks	1984	397848

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

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'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

2.1 Historical industrial land uses

Records within 500m	13

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	207m NW	Unspecified Disused Works	1980	2142906
A	211m NW	Brick Works	1946	2147592
B	275m NW	Brick Works	1946	2147591

ID	Location	Land Use	Date	Group ID
B	278m NW	Unspecified Commercial/Industrial	1957	2130608
C	311m NW	Unspecified Pit	1946	2290206
C	314m NW	Unspecified Pit	1957	2276054
1	344m N	Brick Works	1980	2147593
B	344m NW	Railway Sidings	1957	2128555
B	344m NW	Unspecified Pit	1957	2223399
2	349m N	Clay Pipe Works	1980	2165935
D	453m NW	Unspecified Pit	1946	2282528
D	455m NW	Unspecified Pit	1957	2282528
B	497m NW	Unspecified Pit	1946	2198008

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**3**

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
B	475m NW	Tanks	1993	381004
B	477m NW	Tanks	1984	381623
B	481m NW	Tanks	1984	397848

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**0**

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'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

Site Outline

Search buffers in metres (m)

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	0

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

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

3.6 Licensed waste sites

Records within 500m	0

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

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

3.7 Waste exemptions

Records within 500m	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 20**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	336m E	Bowford Farm Billingshurst Road PULBOROUGH West Sussex RH20 2LP	EPR/GE5144X M/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction

ID	Location	Site	Reference	Category	Sub-Category	Description
A	336m E	BOWFORD FARM, B2133, ASHINGTON, RH20 2LP	WEX126787	Using waste exemption	On a farm	Use of waste in construction

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

4 Current industrial land use

Site Outline

Search buffers in metres (m)

Control of Major Accident Hazards

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	0

Current potentially contaminative industrial sites.

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	1

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.

Features are displayed on the Current industrial land use map on **page 23**

ID	Location	Company	Address	Operational status	Tier
3	431m NW	Ibstock Brick (hudsons) Ltd	Ibstock Brick (hudsons) Ltd, Laybrook Works, Goosegreen Lane, Goose Green, Pulborough, RH20 2LW	Historical NIHHS Site	-

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	2

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

Features are displayed on the Current industrial land use map on **page 23**

ID	Location	Address	Details	
1	266m SW	CROSSWAYS, CRAYS LANE, THAKEHAM, PULBOROUGH WEST SUSSEX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: P06020 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 19/12/1995 Effective Date: 19/12/1995 Revocation Date: 31/03/1997
2	266m NW	THE WARREN, GOOSE GREEN, THE WARREN GOOSE GREEN LANE, GOOSE GREEN, PULBOROUGH, WEST SUSSEX, RH20 2LW	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: N03154 Permit Version: 1 Receiving Water: INTO LAND	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 18/05/1979 Effective Date: 18/05/1979 Revocation Date: -

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	1

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

Features are displayed on the Current industrial land use map on **page 23**

ID	Location	Details	
4	455m NW	Incident Date: 15/08/2001 Incident Identification: 24347 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

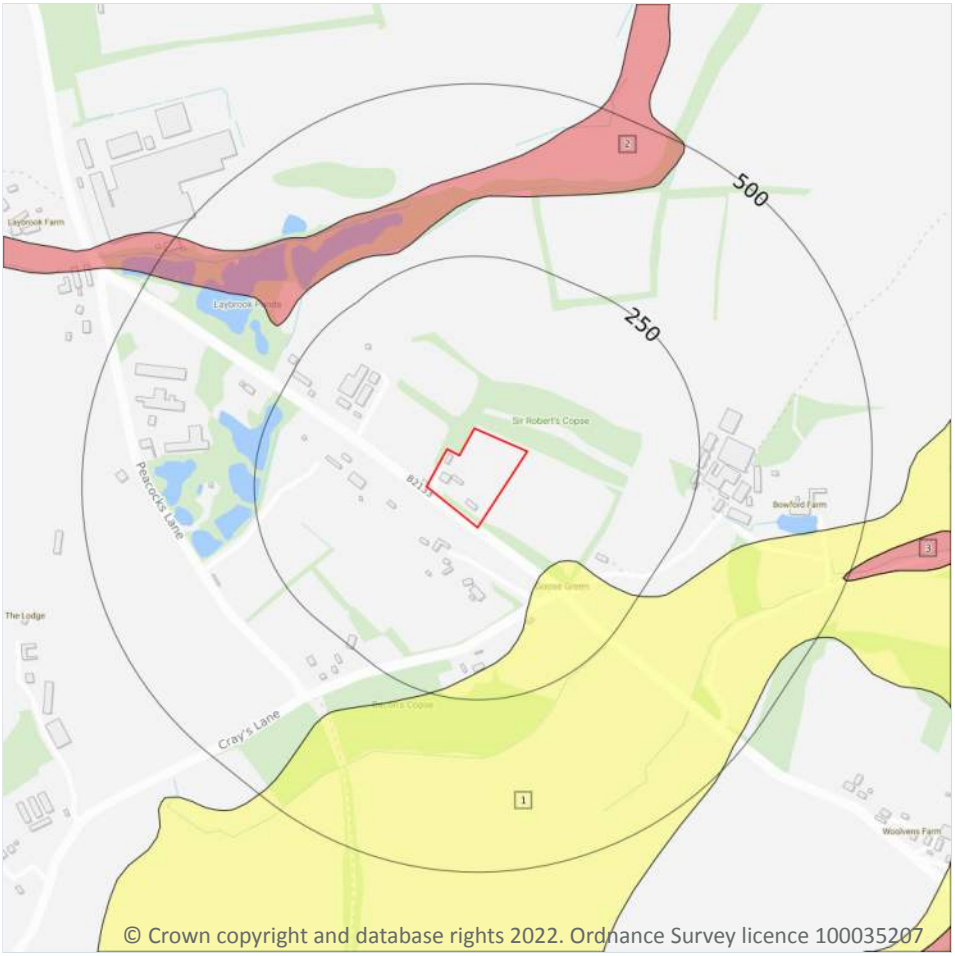
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	3

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 29**

ID	Location	Designation	Description
1	114m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	278m 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

ID	Location	Designation	Description
3	494m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Bedrock aquifer

Site Outline

Search buffers in metres (m)

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

5.2 Bedrock aquifer

Records within 500m	2

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 31**

ID	Location	Designation	Description
1	**On site**	**Unproductive**	**These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow**
2	334m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	2

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

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

Features are displayed on the Groundwater vulnerability map on **page 32**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
2	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

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

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

5.5 Groundwater vulnerability- local information

Records on site	0

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

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

Abstractions and Source Protection Zones

Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	1

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 34**

ID	Location	Details	
-	1999m SW	Status: Active Licence No: 25/097/R01 Details: Horticultural Watering Direct Source: Southern Region Groundwater Point: BOREHOLE AT STORRINGTON ROAD, THAKEHAM Data Type: Point Name: Thakeham Mushrooms Limited Easting: 510260 Northing: 117237	Annual Volume (m^3): 88,650 Max Daily Volume (m^3): 330 Original Application No: NPS/WR/024776 Original Start Date: 04/05/2016 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 19/07/2017 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**0**

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

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

5.8 Potable abstractions

Records within 2000m	**0**

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

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

5.9 Source Protection Zones

Records within 500m	**0**

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology

6.1 Water Network (OS MasterMap)

Records within 250m	4

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 37**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	229m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
C	235m W	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	246m NW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	247m NW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**3**

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 37**

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 37**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Adur (Lancing brook)**	**GB107041012160**	**Adur Upper**	**Adur and Ouse**
A	**On site**	**River**	**Adur (Hammer pond)**	**GB107041012190**	**Adur Upper**	**Adur and Ouse**

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 37**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
7	338m N	River	Adur (Hammer pond)	GB107041012190	Moderate	Fail	Moderate	2019
-	815m E	River	Adur (Lancing brook)	GB107041012160	Poor	Fail	Poor	2019

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

6.5 WFD Groundwater bodies

Records on site	0

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.

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

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

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

7.2 Historical Flood Events

Records within 250m	0

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

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

7.3 Flood Defences

Records within 250m	0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

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

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

7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

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

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

7.7 Flood Zone 3

Records within 50m	0

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

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

8 Surface water flooding

8.1 Surface water flooding

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

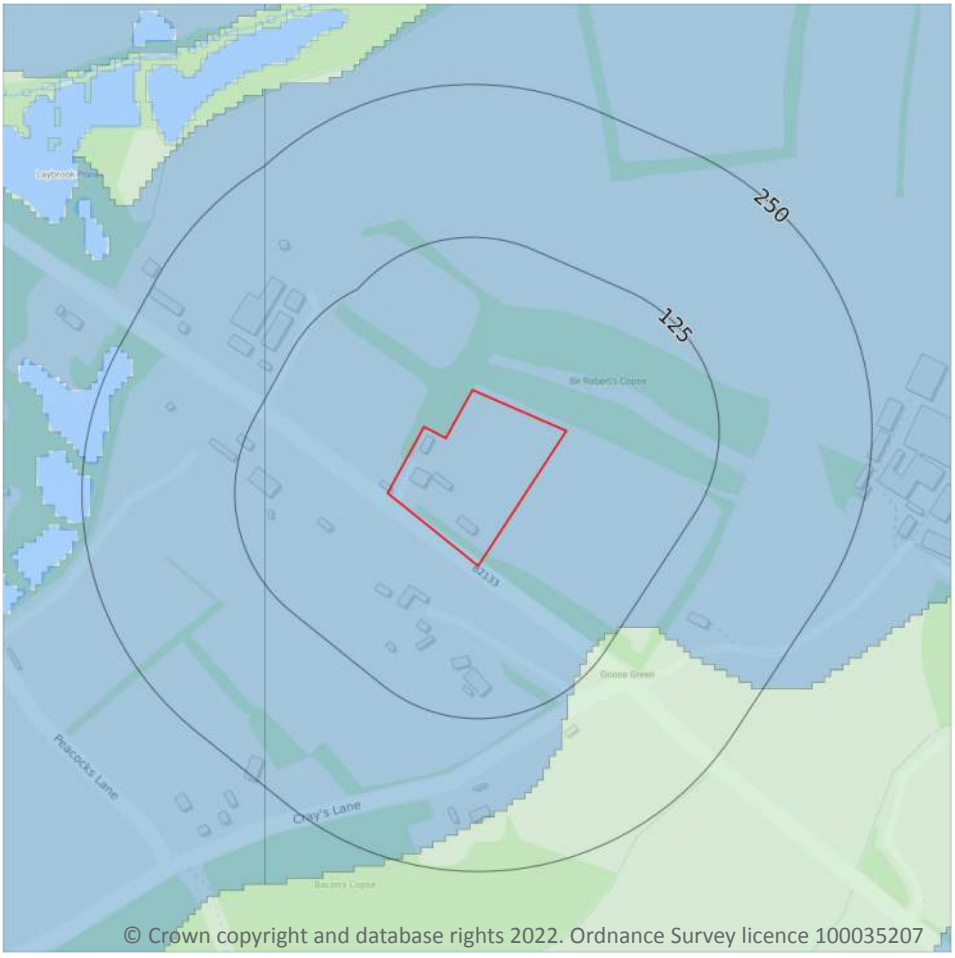
Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year 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.

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

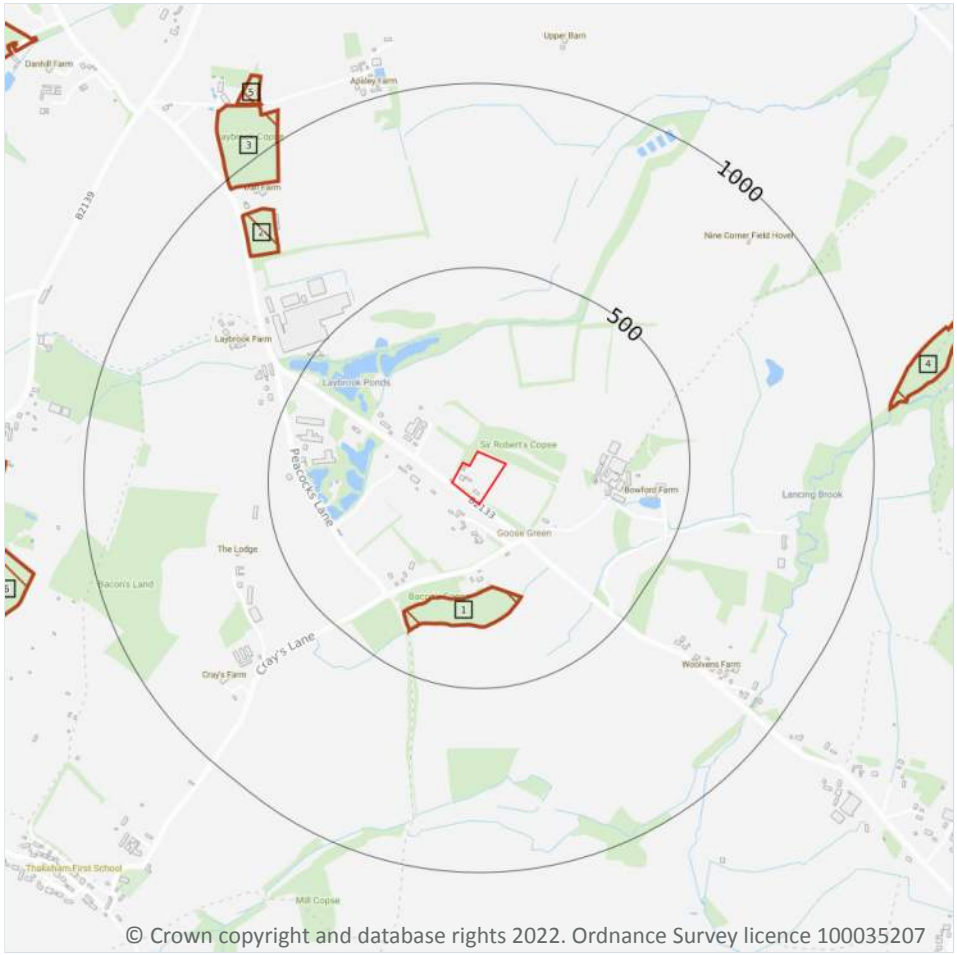
Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

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

Features are displayed on the Groundwater flooding map on **page 44**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

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

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

10.7 Designated Ancient Woodland

Records within 2000m	12

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 45**

ID	Location	Name	Woodland Type
1	226m S	Unknown	Ancient & Semi-Natural Woodland
2	761m NW	Unknown	Ancient & Semi-Natural Woodland
3	912m NW	Unknown	Ancient & Semi-Natural Woodland
4	1055m E	Unknown	Ancient & Semi-Natural Woodland
5	1114m NW	Unknown	Ancient & Semi-Natural Woodland
6	1163m W	Dukes Rough	Ancient & Semi-Natural Woodland
7	1214m W	Unknown	Ancient & Semi-Natural Woodland
-	1441m W	Unknown	Ancient & Semi-Natural Woodland
9	1632m NW	Unknown	Ancient & Semi-Natural Woodland
-	1647m SW	Unknown	Ancient & Semi-Natural Woodland
-	1822m W	Unknown	Ancient & Semi-Natural Woodland
-	1959m NW	Unknown	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

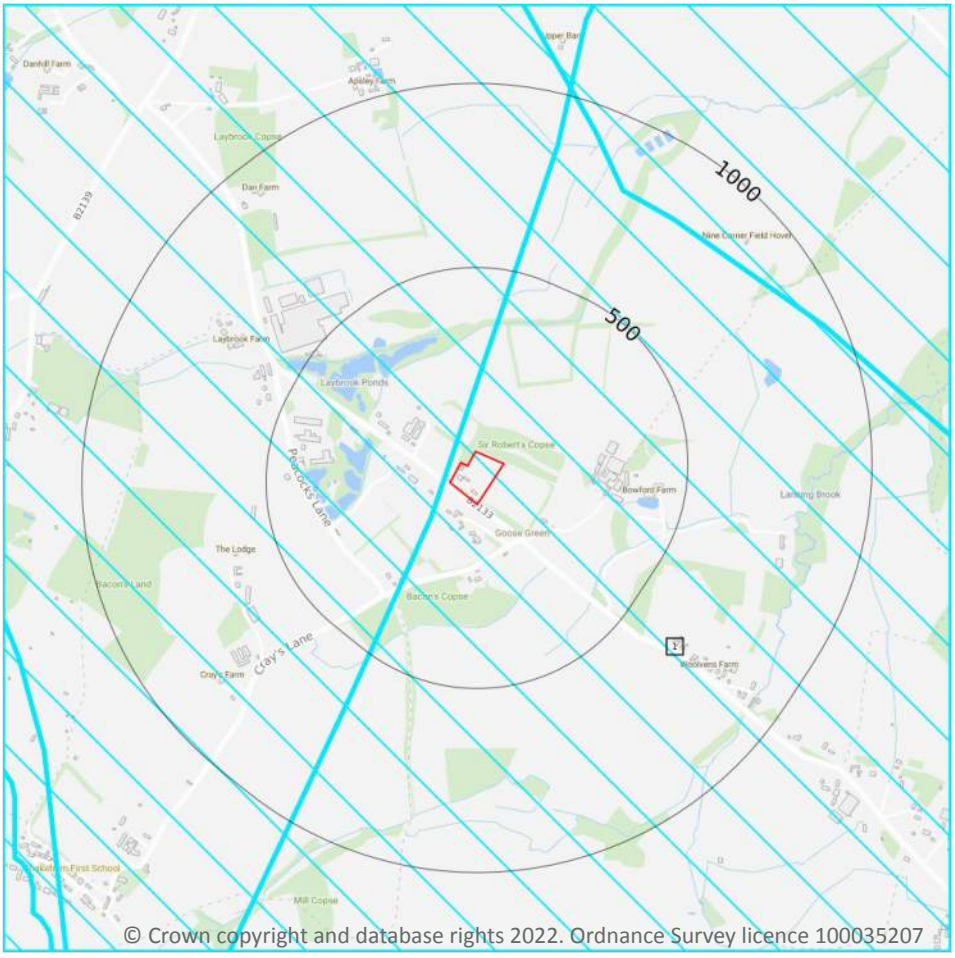
10.16 Nitrate Vulnerable Zones

Records within 2000m	0

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

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

SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site	1

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

Features are displayed on the SSSI Impact Zones and Units map on **page 50**

ID	Location	Type of developments requiring consultation
1	**On site**	**Infrastructure - Airports, helipads and other aviation proposals.** **Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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

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

11 Visual and cultural designations

Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	1

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

Features are displayed on the Visual and cultural designations map on **page 52**

ID	Location	Name	Grade	Reference Number	Listed date
1	44m SW	Bucks Farm, Thakeham, Horsham, West Sussex, RH20	II	1027243	09/05/1980

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	2

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 55**

ID	Location	Classification	Description
1	On site	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.**

ID	Location	Classification	Description
2	181m E	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

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

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

12.3 Tree Felling Licences

Records within 250m	**1**

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

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

ID	Location	Description	Reference	Application date
3	226m S	Selective Fell/Thin (Unconditional)	019/3/07-08	04/04/2007

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	**0**

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

This data is sourced from Natural England.

