SABIL (RENT) LTD



CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN,
HORSHAM, WEST SUSSEX, RH13 0QJ

Preliminary Contamination Risk Assessment

March 2022

eas ltd
Environmental Assessment Services Ltd

REPORT DATA SHEET

Requirement	**Data**
Report Ref:	499/NJA/ClayfieldFarm/PCRA
Date	March 2022
Client	Sabil (Rent) Ltd
Report type	Preliminary Contamination Risk Assessment
Purpose	Planning
Revisions	
Prepared by	Lucy Collins BSc (Hons) MSc, QCIEEM  Signed
Approved by	Eur Ing Malcolm McKemey BSc (Hons), CEng, CEnv, MICE, MIEAust, MCIWEM, MIEnvSc  Signed

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1. CAUTION

This investigation relies largely on a superficial examination of the site, plus a review of data from Horsham District Council Planning and Environmental Health Departments, and the Environment Agency (EA). Even where no previous contaminating activity has been identified, it is possible that the site could be contaminated due to fly tipping or other unrecorded events. The age of a building may indicate probability but cannot be treated as proof of the absence or presence of asbestos. This report does not attempt to comment on the commercial value or viability of the site.

2. THE SITE

The site comprises an agricultural barn and adjacent fields within Clayfield Farm off Valewood Lane in Barns Green. The total site area is approximately 5.57 ha. The Ordnance Survey (OS) map reference for the site is TQ 1178 2657. The site elevation is approximately +53 m OD. See Figure 1 for site location plan and Figure 2 for the existing site layout.

3. GEOLOGY & HYDROGEOLOGICAL CONSIDERATIONS

3.1 According to the British Geological Survey, the site lies on Cretaceous Weald Clay Formation - Mudstone.

3.2 The Environment Agency's (EA) Groundwater Vulnerability Map shows the underlying Weald Clay Formation to be unproductive strata. The site does not lie within groundwater source protection zone (SPZ) and is not considered to be hydrogeologically sensitive.

3.3 According to the Environment Agency flood mapping, the site lies within Flood Zone 1 (low risk of fluvial flooding). The site is shown as at low to very low risk of surface water flooding.

3.4 There are no current or historic waste disposal landfills within 500m of the site.

4. SITE DEVELOPMENT HISTORY

4.1 The site development history is derived from a review of historic maps from 1876 to date and other references.

4.2 The historic maps are provided in Appendix B. A summary of the relevant information provided in these maps is given in Table 4.1 below.

TABLE 4.1: Site Development History

Map date	Features on site	Features within surrounding area (<250 m)
1876	Site is undeveloped farmland bordered by hedgerows. A hedgerow and track divide the site. Parliamentary boundary marked on west boundary of site.	The surrounding area is farmland or woodland. Munthan Grove is adjacent to the north, The Grove and Vale Wood are adjacent to the east. Valewood cottages 150 m E. Vale Wood Lane adjacent to the south. Railway line 400 m SE.
1896	No significant change.	No significant change.
1911	No significant change.	Housing located 30 m S and 150 m S.
1913	No significant change.	No significant change.
1961	No significant change.	No significant change.
1977	Site is combined into single large field.	Expansion of housing area to S and buildings to SE. Fields to W combined and hedgerows removed.
1981	No significant change.	No significant change.
1993	No significant change.	Division of plots and additional houses to S.
2001	No significant change.	Further housing expansion to S. Kingfisher Farm marked to W.
2010	No significant change.	Expansion and connection of woodland areas to N and NE.
2022	Site contains barn adjacent to centre E boundary and track along W boundary and crosses centre of site.	Expansion of road network in surrounding area. Additional housing development to S, SE, SW and W.

4.3 The recent development history may also be traced from the planning history of the site. See Table 4.2 below.

TABLE 4.2
A SUMMARY OF PLANNING APPLICATIONS FOR CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, HORSHAM, RH13 0QJ

Ref. Nos.	Description	Decision & Date
DC/21/1998	Prior notification for the conversion of an agricultural building into two dwellings.	✓ 26/08/21
DC/20/2453	Prior notification for the change of use of agricultural buildings to 2No. dwellinghouses (Class C3).	× 08/12/20
DC/20/1200	Prior notification for the conversion of an agricultural barn to 2No. residential dwellings.	× 29/06/20
DC/13/2362	Reserved matters application for the replacement of existing mobile home and erection of permanent agricultural worker's dwelling associated with Clayfield Farm following approval of outline application.	✓ 08/12/15
DC/13/2362	Replacement of existing mobile home and erection of permanent agricultural worker's dwelling associated with Clayfield Farm (Outline).	✓ 11/12/13
DC/10/1937	Retrospective permission for stationing of mobile home as a temporary agricultural dwelling.	✓ 21/09/10

Key: ✓ planning permission granted × planning permission refused

5. THE EXISTING SITE

5.1 The site was visited on Monday 7 March 2022.

5.2 The site is approximately 5.57 ha in size and comprises a large cattle barn built in 2009 with a coated profiled steel cladding and steel portal frame construction. There is a chalk flooring to a depth of approximately two feet, with a central stack of straw. There are straw filled livestock pens and various equipment associated with keeping of livestock.

5.3 There is a workshop area in the northern section of the barn with various small items of farm and household equipment. There are a few small containers of potentially contaminating fluids including paint, engine oil and car screen wash. There were empty containers of formaldehyde.

5.4 The ground level in the area immediately surrounding the barn is lower than the surrounding level and there was an area of pooled water on the west side of the barn. The area to the rear of the barn is covered by overgrown brambles which extend along the eastern boundary of the site. An abondoned car lies within the brambles behind the north section of the barn.

5.5 The field to the south of the barn contains a horse and a pony. There is a dung heap in the northeast corner of the field and the field is laid to grass.

5.6 The area to the west of the barn is laid to grass and contains various piles of debris, two trailers and equipment associated with keeping cattle, sheep and pigs including fencing and shelters. There are two piles of straw and a hay bale. There is a storage container filled with various items of domestic equipment and clothing. This is surrounded by brambles and there are multiple containers of linseed oil on the southern side of the unit.

5.7 The field to the northwest of the barn is comprised of longer grass and was unoccupied at the time of the visit.

5.8 To the north of the barn are two mobile homes, a caravan, and a shed. There are kennels containing four dogs and an enclosure containing chickens and geese.