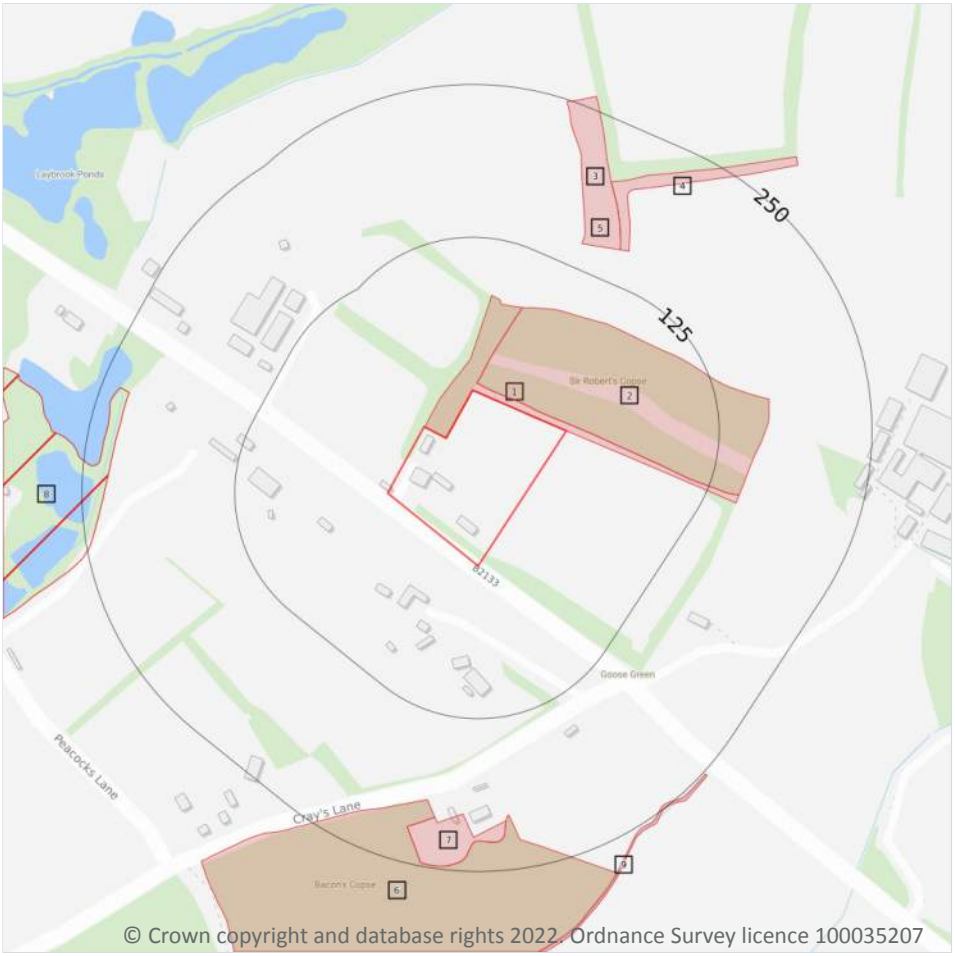
12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

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

13.1 Priority Habitat Inventory

Records within 250m	8

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 58**

ID	Location	Main Habitat	Other habitats
1	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
2	5m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	146m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	153m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	161m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	196m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	203m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	248m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	**0**

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	**1**

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

Features are displayed on the Habitat designations map on **page 58**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
8	226m W	BRITPITS ref: 19495	Low	British Geological Survey BRITPITS database	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

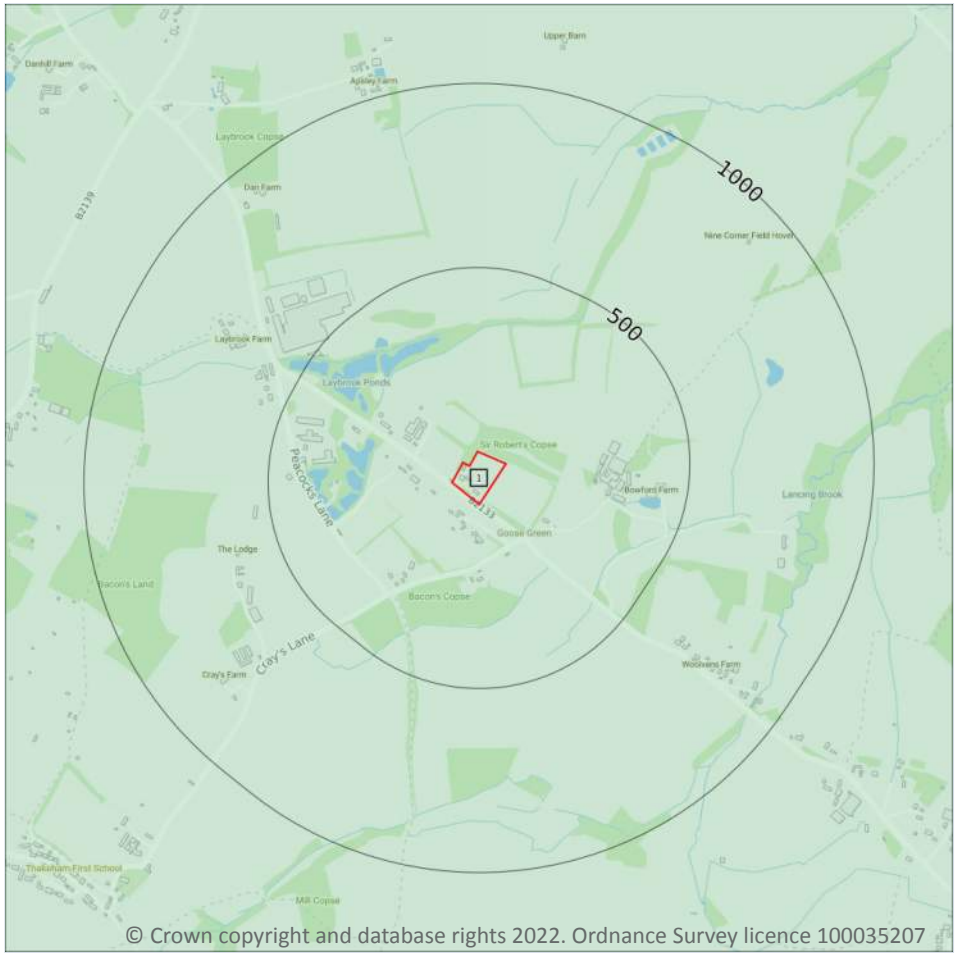
Records within 250m	**0**

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave

them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



14.1 10k Availability

Records within 500m	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 61**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**Full**	**Full**	**No coverage**	**TQ11NW**

This data is sourced from the British Geological Survey.

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

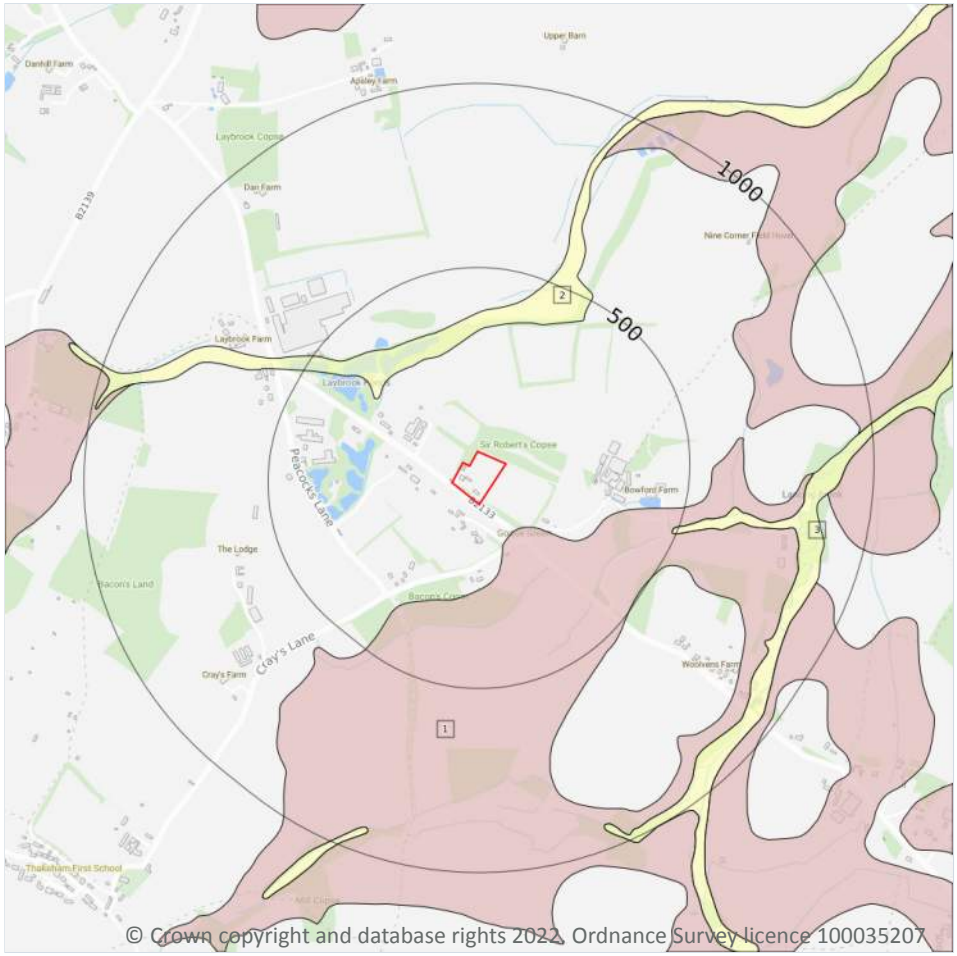
14.2 Artificial and made ground (10k)

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



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m **3**

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 63**

ID	Location	LEX Code	Description	Rock description
1	118m SE	HEAD-XCZS	Head - Clay, Silt And Sand	Clay, Silt And Sand
2	279m NW	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
3	488m E	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

This data is sourced from the British Geological Survey.

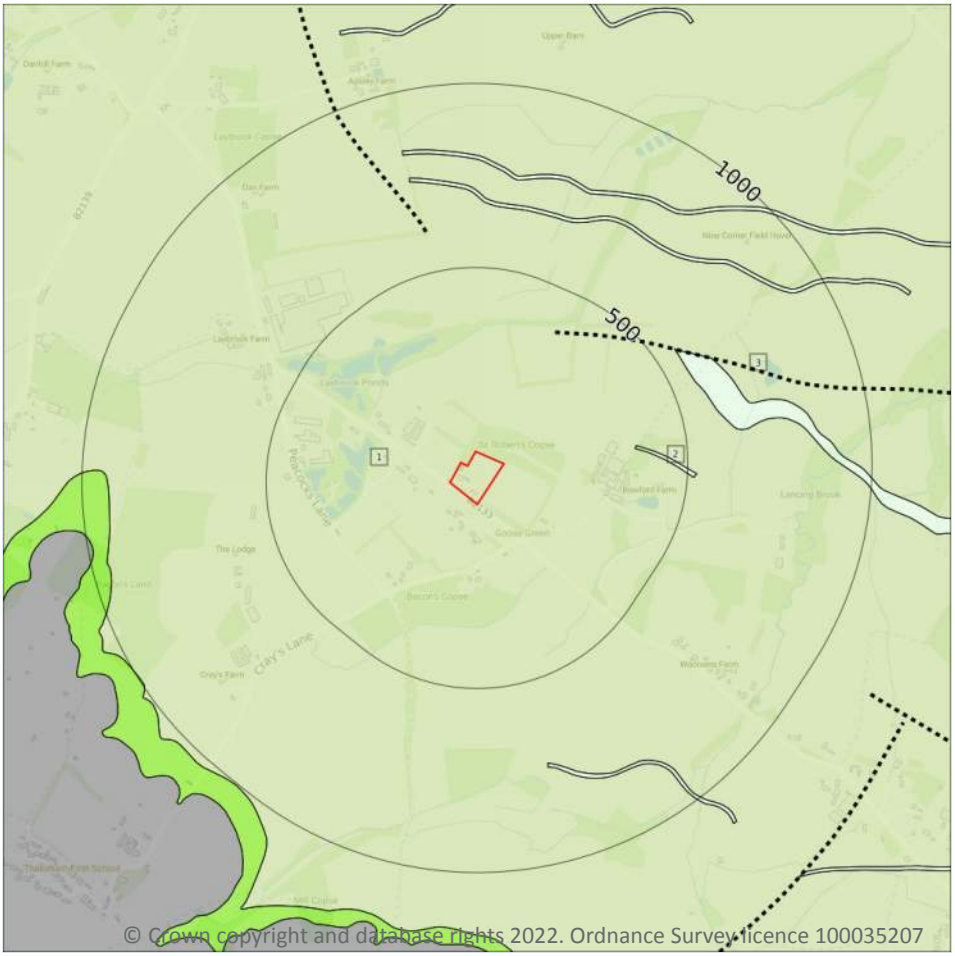
14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m	2

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 65**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**WC-MDST**	**Weald Clay Formation - Mudstone**	**Barremian Age - Hauterivian Age**
2	359m E	WC-SDST	Weald Clay Formation - Sandstone	Barremian Age - Hauterivian Age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	**1**

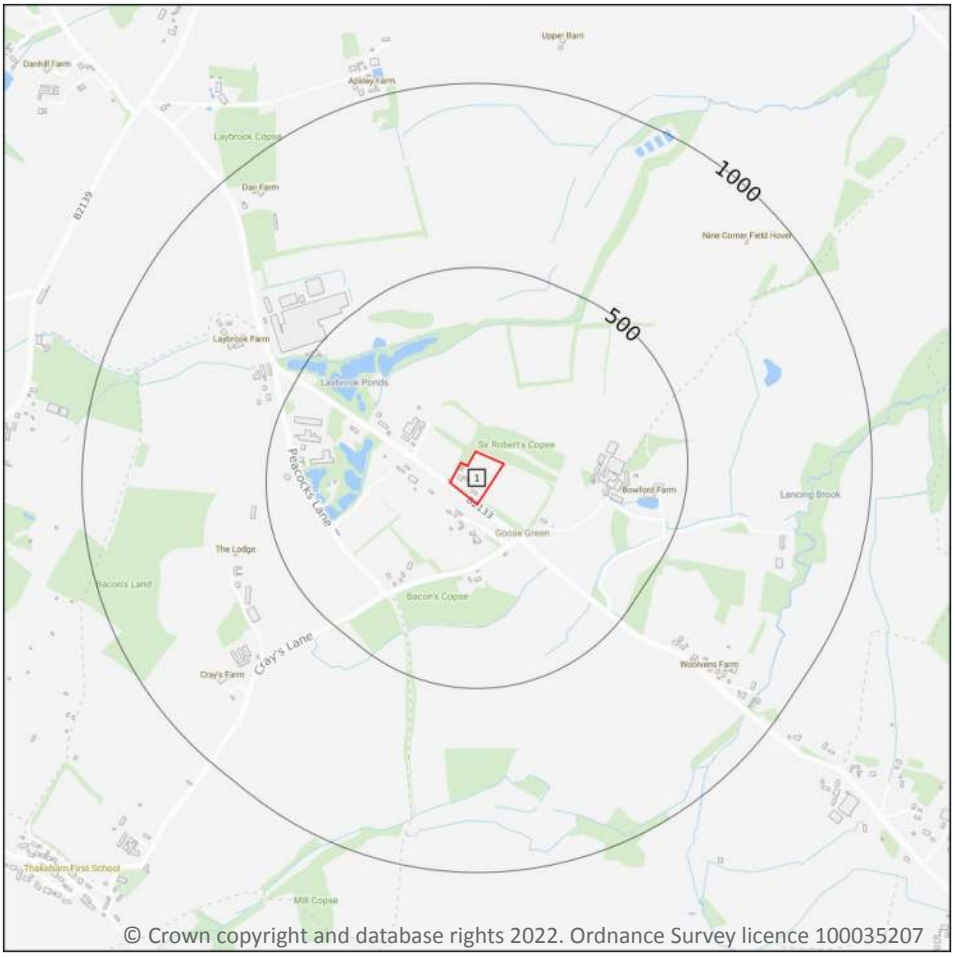
Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 65**

ID	Location	Category	Description
3	383m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side

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 67**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW318_333_brighton_and_worthing_v4**

This data is sourced from the British Geological Survey.

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

15.2 Artificial and made ground (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial

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 69**

ID	Location	LEX Code	Description	Rock description
1	114m SE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
2	278m NW	ALV-XCZSV	ALLUVIUM	CLAY, SILT, 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.

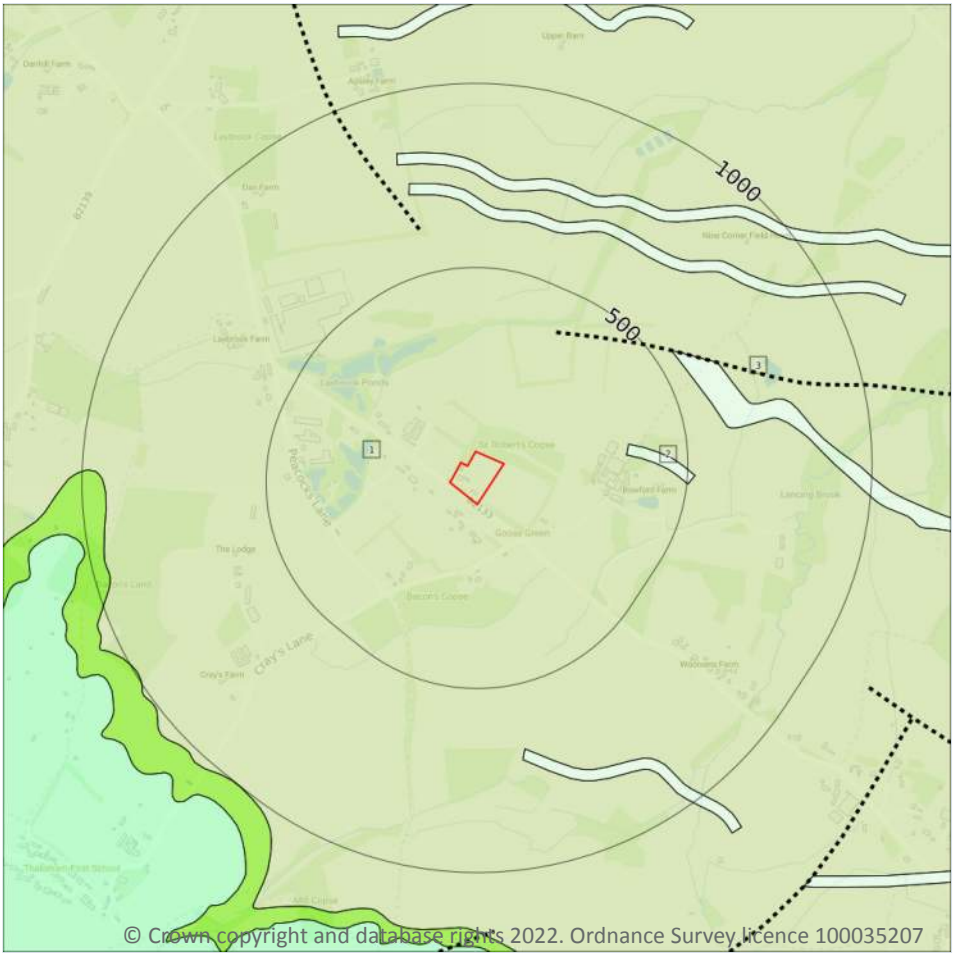
15.7 Landslip permeability (50k)

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	2

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 71**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**WC-MDST**	**WEALD CLAY FORMATION - MUDSTONE**	**HAUTERIVIAN**
2	334m E	WC-SDST	WEALD CLAY FORMATION - SANDSTONE	HAUTERIVIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	1

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

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

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 71**

ID	Location	Category	Description
3	384m NE	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.

16 Boreholes

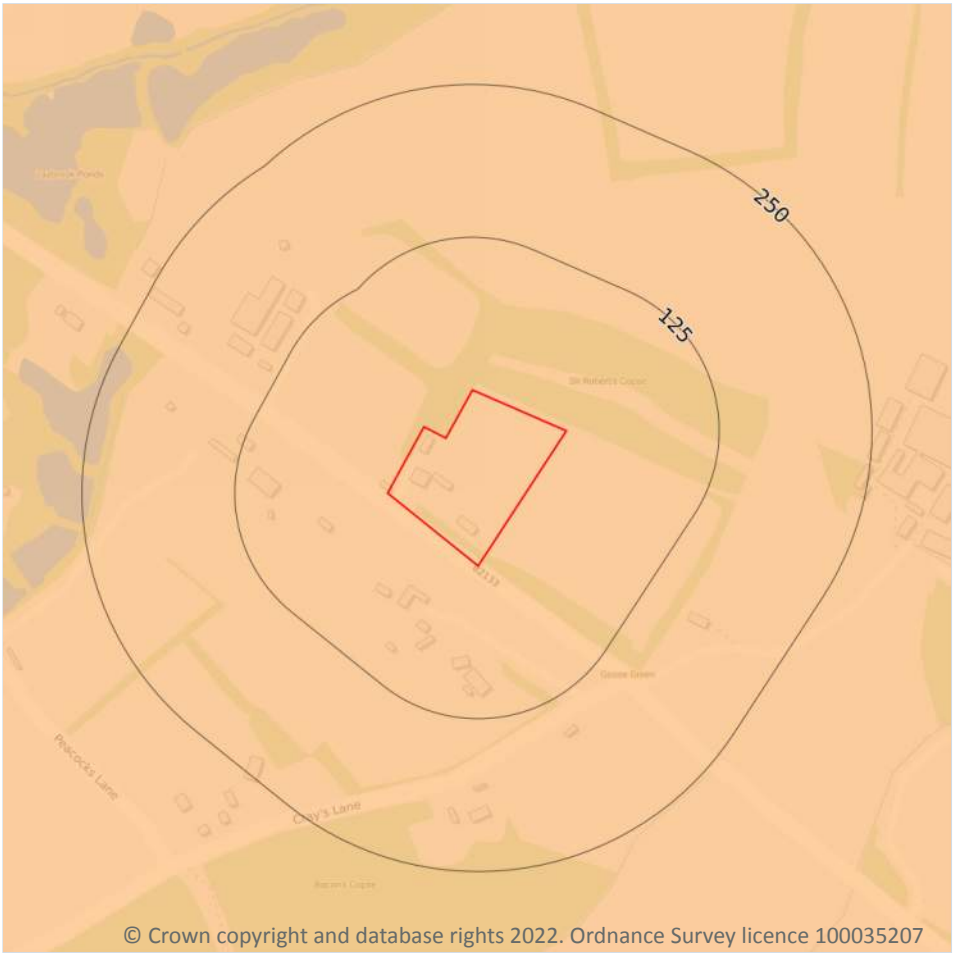
16.1 BGS Boreholes

Records within 250m	0

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

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	1

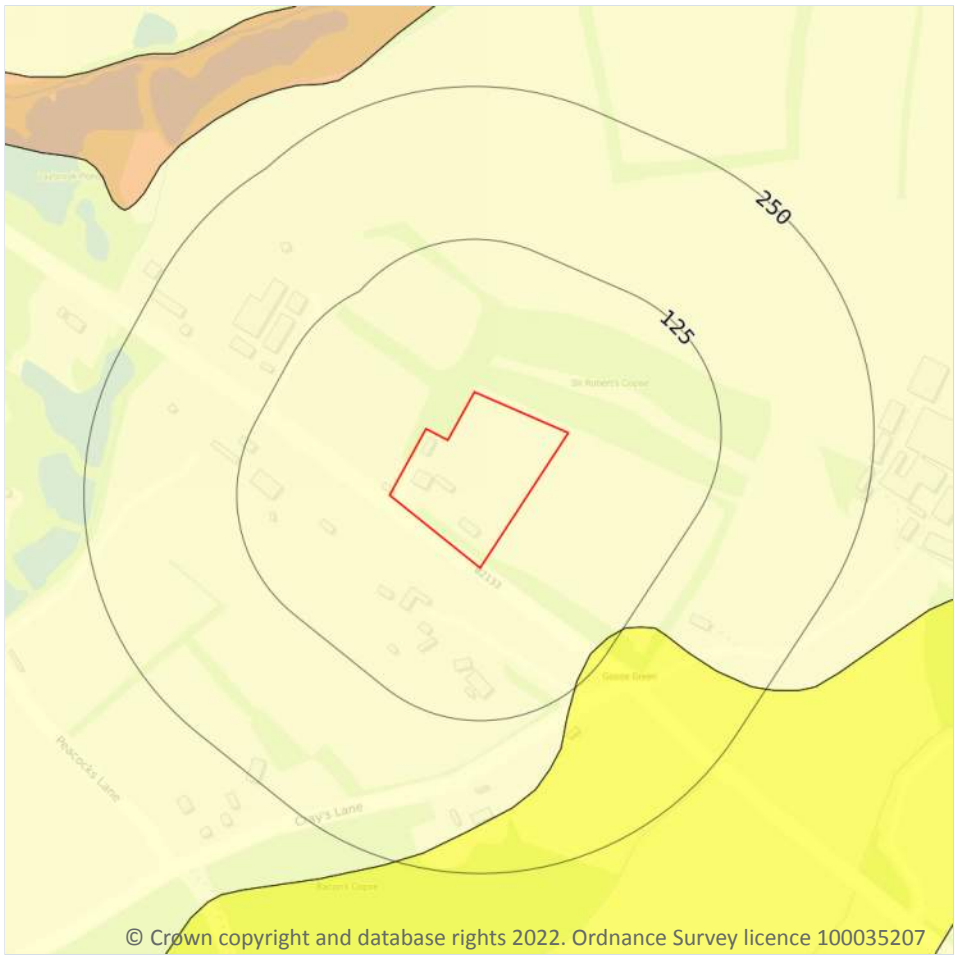
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 74**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	1

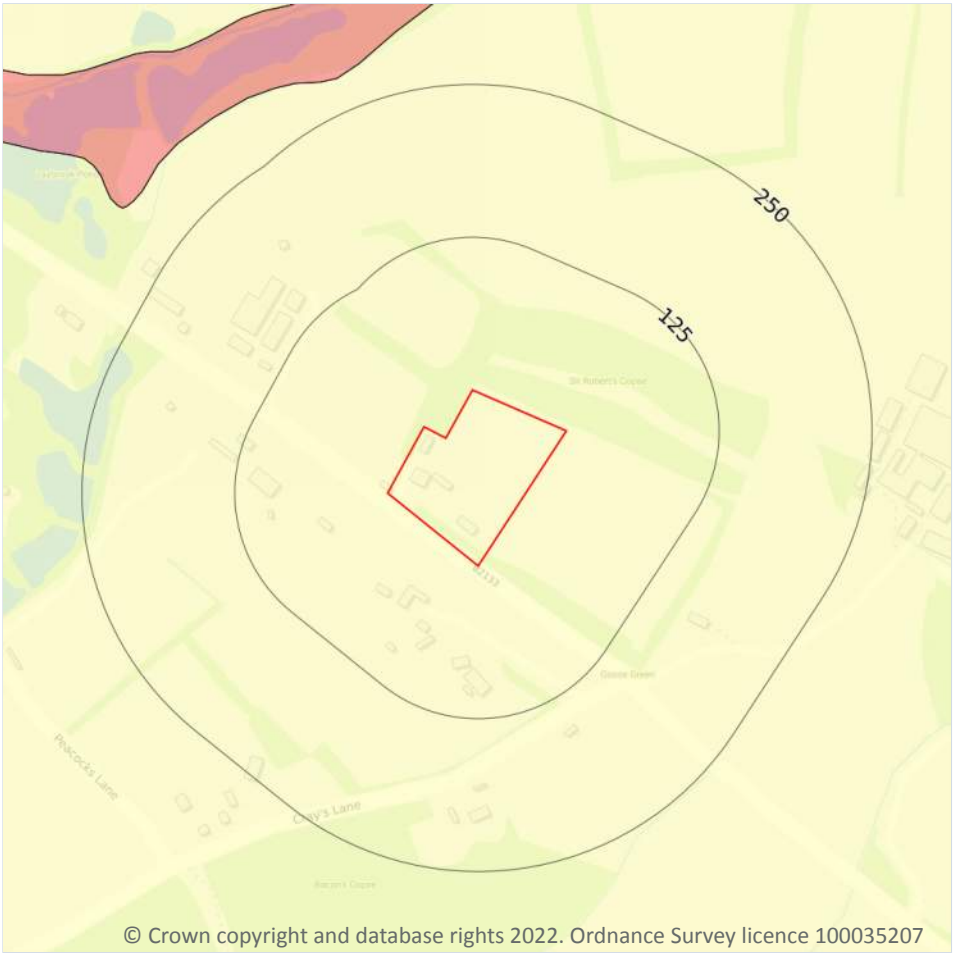
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 75**

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

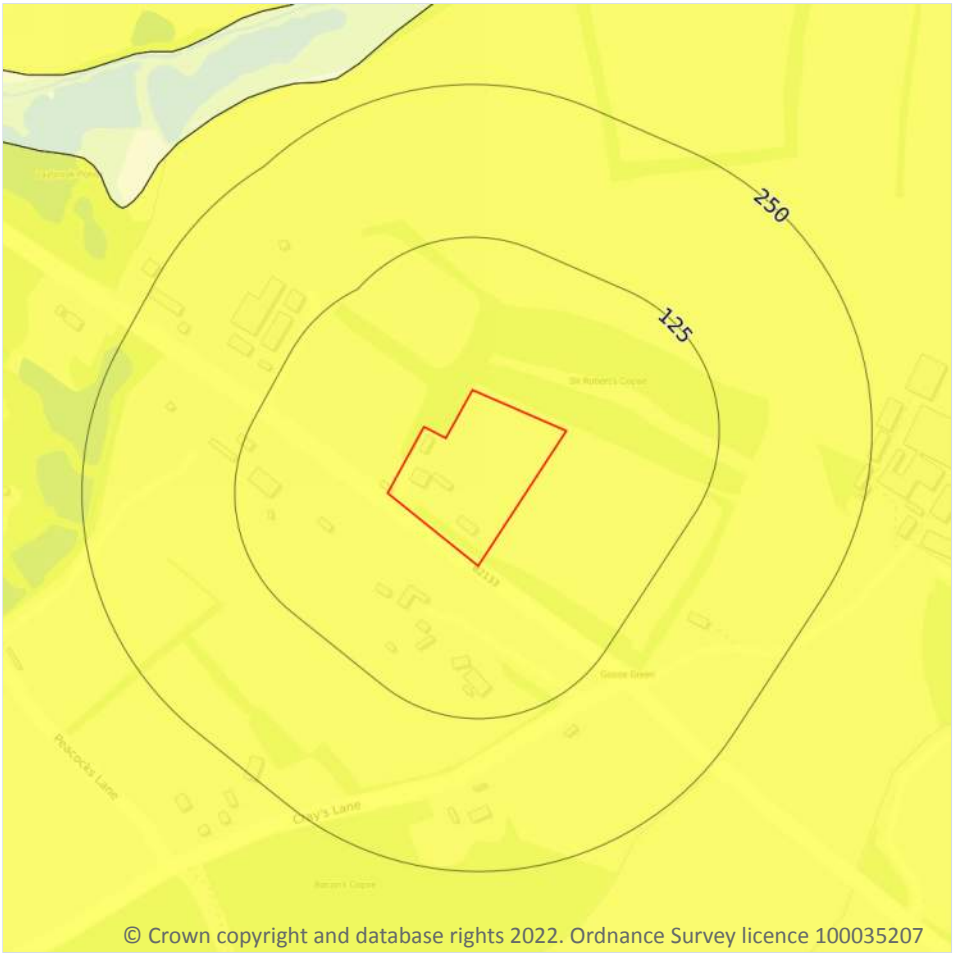
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 76**

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



17.4 Collapsible deposits

Records within 50m	1

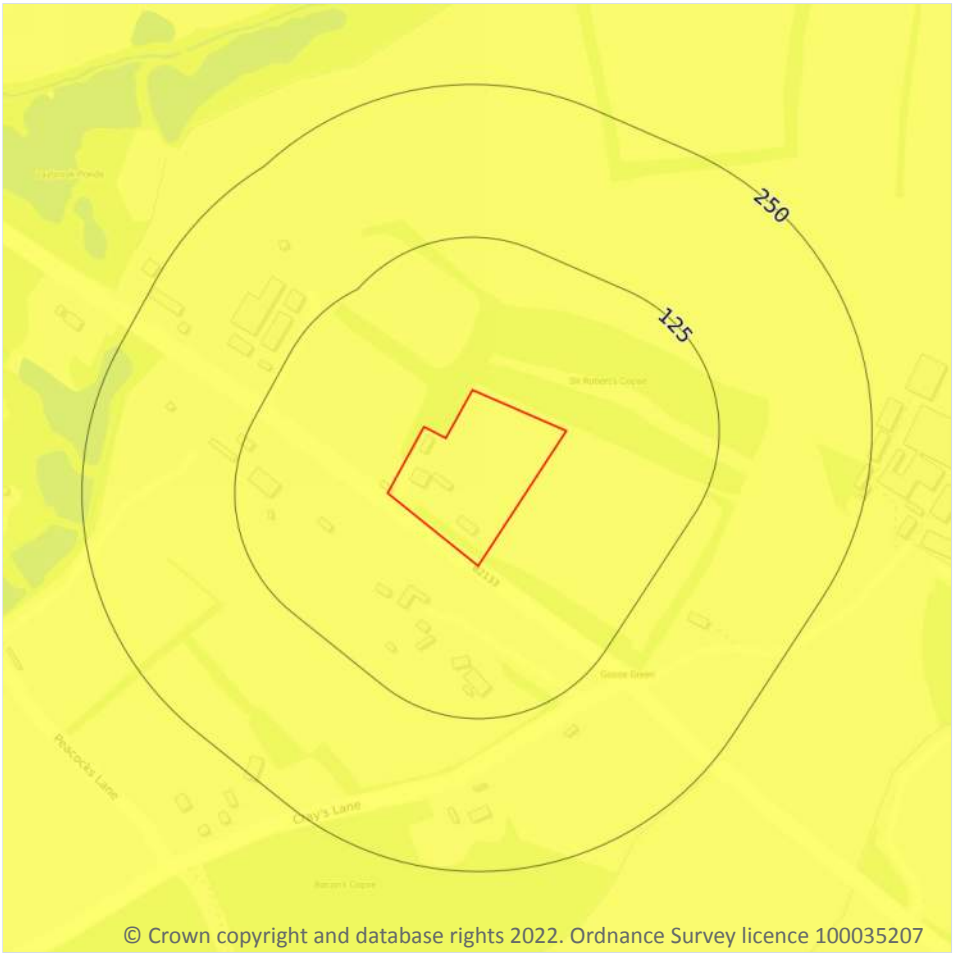
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 77**