5.9 The wider area surrounding the farm is comprised of agricultural fields, residential areas (park homes), and woodland.

5.10 Views of the site are shown in the photographs in Appendix D.

6. CONTAMINATION RISK ASSESSMENT

6.1 Land use history at the site has comprised:

- Farmland from pre 1876 to date.

There are no known contamination risks attached to land use at the site prior to its present development. The main contamination risks relate to use of the site since development.

6.2 Minimal quantities of potentially contaminating fluids are stored in small containers within the barn and in the immediate vicinity of the site. There is some potential for contamination of the compacted chalk/soil floor within the barn and the surrounding areas of grass.

6.3 A Groundsure Enviro+Geo Insight report has been prepared for the site (See Appendix C). The significant findings are summarised in Section 6.10 below. This document should be read in conjunction with this report.

6.4 The risk to future site users can be assessed using the Conceptual Model. This comprises three elements all of which must be present for there to be a risk. The three elements of the model are, a *source* of potentially hazardous contaminant, a *pathway* by which the contaminant can be transmitted and a *receptor* on which the contaminant may have a harmful effect. A conceptual model for the site is given in Figure 4 below:

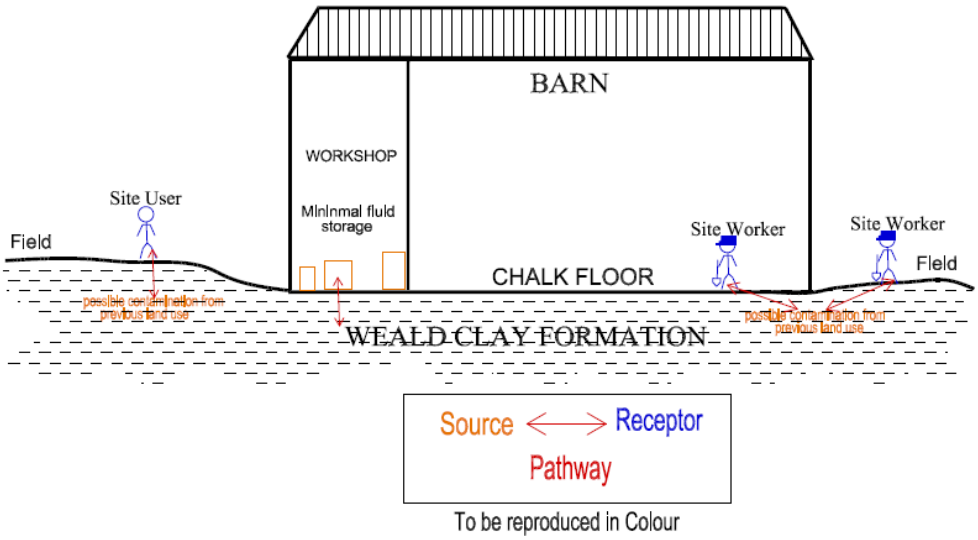


FIGURE 4

6.5 Potential pollutant linkages between source, pathway and receptor for the site are shown in Table 6.1 below.

TABLE 6.1

Source		Pathway	Receptor	Risk
Contaminated soil	Contaminated groundwater			
Minor potential for contaminated soil from former and existing land uses at the site and adjacent, although penetration limited by underlying geology.	Minor potential for contaminated groundwater from former and existing land uses at the site and in the vicinity, although migration limited by underlying geology.	Contact with contaminated soil, groundwater or soil gas.	Existing and future site users.	?
		Ingestion of or skin contact with contaminated soil, dust or groundwater.	Maintenance or construction workers engaged in groundworks on the site.	?
		Contact with contaminated soil or ground water.	Building & services.	×
		Leeching of site contaminants into groundwater.	Wider environment.	×

Key: ✓Significant risk × No significant risk ? Uncertain risk

6.6 There is some uncertainty regarding activities at the site prior to the existing use. However, these activities would appear to be primarily grazing livestock and/or arable farming and the risks of significant contamination would appear to be minimal. It is proposed to redevelop the site, converting the existing agricultural barn for residential use with garden/amenity area/s.

6.7 The site does not lie within a groundwater source protection zone and the underlying geology is classified as unproductive strata. The site is not considered to be hydrogeologically sensitive.

6.8 The site is not on any Council maintained register of contaminated land nor scheduled for investigation under the provisions of Part 2A of the Environmental Protection Act 1990.

6.9 The findings of the Groundsure Enviro+Geo Insight report in Appendix C are summarised below:

6.9.1 Historical and current Land Use

There are three records of Cuttings, 38 m SE, 339 m SE and 383 m E of the site in 1896. Old Clay Pit 229 m SW. Unspecified pits are recorded 269 m SW (1913), 271 m SW (1961) and 272 m SW (1913). There are two records of Unspecified Heaps 294 m NE (1961) and 409 m NE of the site (1913-1961). There is 1 record of an unspecified tank 287 m W of the site in 1911. There are no historic energy features, petrol stations or garages within 500 m of the site. There are no records of active or recent landfill within 500 m of the site. There are seven waste exemption records within 500 m, the closest is on site.

6.9.2 Environmental Permits, Incidents and Registers

There are two records of licensed discharges to controlled waters within 500 m of the site, for final/treated sewage discharges at New Development Near Chalfonts, 77 m SE of the site, and for unspecified sewage discharges at Woodpeckers, Valewood Lane, 168 m E of the site. There are no records of pollution incidents within 500 m of the site.

6.9.3 Landfill and other Waste Sites

There are no records of active or recent landfill site within 500 m of the site. There is one historic landfill record, 66 m SE of the site on Vale Wood Lane (Environmental Permitting Regulations (Waste)) between 1964 – 1970. There is a waste exemption on site, and 49 m W at Burlands Farm for Using Waste (On a farm).

6.9.4 Hydrology and Flood Risk

The bedrock the site lies upon is classed as Unproductive Strata. The site does not lie within a groundwater source protection zone. There are no records of groundwater or surface water abstractions within 2000 m of the site.

There are six water network records within 250 m of the site, the closest is 132 m N (inland river not influenced by normal tidal action). There are three surface water feature records within 150 m of the site. There is a Water Framework Directive (WFD) surface water body catchment on site, Adur West, and a WFD surface water body 626 m SE.

There are no records of risks of flooding from rivers and the sea within 50 m of the site. There are no records of historical flood events within 250 m and no areas of Flood Zone 2 or Flood Zone 3 within 50 m oof the site. The highest risk of surface water flooding on site is a small area of 1 in 30 year (0.3 m-1 m). There is negligible risk of groundwater flooding.

6.9.5 Designated Environmentally Sensitive Sites

There are no records of any Sites of Special Scientific Interest (SSSI) or Ramsar Sites within 2000 m of the site, although the site lies within a SSSI Impact Risk Zone. There are 50 records of Designated Ancient Woodland within 2000 m of the site, the closest being two records of Ancient & Semi-Natural Woodland on site. There are two records of Nitrate Vulnerable Zones within 2000 m of the site 1820 m SW and 1825 m NW. The agricultural designation for the site (and SW of the site) is Grade 3 – good to moderate quality. The land to the NE is designated as Grade 4 – poor quality. There are 14 records of Priority Habitat Inventory within 250 m of the site, all are deciduous woodland, the closest are on site, 18 m NE and 43 m E.

6.9.6 Natural Hazards Findings and Mining

There are no records of artificial or made ground within 500 m of the site. There are no records of superficial geology within 500 m. There is one record of bedrock geology within 500 m of the site: Weald Clay Formation – Mudstone. There is one record of bedrock permeability within 50 m with fracture flow type, low maximum permeability and very low minimum permeability.

There is a low hazard of shrink swell clays on site and a negligible hazard of running sands on site.

On site there is a negligible hazard of compressible deposits, a very low hazard of collapsible deposits, a very low hazard of landslides, and a negligible hazard of ground dissolution of soluble rocks.

There is one BritPit[1] within 500 m; Duncan's Copse Clay Pit, 277 m SW. There are eight records of surface ground workings within 250 m of the site, the closest being cuttings 38 m SE (mapped in 1876) followed by a pond 92 m W (mapped in 1981). There is one record of non-coal mining within 1000 m for Iron Ore on site (Likelihood: 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).

[1] BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database – Groundsure, 2022

The site is not within an area of significant radon risk, estimated properties affected <1%, with no protection measures required. The British Geological Survey (BSG) Estimated Background Soil Chemistry for the site and vicinity is given below:

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

7. CONCLUSIONS

7.1 The site does not lie within a groundwater source protection zone and the underlying geology is classified as unproductive strata. The site is not considered to be hydrogeologically sensitive.

7.2 The site lies within Flood Zone 1 (low risk of flooding).

7.3 The current use of the barn is as a livestock barn and non-commercial workshop with minimal storage of potentially contaminating fluids and various piles of debris in the surrounding area. There is some potential for leakage of fluids into the surrounding soil, and this poses an uncertain, if minor, contamination risk.

7.4 Surface water drainage is by soakage or run-off to the north, there is a gutter on the northern façade of the barn. Surface water from the existing hard standing will drain into the surrounding areas of soil and grass.

7.5 The principal contamination risk associated with the site is the keeping of livestock and storage of some potentially contaminating fluids within the site.

7.6 Present and future site users, comprising agricultural workers and maintenance or construction workers, will occasionally be in contact with the underlying soil. Future occupants of the proposed dwelling are unlikely to come into contact with any contaminated soil within the barn, as the flooring within the barn will be resurfaced as part of the redevelopment, effectively removing the pathway between source and receptor. Future occupants and maintenance or construction workers may come into contact with contaminated soil in proposed garden areas.

7.7 Should the application be approved, it is recommended that soil samples are taken and sent for analysis from any stained areas within the barn, and in the immediate surrounding area proposed for garden amenity, to assess whether any contamination has occurred. Analysis should include petroleum and polycyclic aromatic hydrocarbons, heavy metals and pH. Any remediation required will be recommended following the results of this testing.

7.8 The site is not on any Horsham District Council maintained register of contaminated land nor scheduled for investigation under the provisions of Part 2A of the Environmental Protection Act 1990.