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

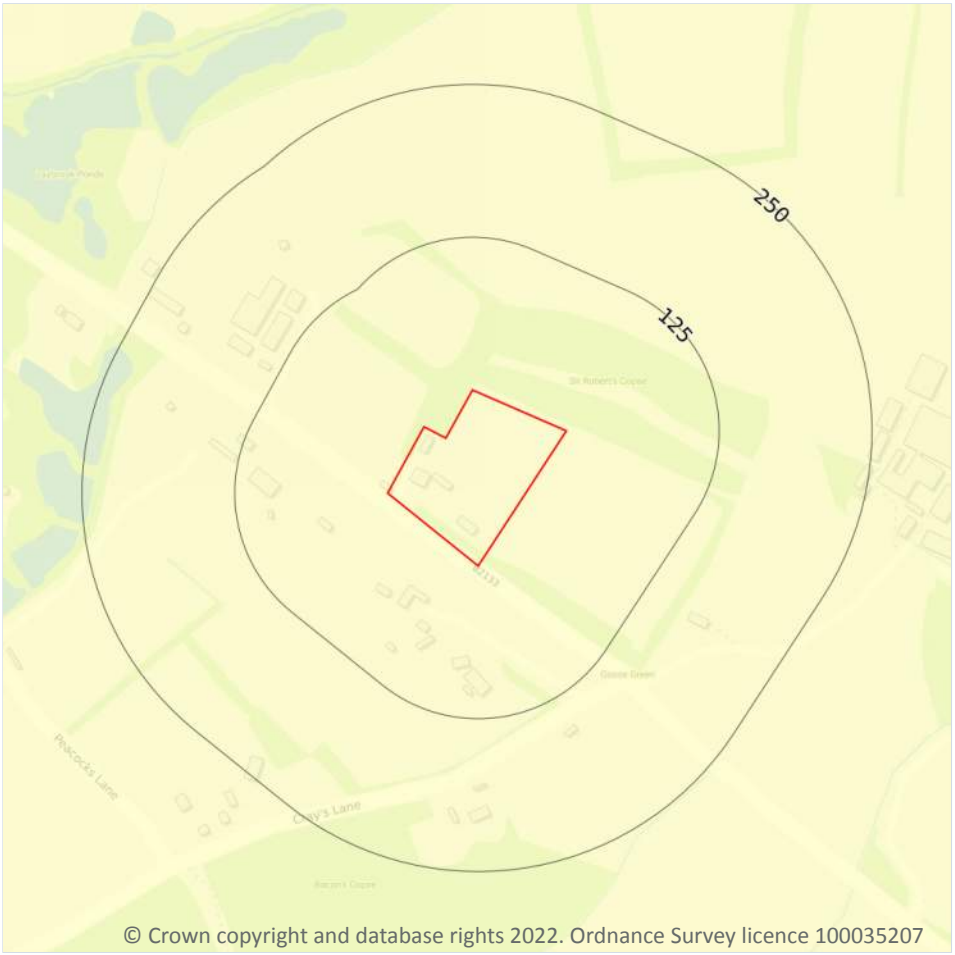
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 78**

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	1

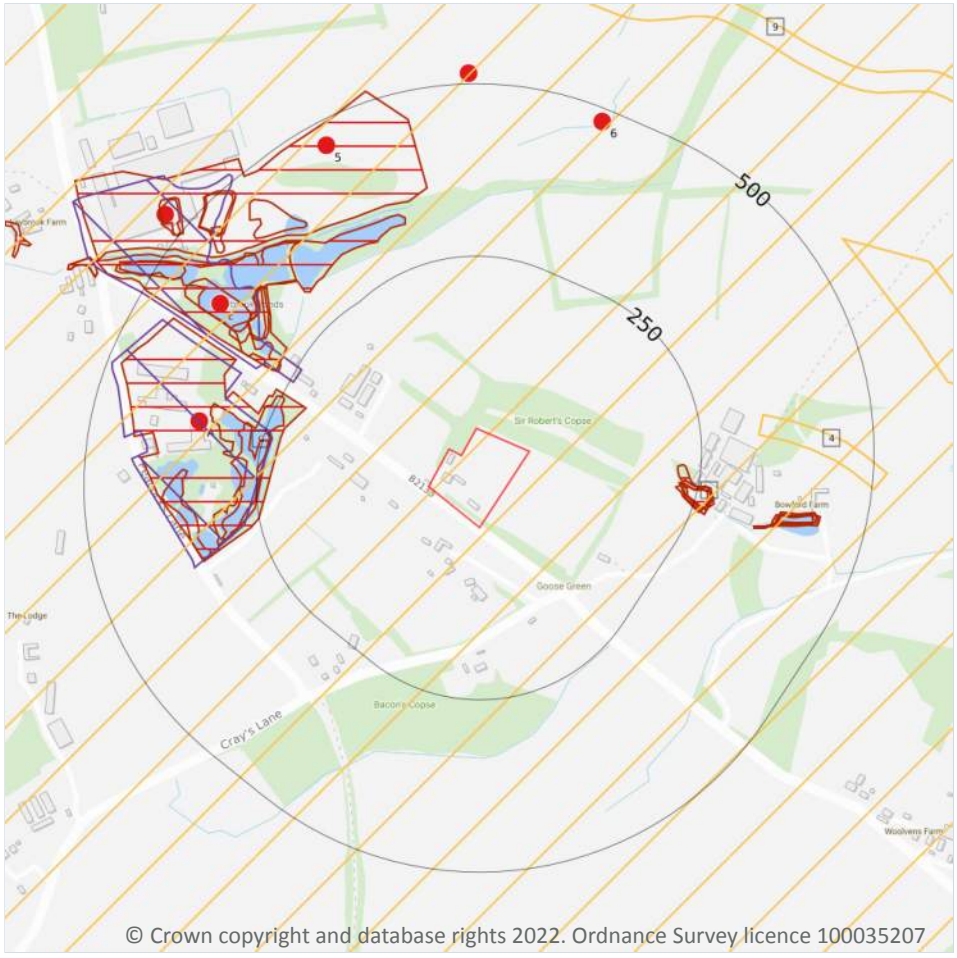
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 79**

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

This data is sourced from the British Geological Survey.

18 Mining, 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	5

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 80**

ID	Location	Details	Description
A	346m W	Name: Goose Green Brickworks Address: Thakeham, PULBOROUGH, West Sussex Commodity: Clay & Shale 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
A	346m W	Name: Goose Green Brickworks Address: Thakeham, PULBOROUGH, West Sussex Commodity: Sand 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
E	393m NW	Name: Laybrook Quarry Address: Thakeham, PULBOROUGH, West Sussex Commodity: Clay & Shale 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
5	464m NW	Name: Laybrook Quarry Address: Thakeham, PULBOROUGH, West Sussex Commodity: Clay & Shale Status: Inactive	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, is not extracting minerals, but which still has a valid planning permission to do so, and can restart at any time. May be considered Mothballed by operator.May be considered to have Active or Dormant planning permission
6	481m N	Name: Laybrook Quarry Address: Thakeham, PULBOROUGH, West Sussex Commodity: Clay & Shale Status: Inactive	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, is not extracting minerals, but which still has a valid planning permission to do so, and can restart at any time. May be considered Mothballed by operator.May be considered to have Active or Dormant planning permission

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	9

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 80**

ID	Location	Land Use	Year of mapping	Mapping scale
A	211m NW	Brick Works	1946	1:10560
B	217m E	Pond	1980	1:10000
B	219m E	Pond	1957	1:10560
B	223m E	Pond	1946	1:10560
B	223m E	Pond	1909	1:10560
B	227m E	Pond	1875	1:10560
B	227m E	Pond	1896	1:10560
C	228m NW	Ponds	1980	1:10000
C	241m W	Ponds	1957	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	2

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 80**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
A	237m W	Peacock Lane	Sand	Surface mineral working	Valid	3/12/47
D	243m NW	Laybrook	Brick clay	Surface mineral working	Valid	Not available

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	**6**

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 80**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Not available**	**Sand/Building Stone**	**B**	**Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered**
4	334m E	Not available	Iron Ore	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
8	550m NE	Not available	Iron Ore	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
9	631m N	Not available	Iron Ore	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
-	677m S	Not available	Iron Ore	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
-	714m N	Not available	Iron Ore	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	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.

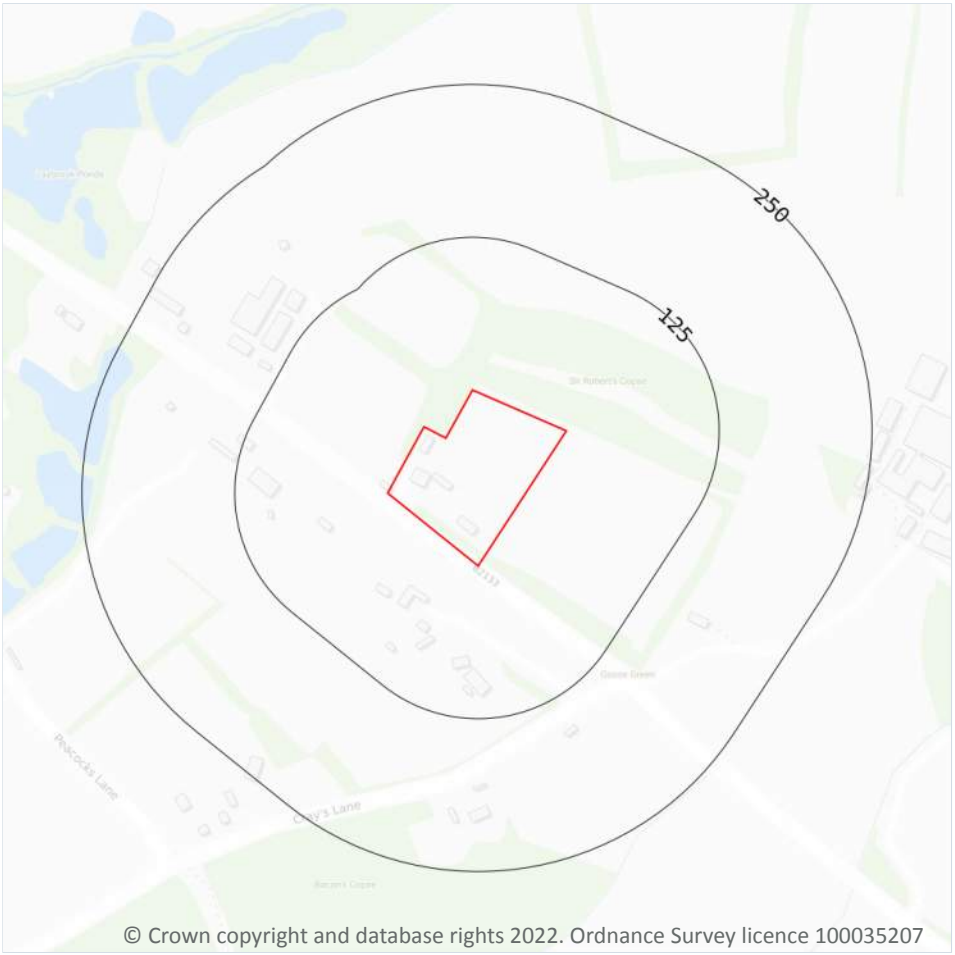
18.13 Clay mining

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	1

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 86**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**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	4

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 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
11m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
29m NE	15 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

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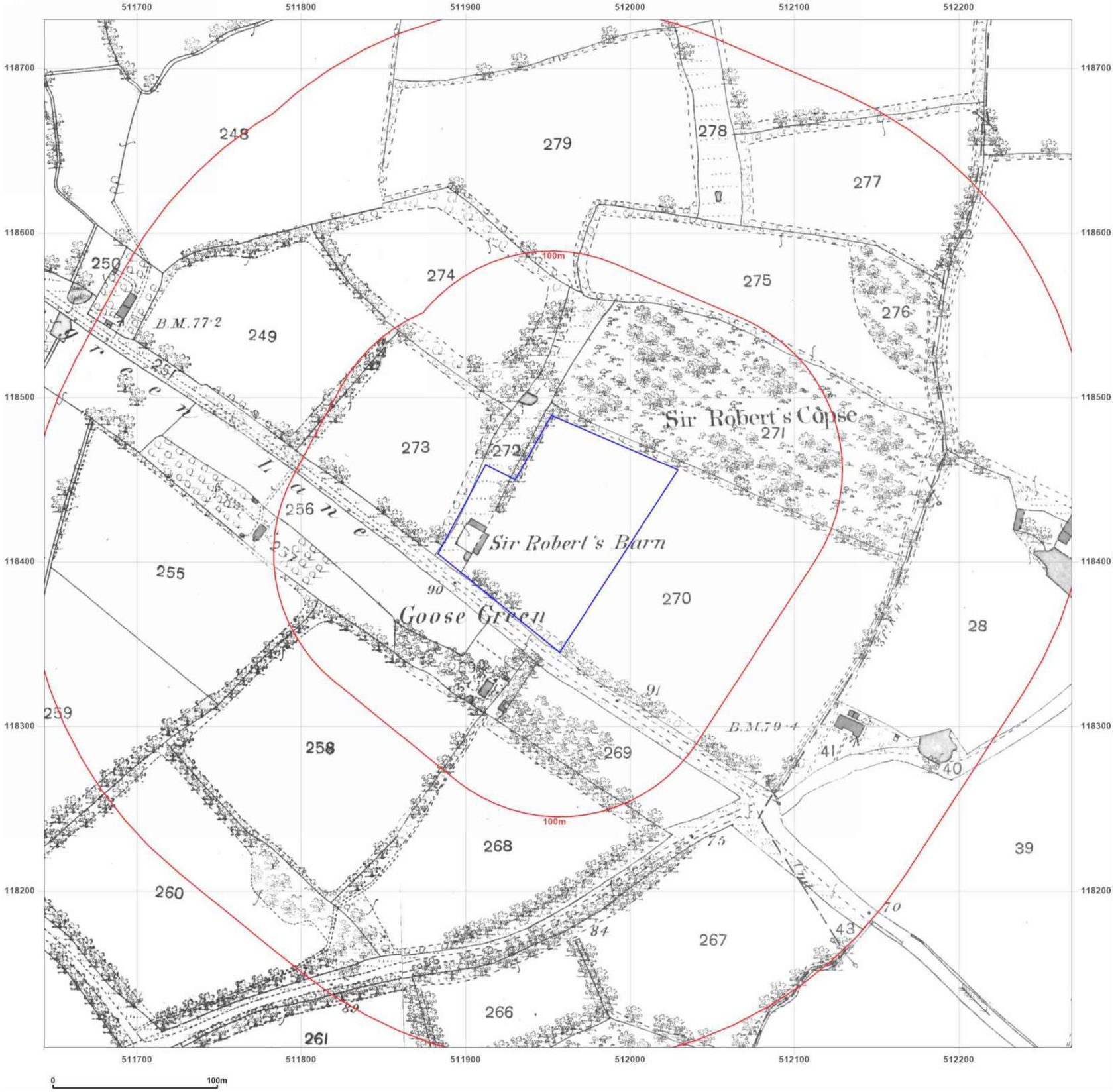
Appendix B

Historical Maps



Groundsure INSIGHTS

Site Details:

SIR ROBERTS FARM, GOOSE GREEN LANE, GOOSE GREEN, RH20 2LW

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Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series
Map date: **1875-1876**
Scale: 1:2,500
Printed at: 1:2,500

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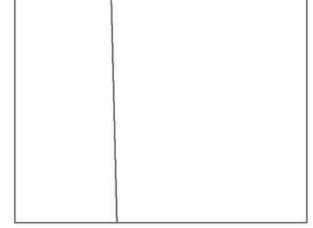
Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1875
Revised 1875
Edition N/A
Copyright N/A
Levelled N/A