7.9 The site does not lie within a radon-affected area.

7.10 No concerns relating to asbestos containing materials were apparent for this site and proposed development.

7.11 The overall environmental risk for the site is rated according to the risk assessment matrix in Table 7.1 below:

TABLE 7.1
RISK ASSESSMENT MATRIX

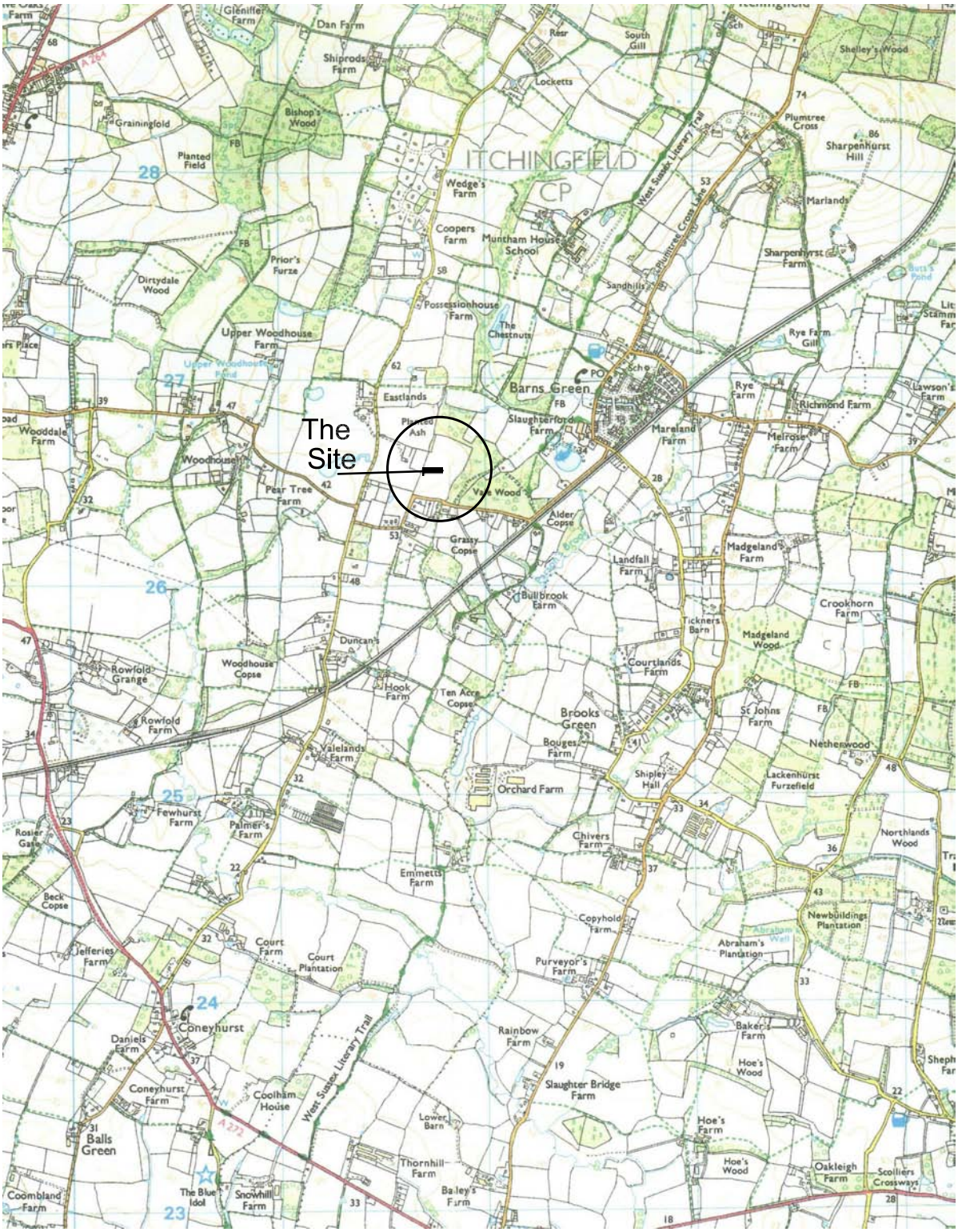
PROBABILITY OF IMPACT	CONTAMINATION POTENTIAL		
	SEVERE	MODERATE OR UNCERTAIN	MINIMAL
High	4	3	2
Medium	3	2	1
Low	2	1	1

In this case, there is considered to be low contamination potential, although there remains a degree of uncertainty. Subject to the application of the guidance and recommendations given above, the contamination potential could be reduced to 'minimal', and the overall environmental risk rating will be 1 (low), with minimal uncertainty.

☆ ☆ ☆ ☆ ☆ ☆ ☆

FIGURES

FIGURE 1: **Site Location Plan**
FIGURE 2: **Existing Site Layout**
FIGURE 3: **Proposed Development**
FIGURE 4: **Conceptual Model (in text)**



Reproduced from the Ordnance Survey 1:25000 scale Explorer Map No. 134. with the permission of the Controller of Her Majesty's Stationery Office. Licene No. 100005508

Scale 1:25000

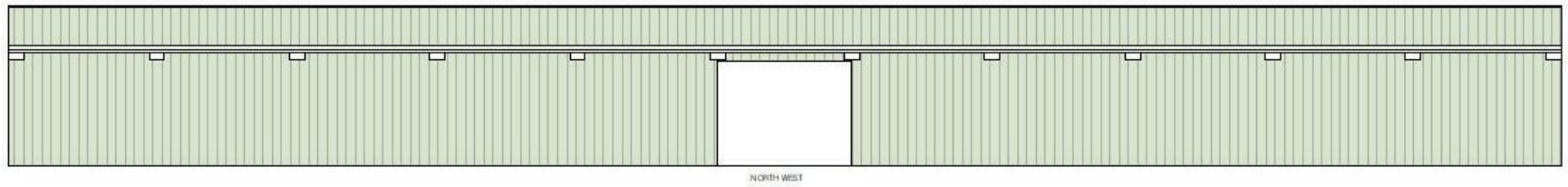
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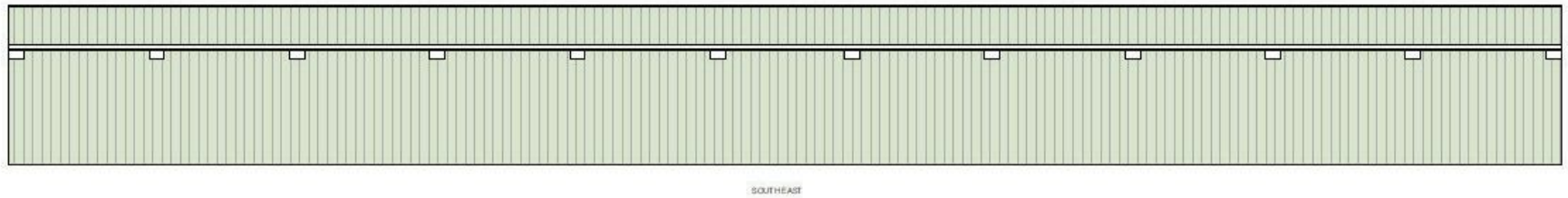
CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN,

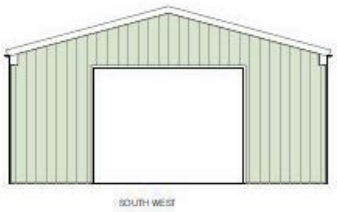
HORSHAM, WEST SUSSEX, RH13 0QJ

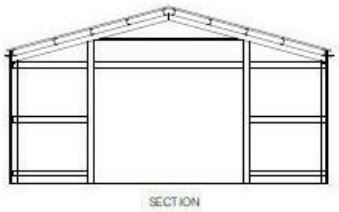
Figure 1: Site Location

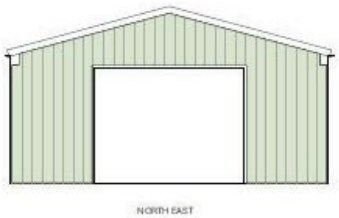
March 2022













Scale as shown

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Figure 2: Site as Existing

March 2022



Scale as shown

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Figure 3: Proposed Development

March 2022

APPENDIX A

Environment Agency Flood Map for Planning & Surface Water Flood Risk Map

Flood map for planning

Your reference	Location (easting/northing)	Created
Clayfield	**512012/126320**	**2 Mar 2022 14:55**

Your selected location is in flood zone 1, an area with a low probability of flooding.

This means:

- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

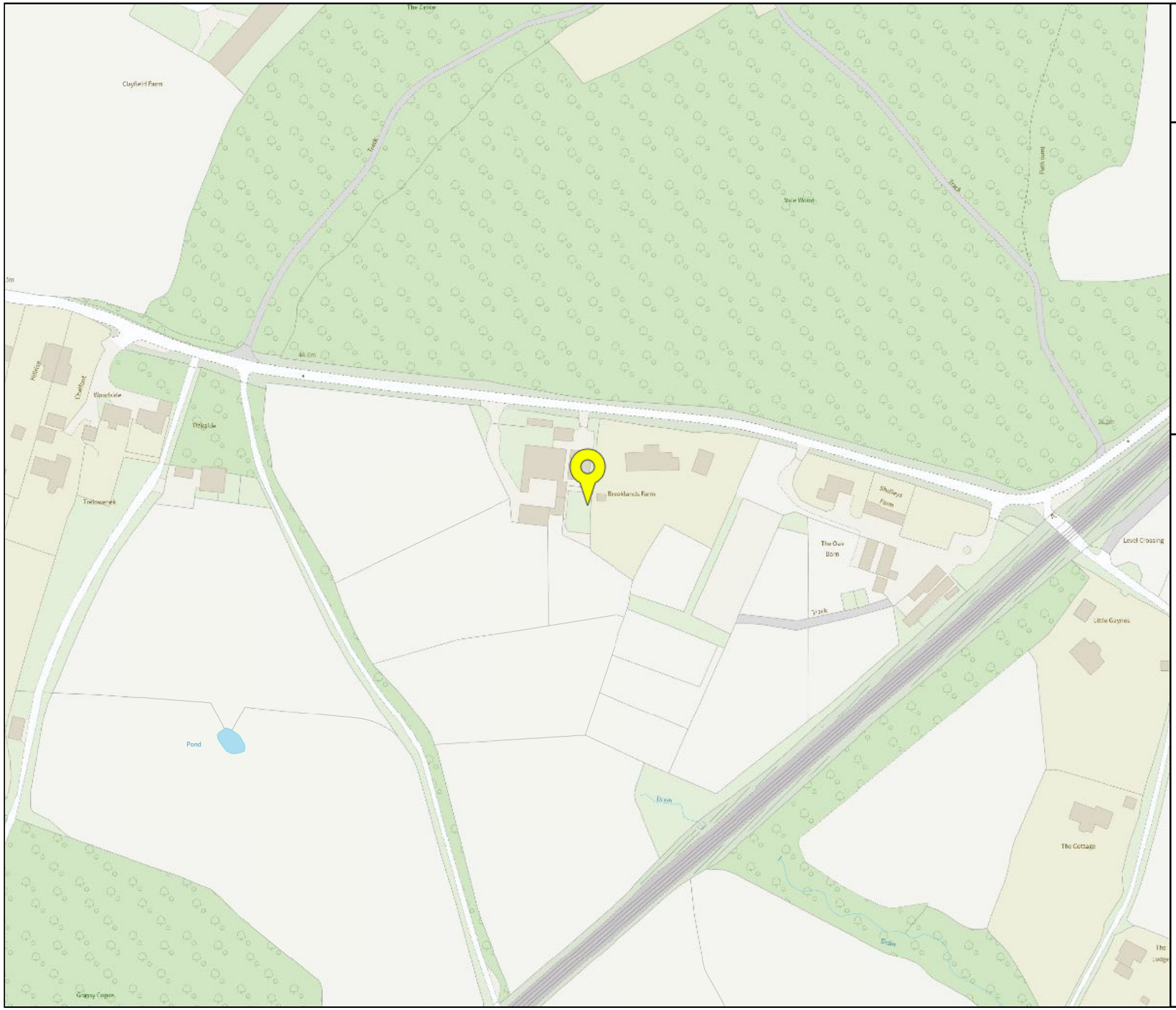
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2021 OS 100024198. https://flood-map-for-planning.service.gov.uk/os-terms