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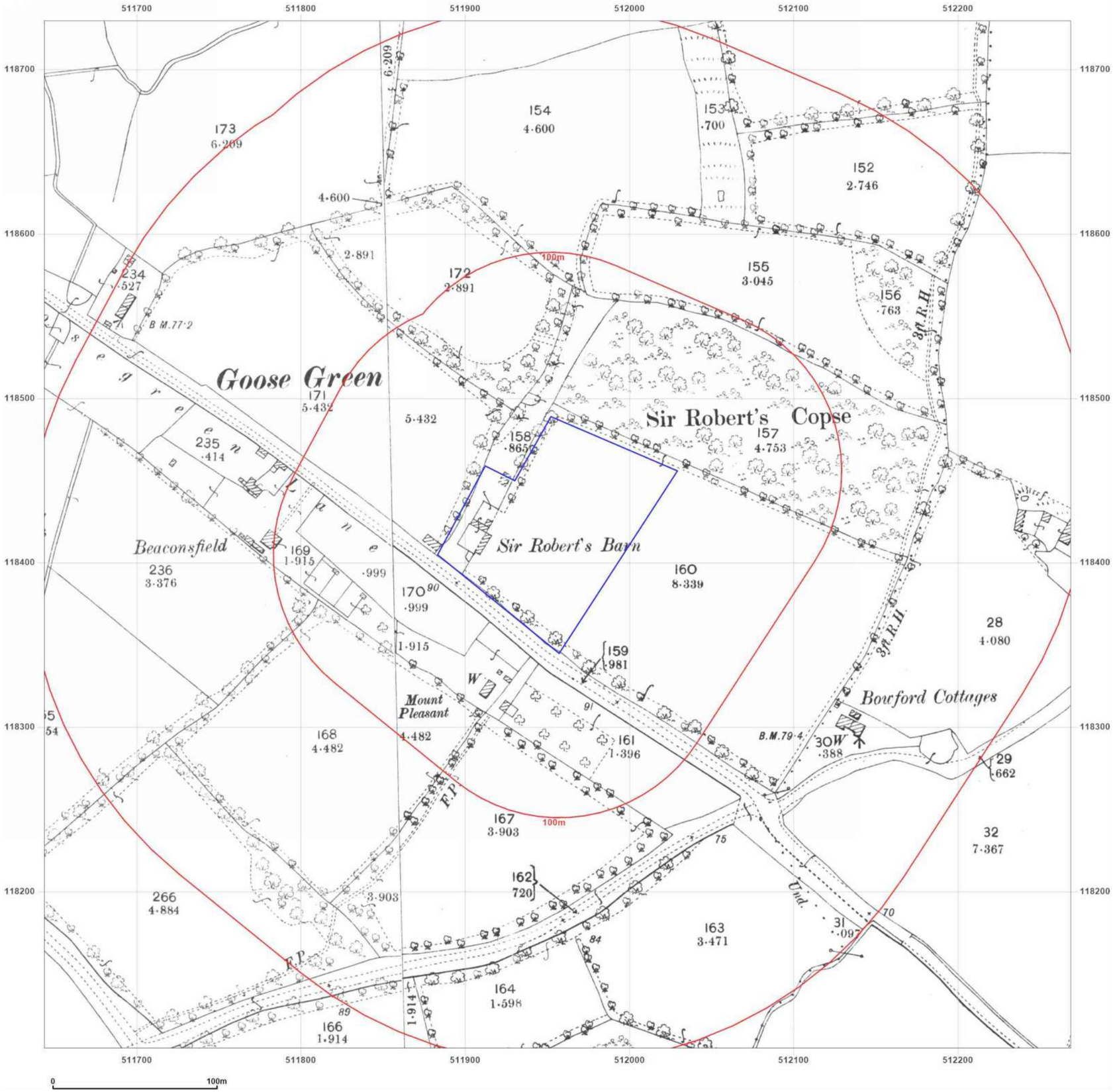

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series

Map date: **1897**

Scale: 1:2,500

Printed at: 1:2,500

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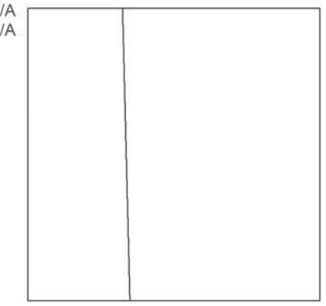
Surveyed 1897
Revised 1897
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1897
Revised 1897
Edition N/A
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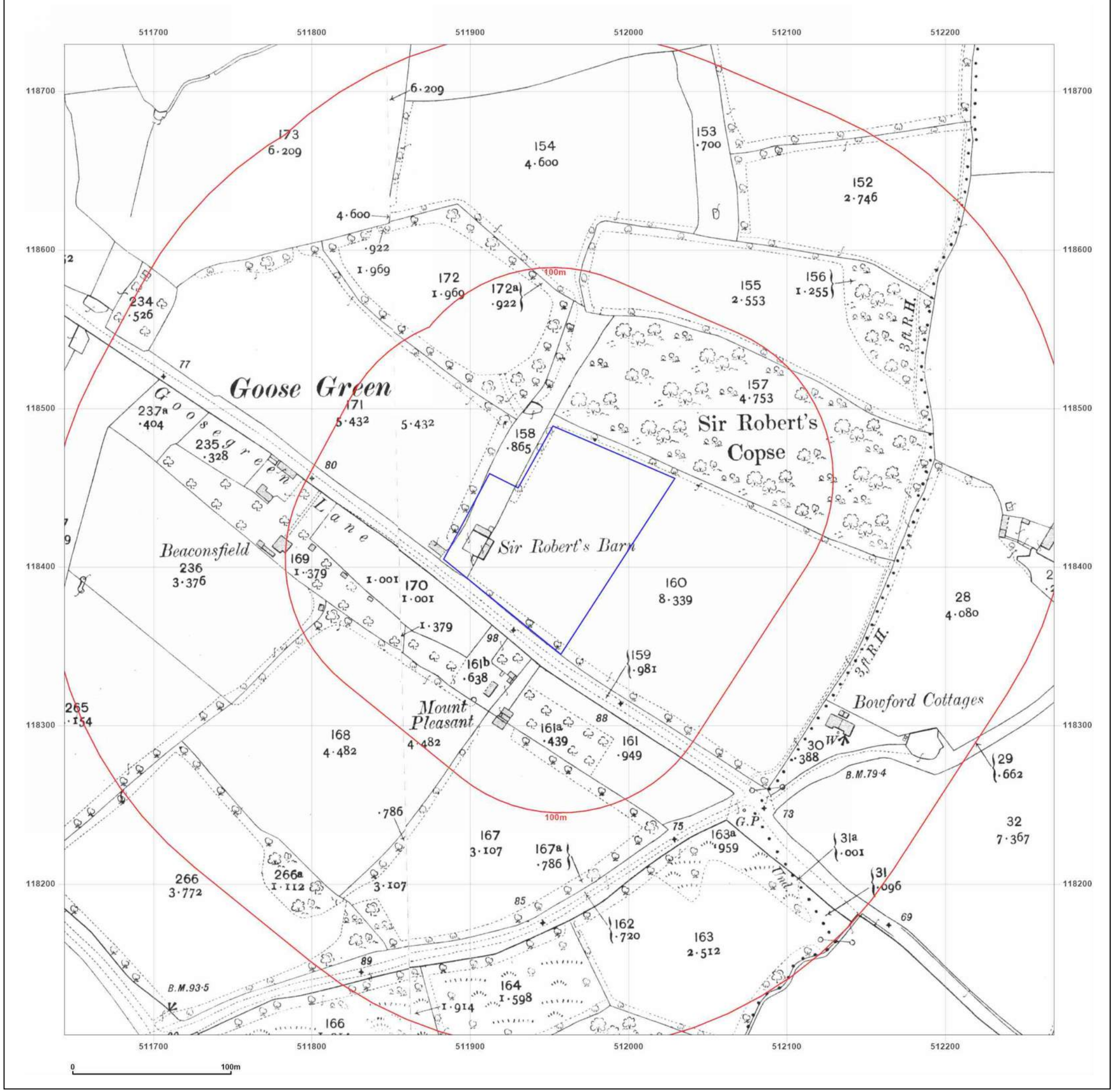

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Site Details:

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series
Map date: **1911-1912**
Scale: 1:2,500
Printed at: 1:2,500

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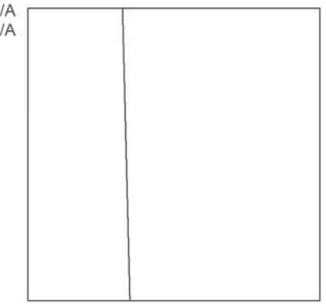
Surveyed 1911
Revised 1911
Edition N/A
Copyright N/A
Levelled N/A

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



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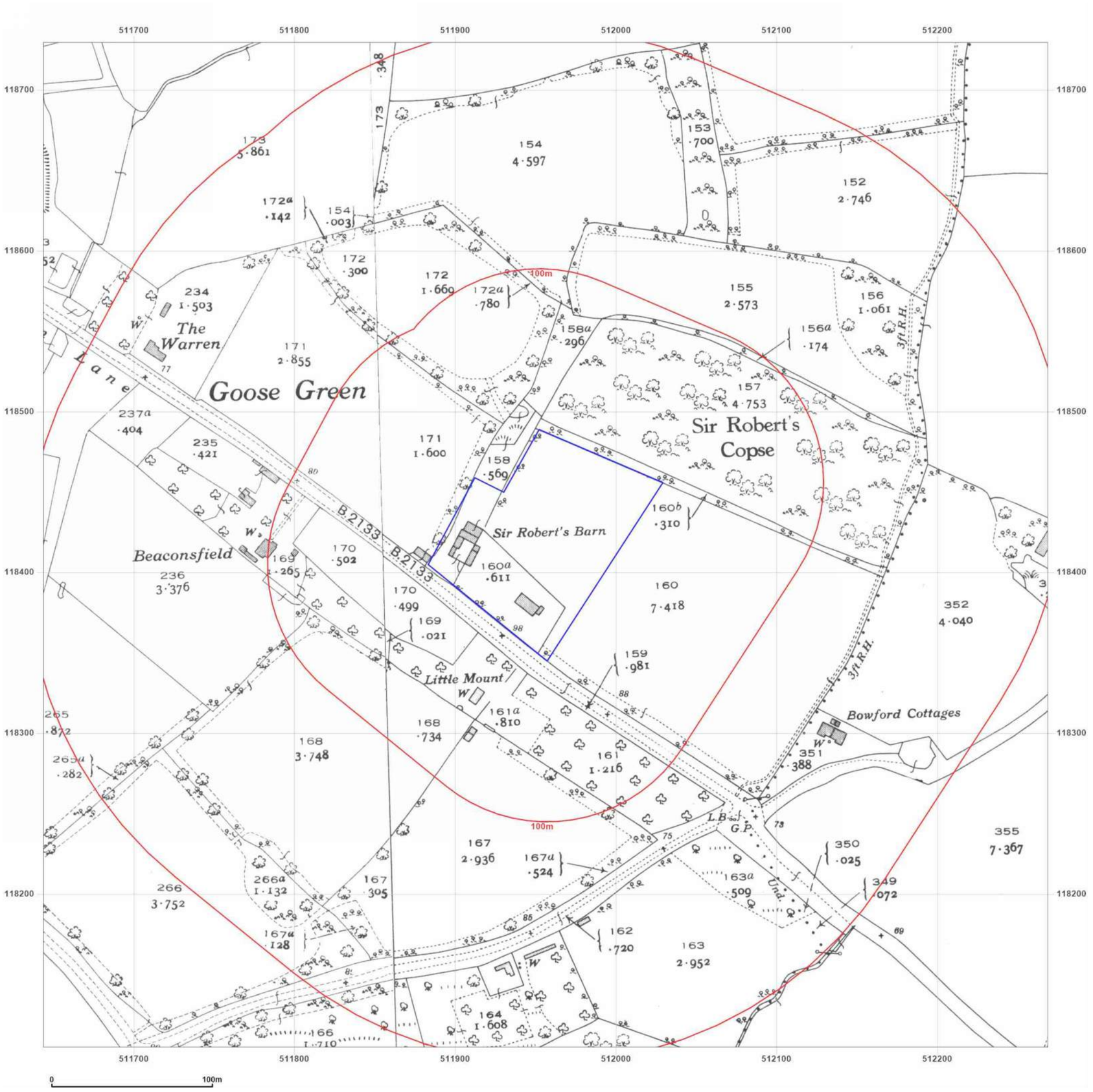

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series
Map date: **1939**
Scale: 1:2,500
Printed at: 1:2,500

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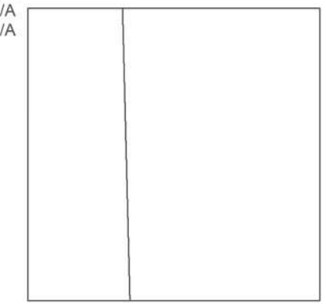
Surveyed 1939
Revised 1939
Edition N/A
Copyright N/A
Levelled N/A



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Revised 1939
Edition N/A
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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: National Grid
Map date: **1974**
Scale: 1:2,500
Printed at: 1:2,500

N W E S

Surveyed 1973	Surveyed 1973
Revised 1973	Revised 1973
Edition N/A	Edition N/A
Copyright 1974	Copyright 1974
Levelled 1966	Levelled 1966

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: National Grid
Map date: **1974**
Scale: 1:2,500
Printed at: 1:2,500

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Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: National Grid

Map date: **1984**

Scale: 1:2,500

Printed at: 1:2,500

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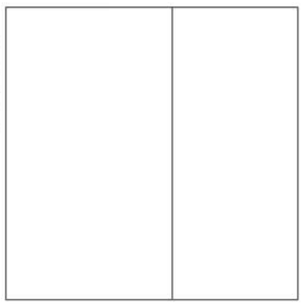
Surveyed 1966
Revised 1984
Edition N/A
Copyright 1984
Levelled 1966



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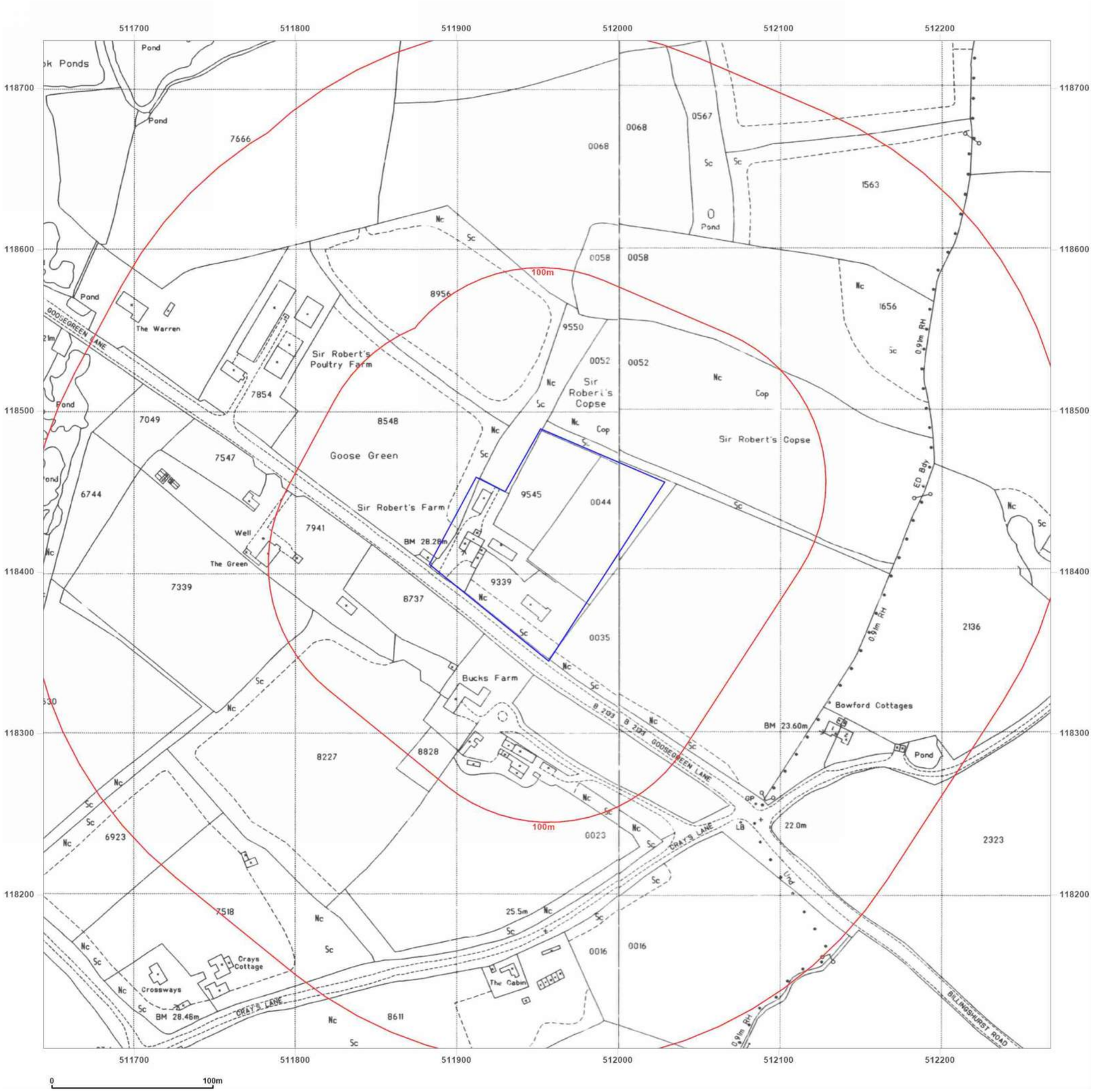