Environment Agency

Flood map for planning

Your reference
Clayfield

Location (easting/northing)
512012/126320

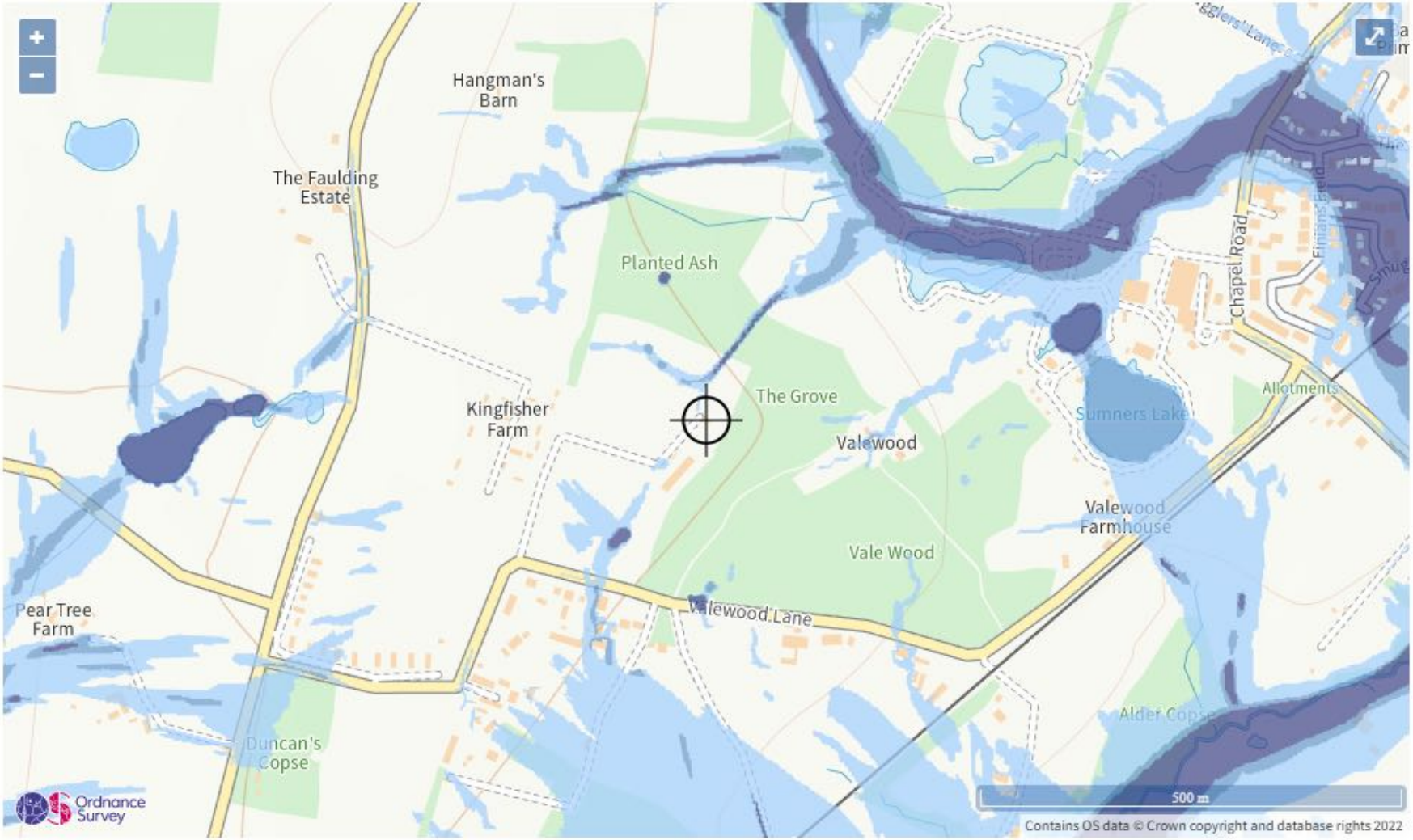
Scale
1:2500

Created
2 Mar 2022 14:55

- Selected point
- Flood zone 3
- Flood zone 3: areas benefitting from flood defences
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Flood storage area

0 20 40 60m

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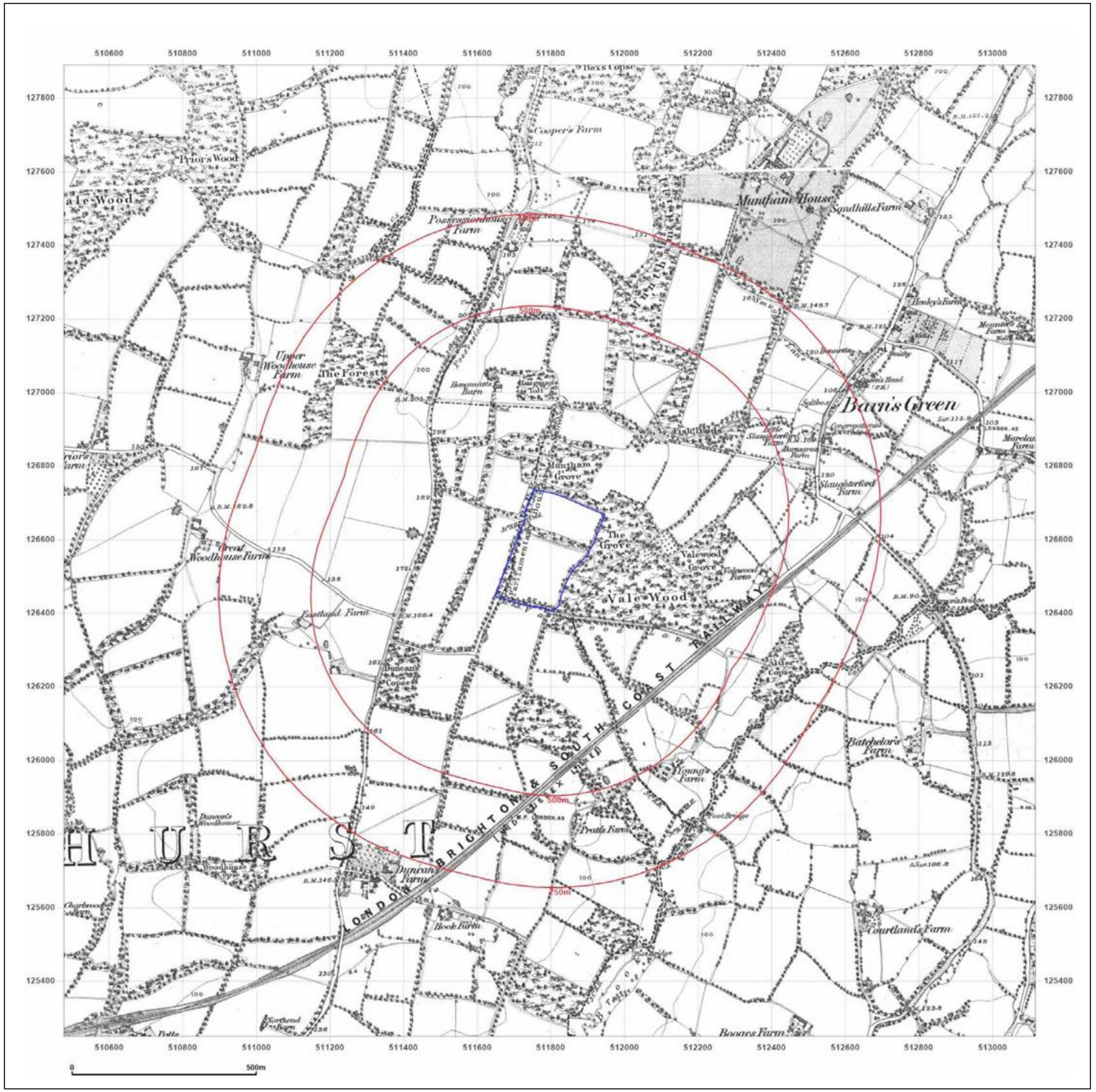


Extent of flooding from surface water

High Medium Low Very low Location you selected

APPENDIX B

Historic Maps



Groundsure INSIGHTS

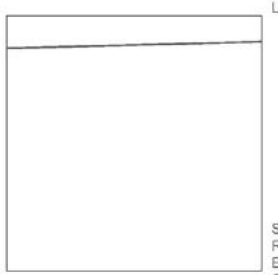
Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

Map Name: County Series
Map date: **1876**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S