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: National Grid

Map date: **1993**

Scale: 1:2,500

Printed at: 1:2,500

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

Surveyed 1993
Revised N/A
Edition N/A
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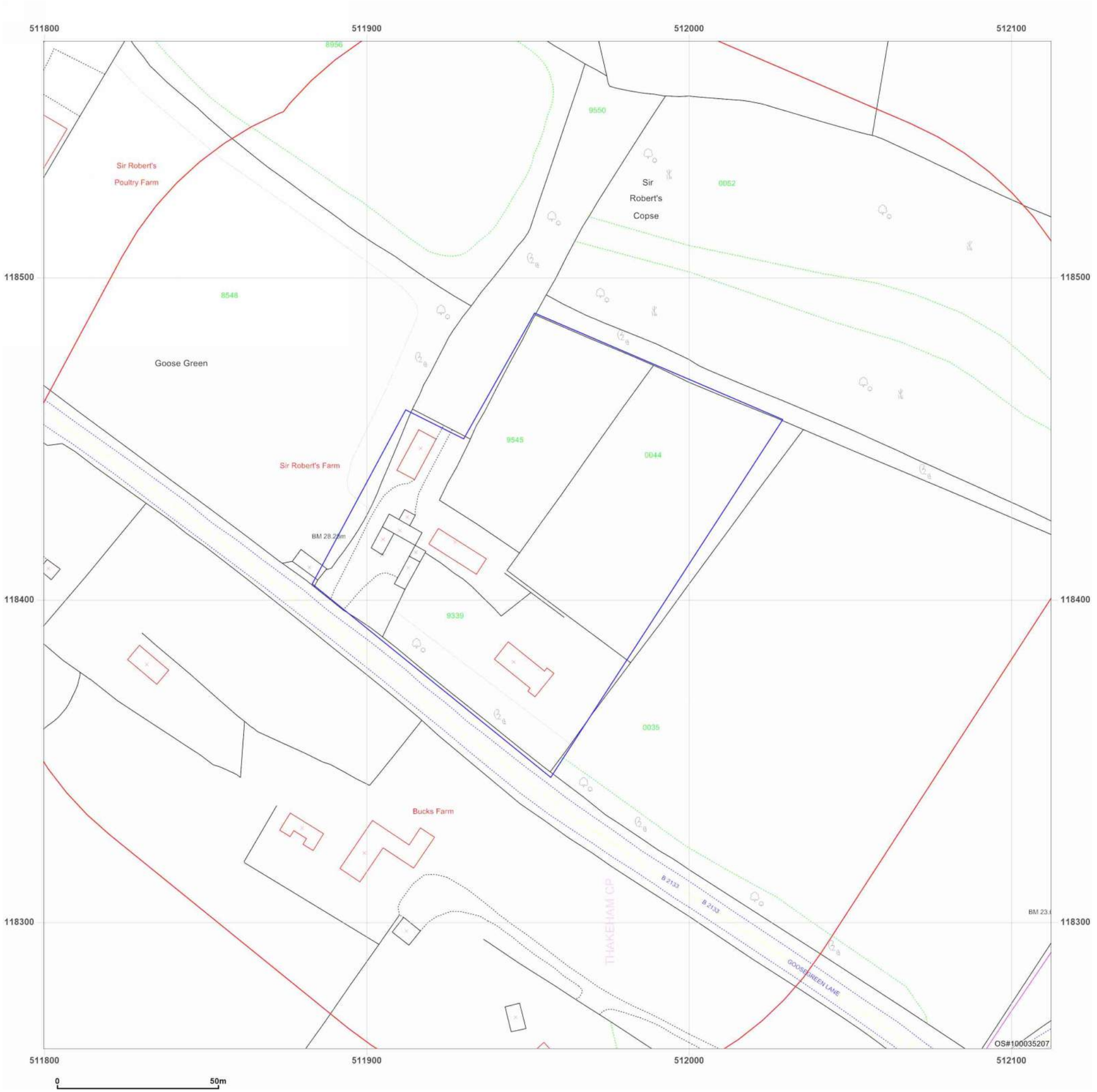

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Site Details:

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

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

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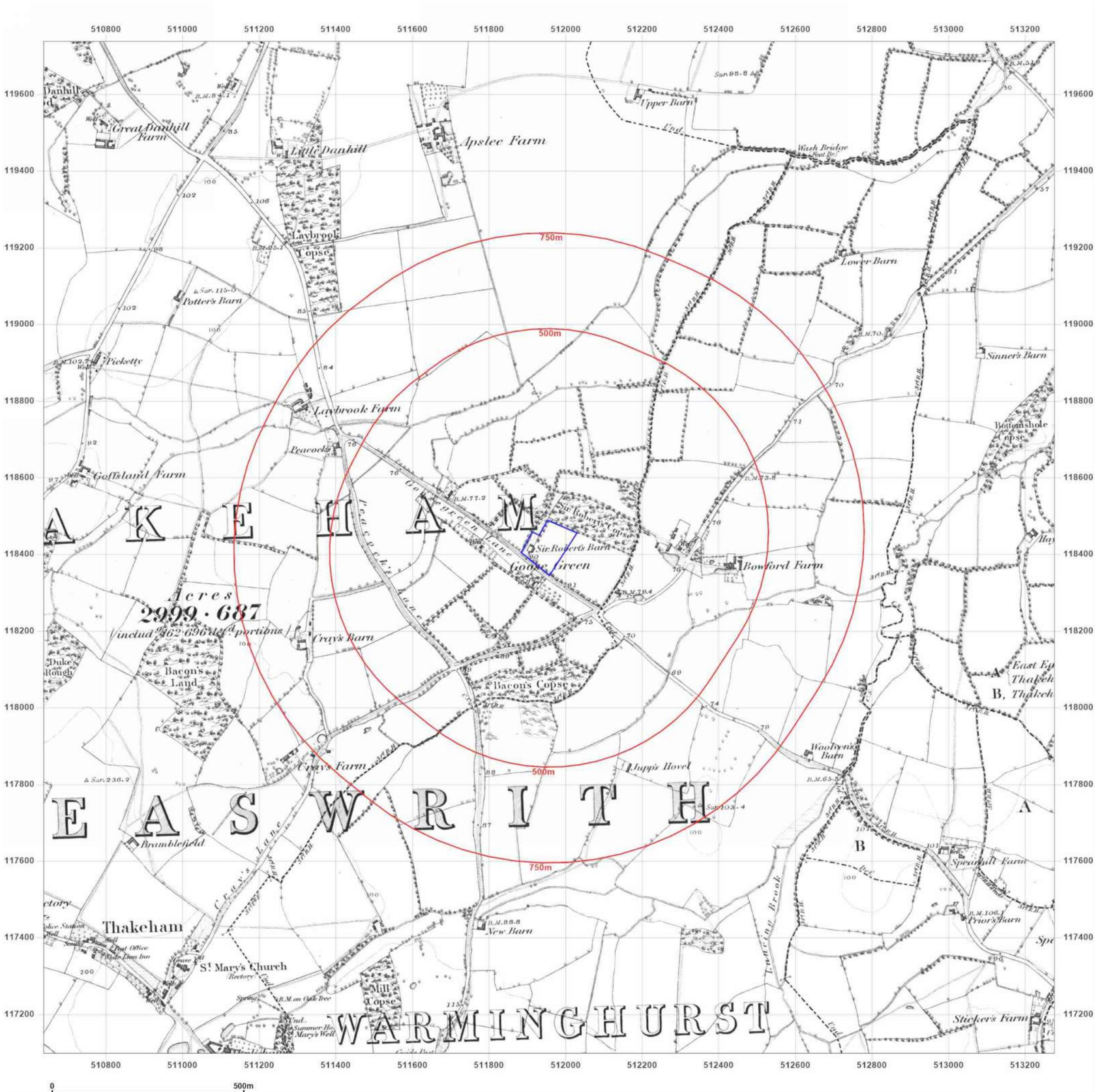

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series
Map date: **1875**
Scale: 1:10,560
Printed at: 1:10,560

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Surveyed 1875
Revised 1875
Edition N/A
Copyright N/A
Levelled N/A

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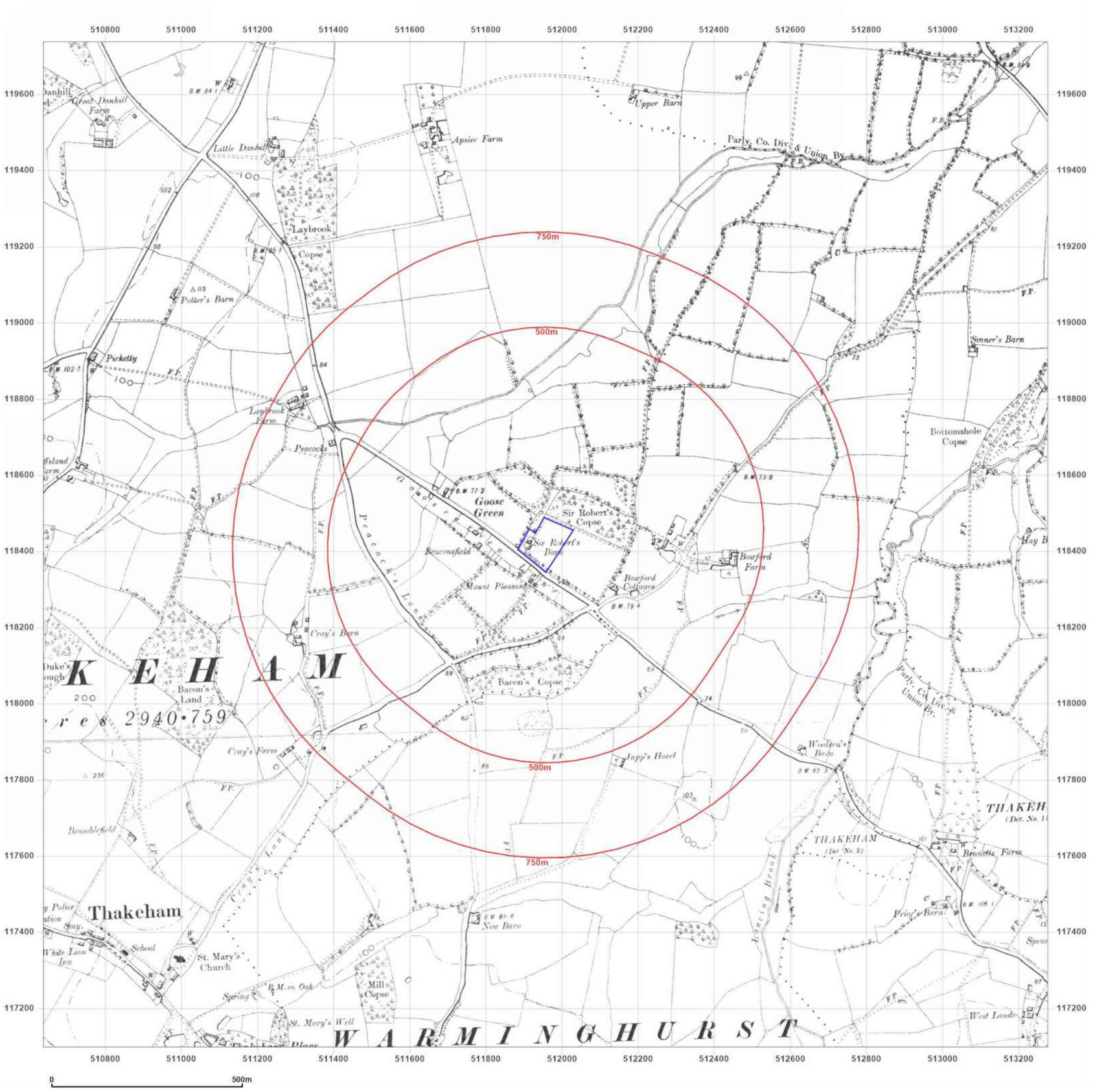

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series

Map date: **1896**

Scale: 1:10,560

Printed at: 1:10,560

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Revised 1896
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1896
Edition N/A
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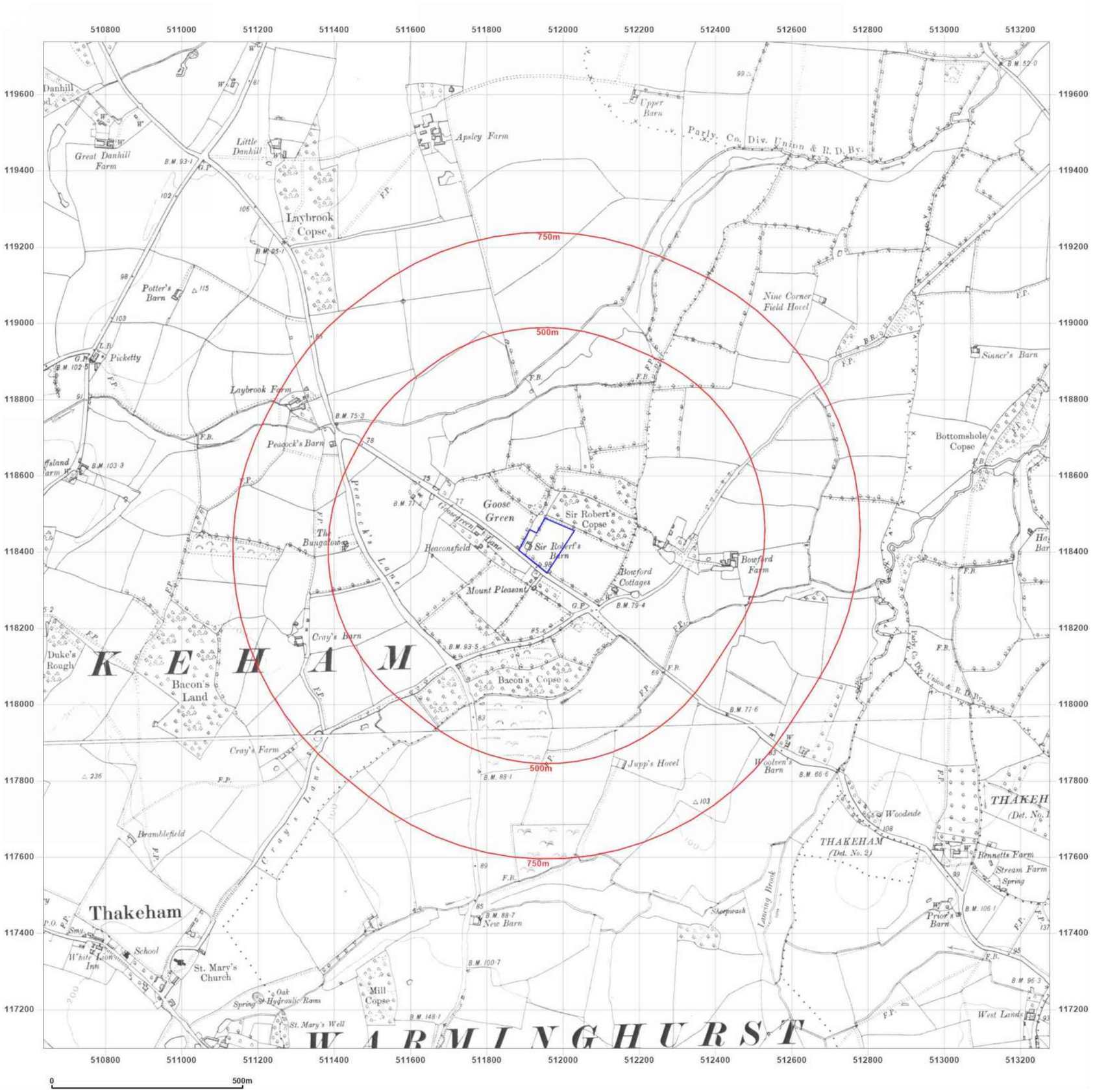

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Site Details:

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series

Map date: **1909**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1875
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1875
Revised 1909
Edition N/A
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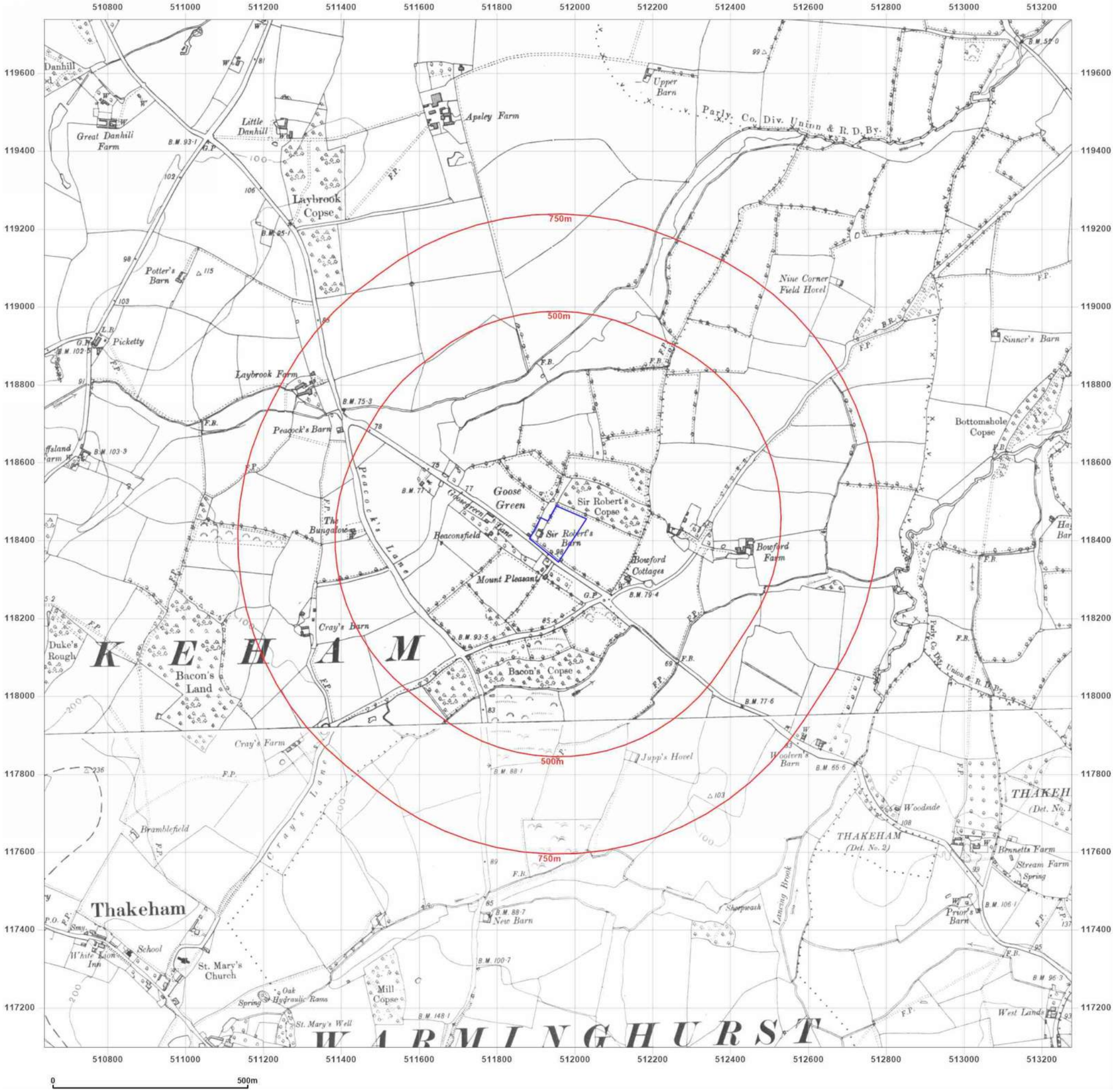