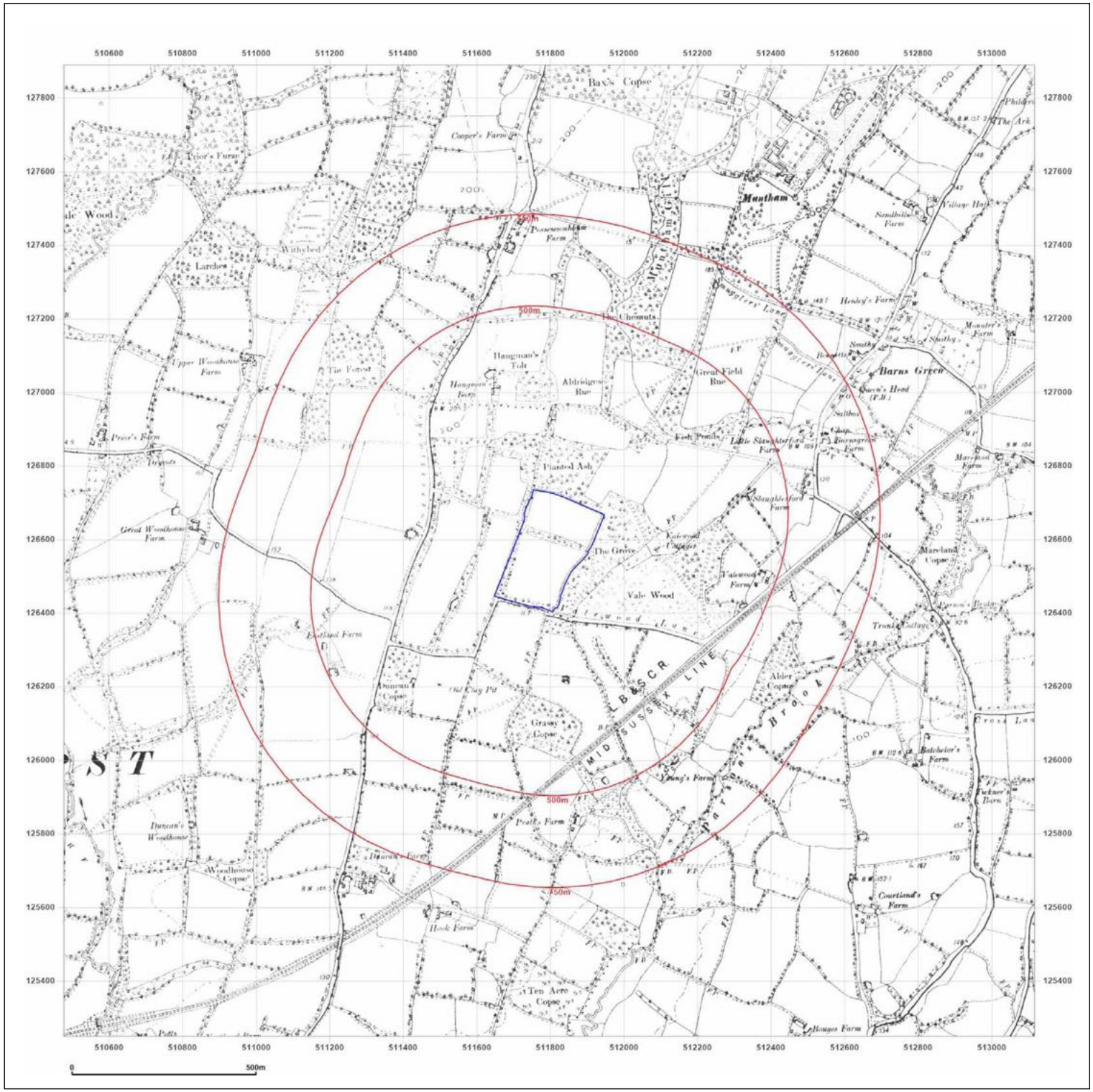
Powered by OS

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

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Production date: 04 March 2022

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



Groundsure INSIGHTS

Site Details:

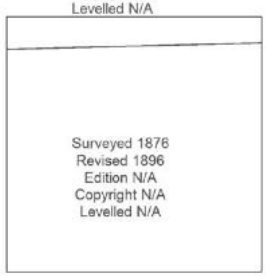
CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

Map Name: County Series
Map date: **1896**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1876
Revised 1896
Edition N/A
Copyright N/A
Levelled N/A