Groundsure INSIGHTS

Site Details:

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series

Map date: **1909**

Scale: 1:10,560

Printed at: 1:10,560

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Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1875
Revised 1909
Edition N/A
Copyright N/A
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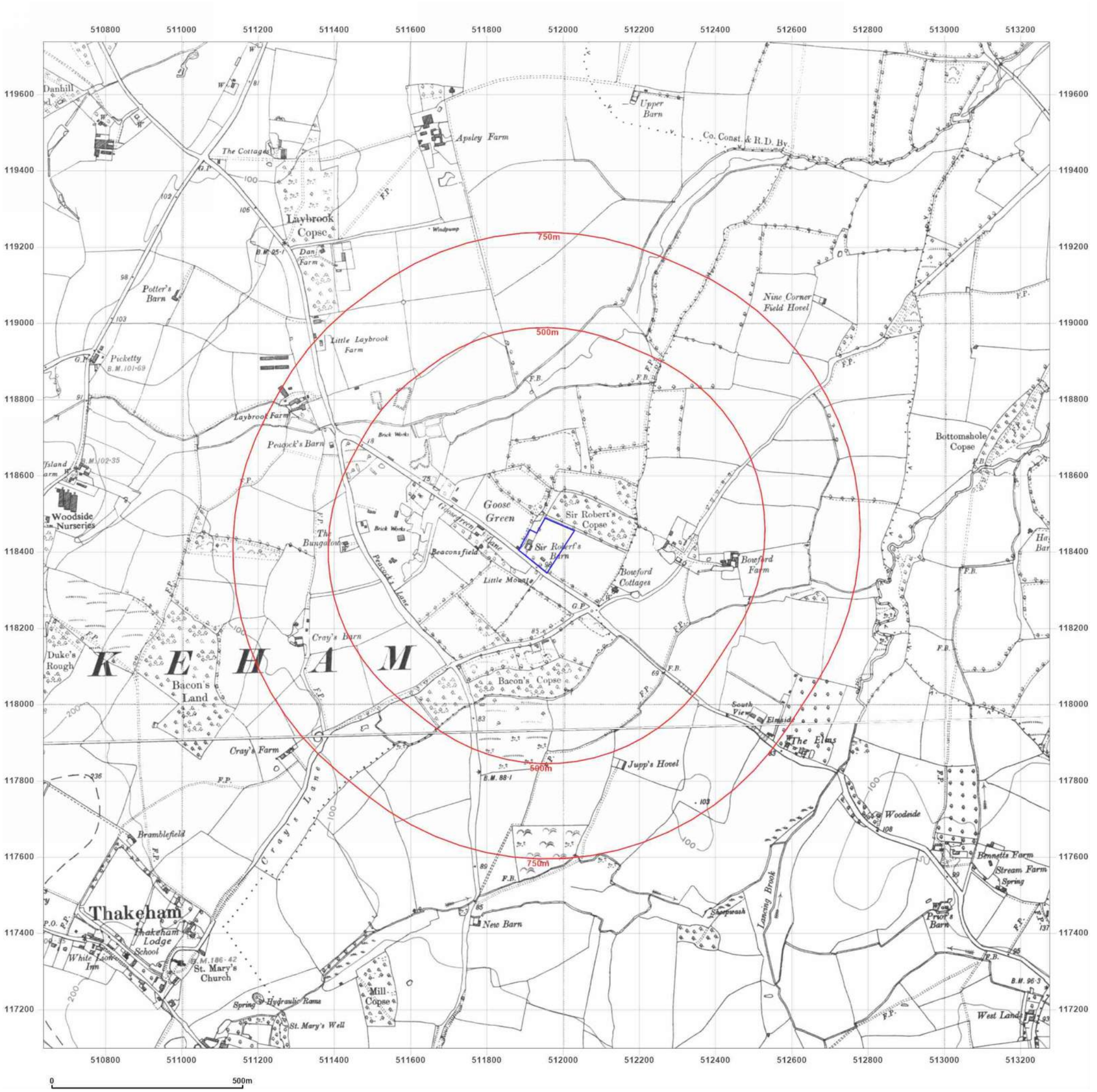

Groundsure INSIGHTS

Site Details:

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Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: County Series

Map date: **1946**

Scale: 1:10,560

Printed at: 1:10,560

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Levelled N/A

Surveyed 1875
Revised 1946
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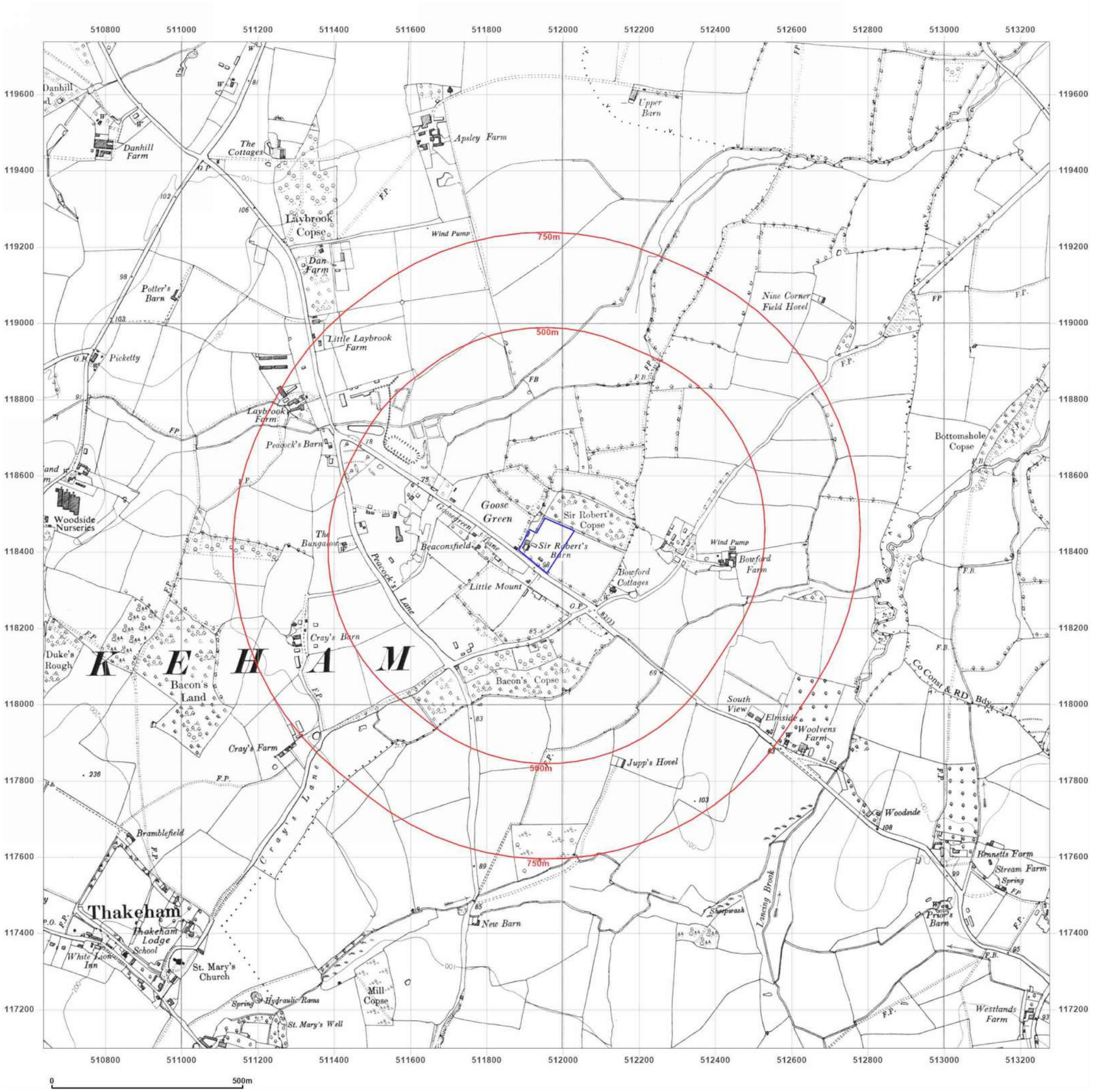

Groundsure INSIGHTS

Site Details:

SIR ROBERTS FARM, GOOSE GREEN LANE, GOOSE GREEN, RH20 2LW

Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: Provisional

Map date: **1957**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1957
Revised 1957
Edition N/A
Copyright N/A
Levelled N/A

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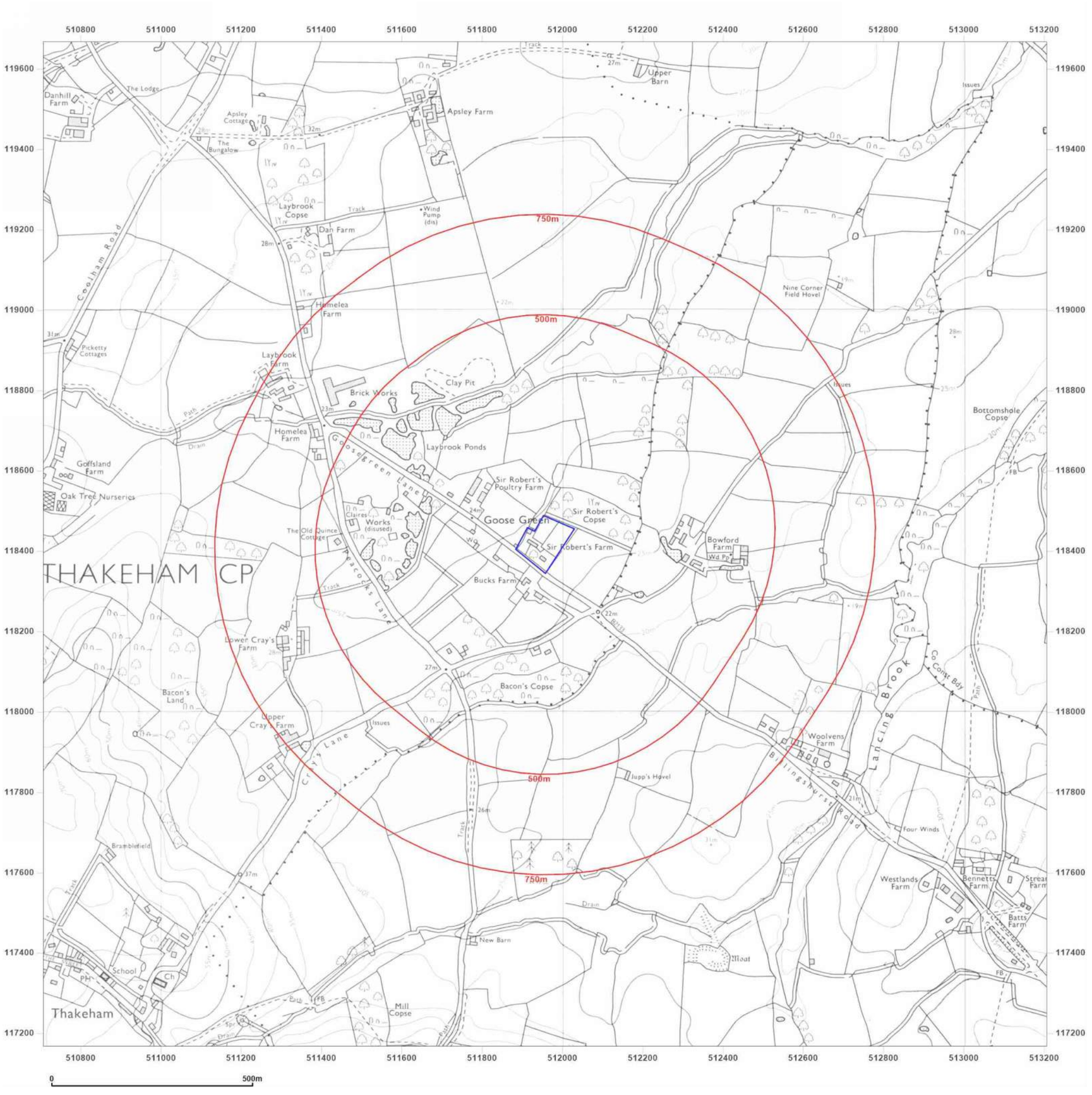

Groundsure INSIGHTS

Site Details:

SIR ROBERTS FARM, GOOSE GREEN LANE, GOOSE GREEN, RH20 2LW

Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: National Grid

Map date: **1980**

Scale: 1:10,000

Printed at: 1:10,000

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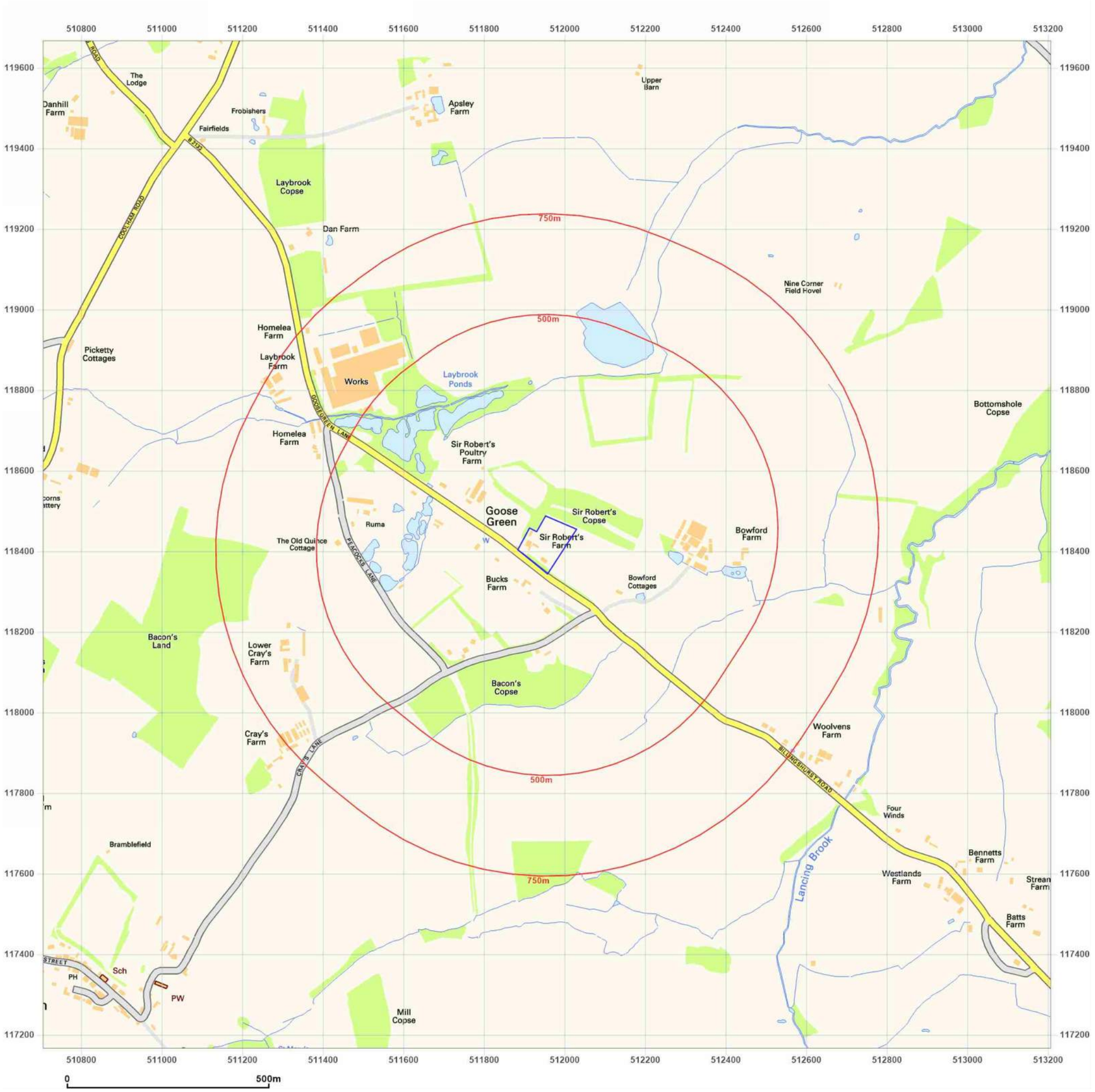

Groundsure INSIGHTS

Site Details:

SIR ROBERTS FARM, GOOSE GREEN LANE, GOOSE GREEN, RH20 2LW

Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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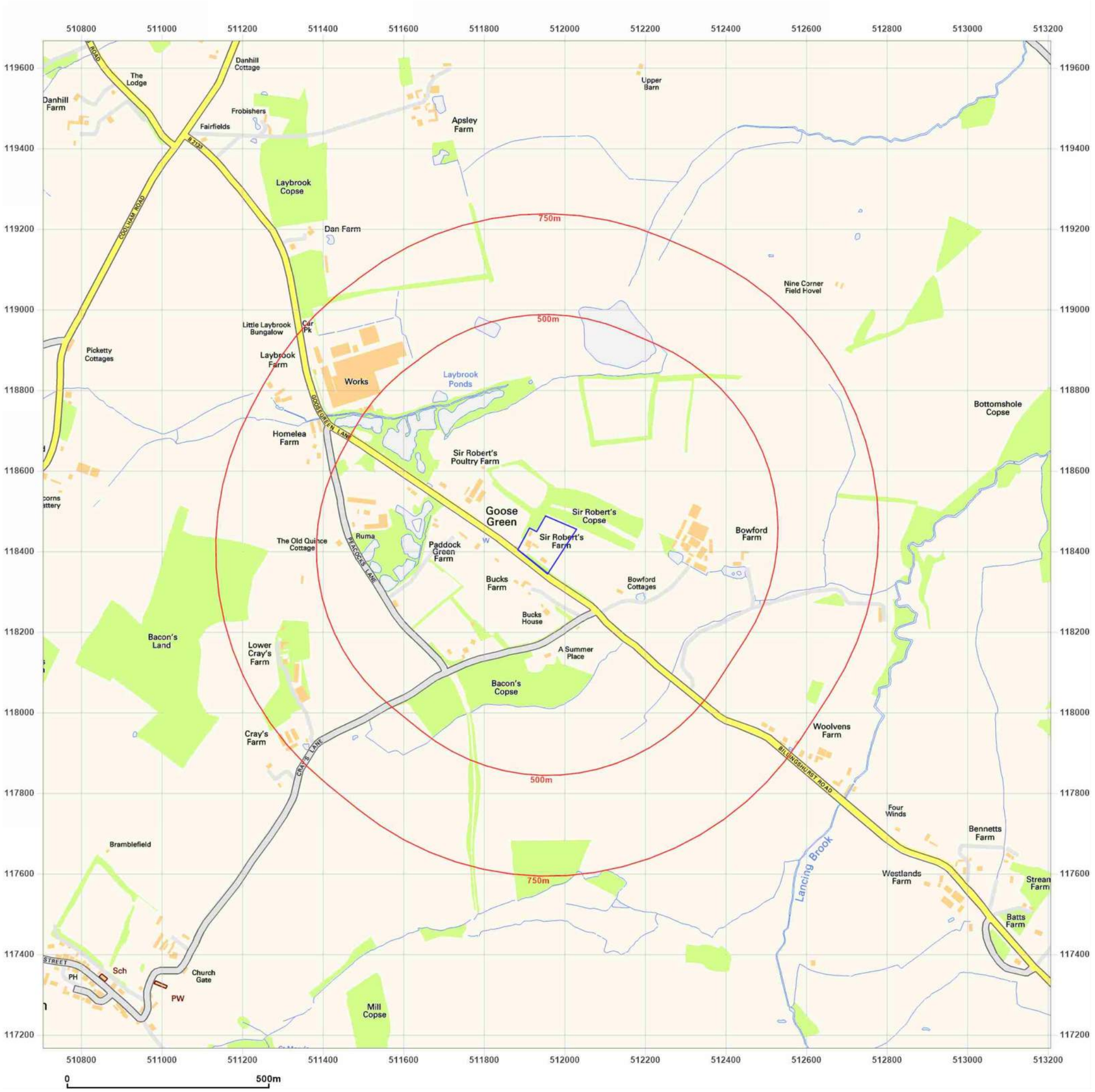

Site Details:

SIR ROBERTS FARM, GOOSE GREEN LANE, GOOSE GREEN, RH20 2LW

Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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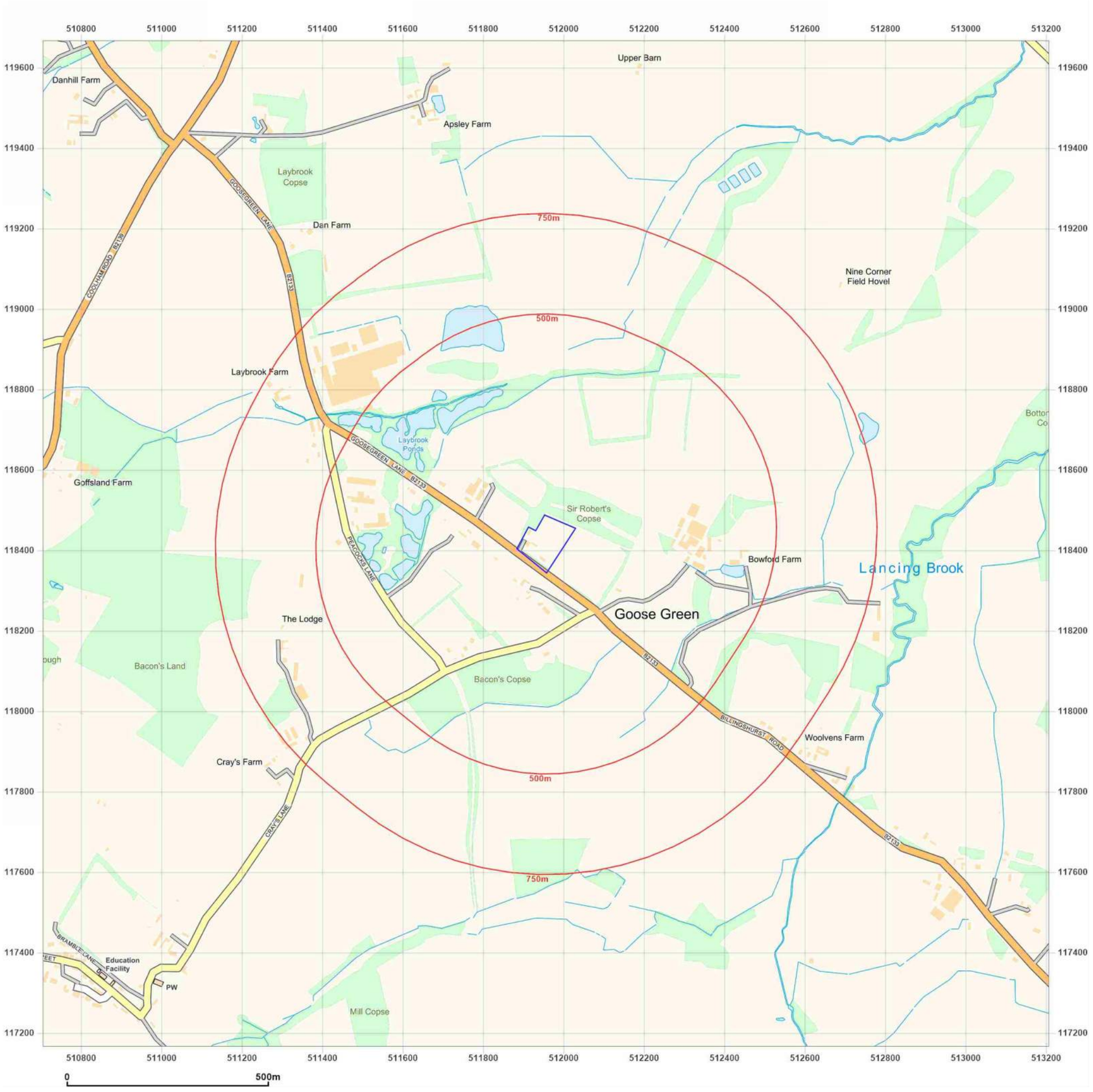

Groundsure INSIGHTS

Site Details:

SIR ROBERTS FARM, GOOSE GREEN LANE, GOOSE GREEN, RH20 2LW

Client Ref: 9961
Report Ref: GS-8734041
Grid Ref: 511956, 118417

Map Name: National Grid

Map date: **2022**

Scale: 1:10,000

Printed at: 1:10,000

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Appendix C

Risk Assessment

Qualitative Risk Assessment: Sir Robert's Farm, Goose Green Lane, Pulborough, West Sussex, RH20 2LW

The assessment of risk has been carried out using the risk matrix presented in the following table. Classifications of likelihood, severity and risk are provided in subsequent tables.

Table C1 Risk Assessment Matrix – Comparison of severity and likelihood

		Likelihood of significant impact			
Severity of potential impact (hazard)		Very Low	Low	Moderate	High
	Very Minor	Negligible	Very Low	Low	Low/Moderate
	Minor	Very Low	Low	Low/Moderate	Moderate
	Moderate	Low	Low/Moderate	Moderate	High
	Severe	Low/Moderate	Moderate	High	Very High

Table C2 Classification of Likelihood

Likelihood Classification	Definition
High	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution.
Moderate	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term.
Very Low	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

Table C3 Classification of Severity (hazard)

Severity Classification	Definition
Severe	Short term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA. Short term risk of pollution of sensitive water resource. Catastrophic damage to buildings/property. A short term risk to a particular ecosystem or organisation forming part of such ecosystem.
Moderate	Chronic damage to Human Health "significant harm". Pollution of sensitive water resources. A significant change in a particular ecosystem or organism forming part of such ecosystem.
Minor	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services "significant harm". Damage to sensitive buildings/structures/services or the environment.
Very Minor	Harm, although not necessarily significant harm, which may result in a financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing, etc). Easily repairable effects of damage to buildings, structures and services.

Table C4. Classification of Risk

Risk Classification	Definition
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the long term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but there is a low likelihood of this hazard occurring and if realised, harm would at worst normally be mild.
Very Low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

The risk assessment has been carried out based on the site being several buildings including a residential bungalow, a barn, and a garage. Should the proposed end use be altered, a revised risk assessment may be required.

Table C5 Qualitative Risk Assessment: Three buildings including Sussex Barn, Sir Robert's Farm, Goose Green Lane, Pulborough, West Sussex, RH20 2LW

Potential contamination sources related to industry	Pathway	Receptor	Hazard classification	Likelihood classification	Risk classification
Historical use of the site: As farmland with structures onsite including barns.	Soil ingestion, dermal contact, inhalation uptake, leaching migration, groundwater migration.	Current users of the site or adjacent land.	Very Minor	Low	Very Low
		Construction workers on the site.	Very Minor	Low	Very Low
		Future users of the proposed site.	Very Minor	Low	Very Low
	Leaching migration through the concrete /open ground.	Controlled water bodies in/on/under and close to the site (surface water).	Minor	Very Low	Very Low
		Controlled water bodies close to the site (ground water).	Minor	Very Low	Very Low
	Chemical attack.	Current physical structures on and adjacent to the site.	Minor	Very Low	Very Low

Potential contamination sources related to industry	Pathway	Receptor	Hazard classification	Likelihood classification	Risk classification
		Future physical structures on the site, including services.	Minor	Very Low	Very Low
Current use of the site: a small holding including open fields, one residential bungalow and other vacant structures.	Soil ingestion, dermal contact, inhalation uptake, leaching migration, vegetation uptake, groundwater migration.	Current users of the site or adjacent land.	Very Minor	Low	Very Low
	Soil ingestion, dermal contact, inhalation uptake	Construction workers on the site.	Very Minor	Low	Very Low
	Leaching migration through the concrete /open ground.	Controlled water bodies in/on/under and close to the site (surface /ground water).	Very Minor	Low	Very Low
	Chemical attack from observed stains.	Current physical structures on and adjacent to the site, including services.	Very Minor	Low	Very Low
Future use of the site: as residential housing with open	Soil ingestion, dermal contact, inhalation uptake, leaching migration, vegetation uptake,	Future users of the site or adjacent land.	Very Minor	Low	Very Low

Potential contamination sources related to industry	Pathway	Receptor	Hazard classification	Likelihood classification	Risk classification
space.	groundwater migration.	Physical structures on and adjacent to the site, including services.	Very Minor	Low	Very Low
		Controlled water bodies in/on/under and close to the site (surface /ground water).	Very Minor	Low	Very Low
Historic and current offsite uses: open agricultural land with few residential structures.	Soil ingestion, vegetable/root uptake, dermal contact, inhalation uptake, leaching migration, groundwater migration.	Current users of the site or adjacent land.	Very Minor	Low	Very Low
		Construction workers on the site.	Very Minor	Low	Very Low
		Future users of the proposed site.	Very Minor	Low	Very Low
	Leaching migration into the controlled water bodies.	Controlled water bodies in/on/under and close to the site (surface water).	Minor	Very Low	Very Low
		Controlled water bodies close to the site (ground water).	Minor	Very Low	Very Low

Potential contamination sources related to industry	Pathway	Receptor	Hazard classification	Likelihood classification	Risk classification
	Chemical attack.	Current physical structures on and adjacent to the site.	Minor	Very Low	Very Low
		Future physical structures on the site, including services.	Minor	Very Low	Very Low
Asbestos *(Chicken Shed/Dutch Barn)* (Asbestos is included as a risk whilst it is not known if asbestos is present in the materials on site. It is assumed that the risk will be assessed and mitigated against by best practice management during the site works).	Inhalation uptake.	Current user, construction worker, future users.	Severe	High	Very High
Ground gas	Inhalation of methane and/or carbon dioxide	Future occupants of the residential properties	Minor	Low	Low (Characteristic Situation 2)

Appendix D

Photos

Target Notes and Photographs

Photo No.	Feature (Target Note no.)	Photograph of Feature
1	Entrance to site, hardstanding and gravel track (TN1)	

2	Closer image of hardstanding south of Sussex Barn.	
3	Oil tank south of Dutch Barn (TN2).	

4	Temporary campsite in westernmost field.	
5	Gas cannister near temporary campsite facilities.	

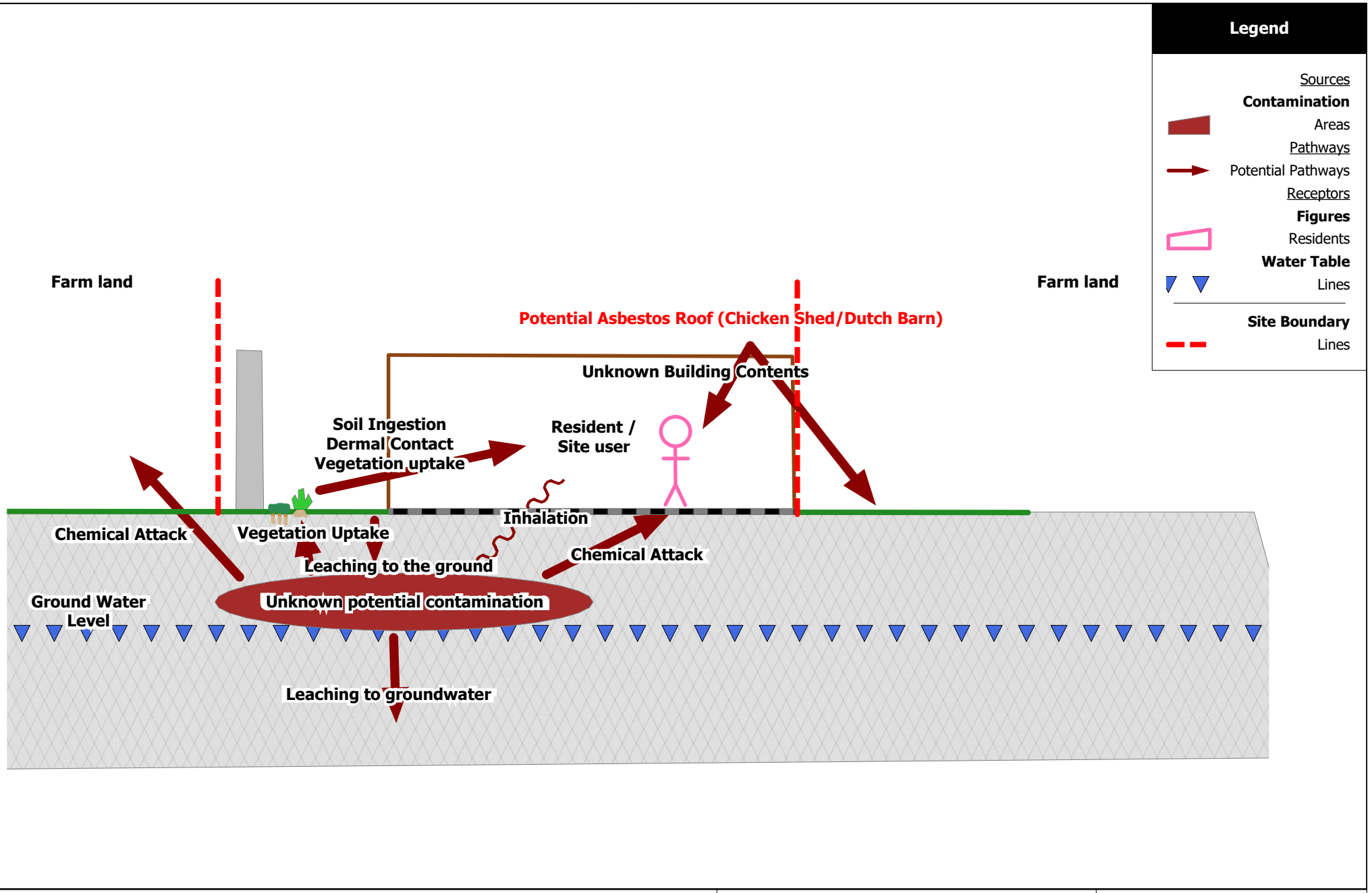
6	Bungalow with some debris and piled wood.	
7	Roofing of Sussex Barn.	

8	Cottage at east of site entrance.	
9	Chicken Shed with potential asbestos roofing (TN3).	
10	Dutch Barn with potential asbestos roofing (TN4).	

11	Open field to north of bungalow.	

Appendix E

Conceptual Model



Sir Roberts Farm, Goose Green Lane, RH20 2LW
Contamination Conceptual Model

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