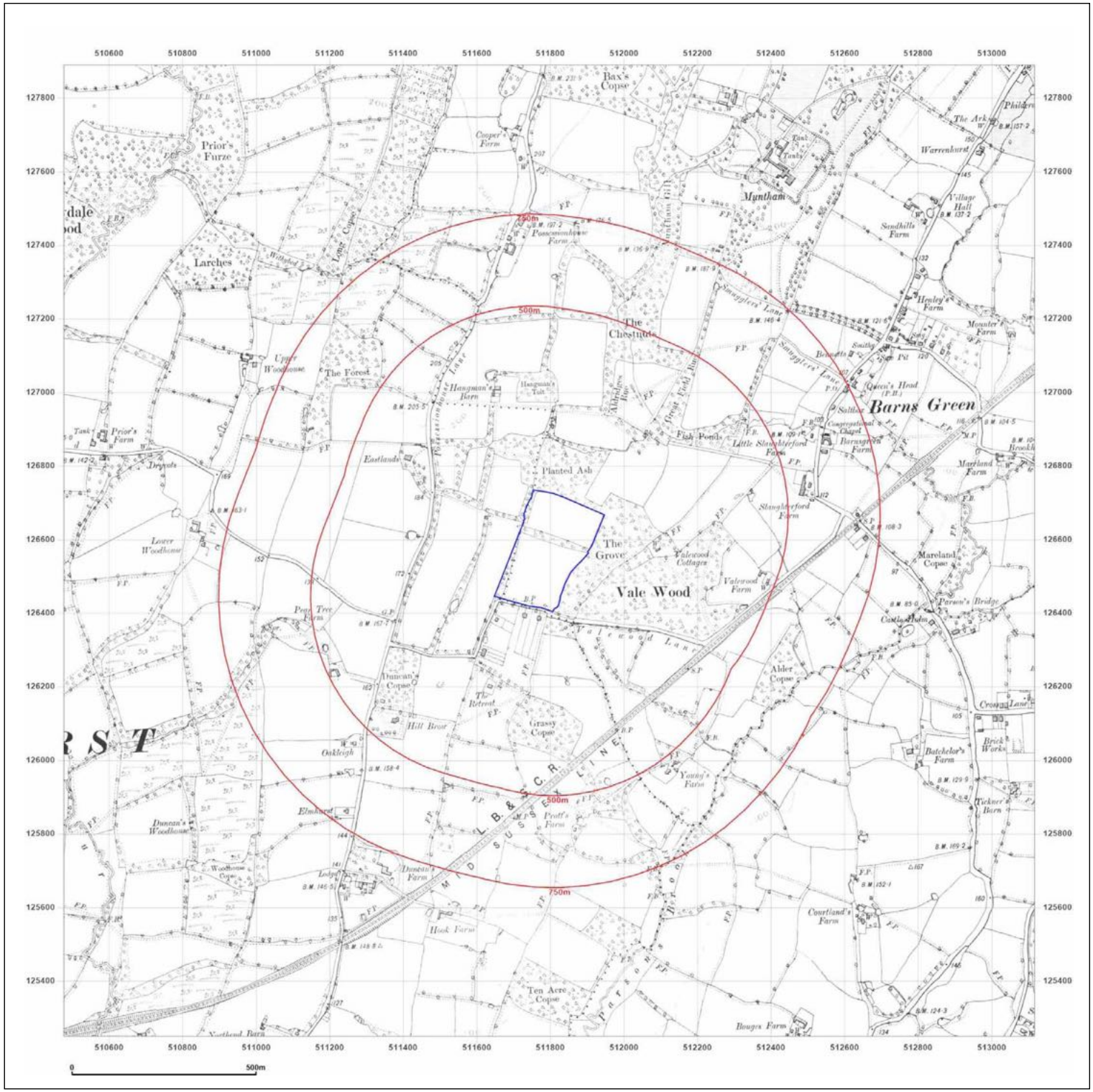
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Production date: 04 March 2022

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



Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

Map Name: County Series

Map date: **1913**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1874
Revised 1913
Edition 1913
Copyright N/A
Levelled N/A

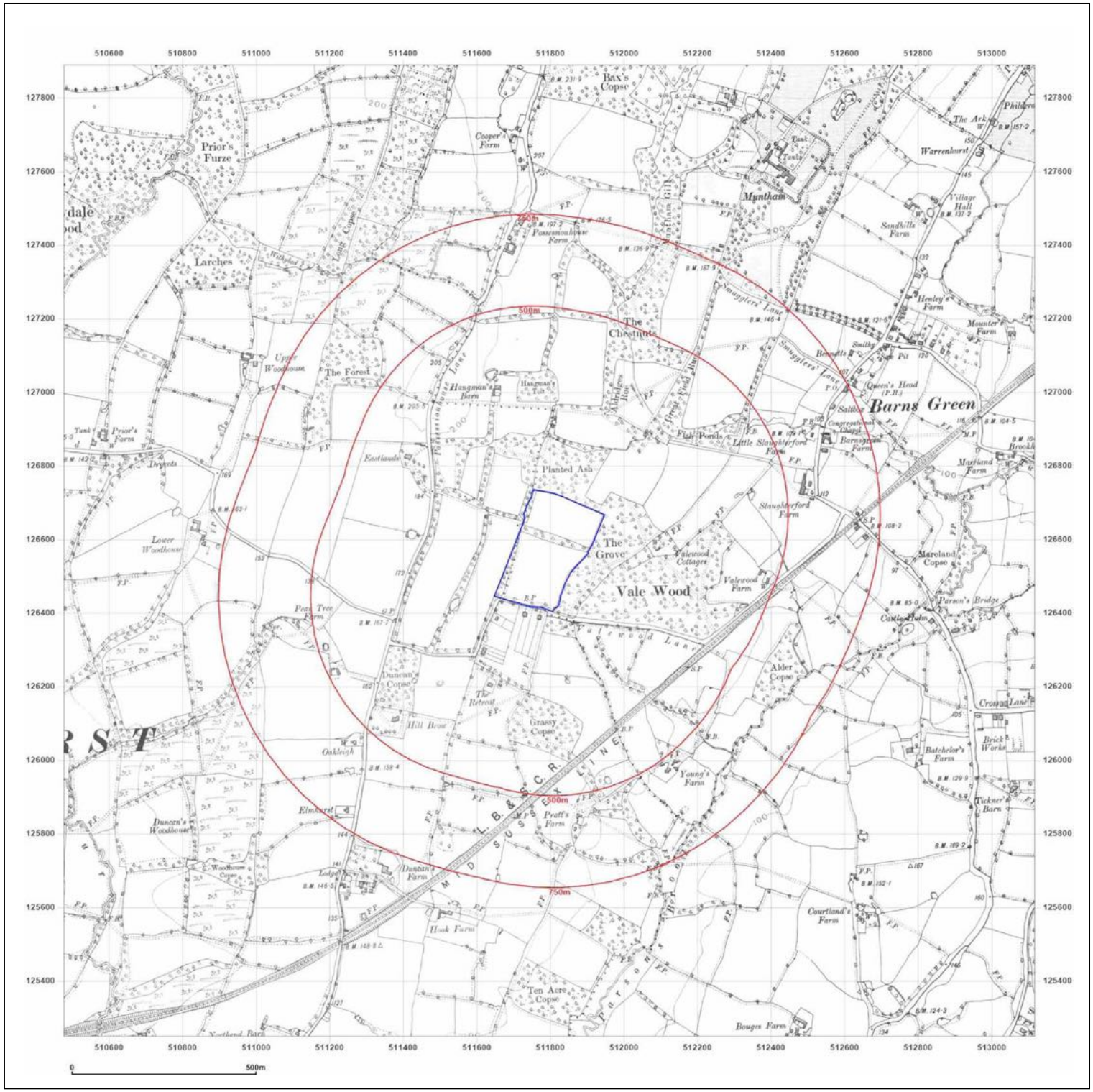
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Revised 1913
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Groundsure INSIGHTS

Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

Map Name: County Series
Map date: **1913**
Scale: 1:10,560
Printed at: 1:10,560

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Surveyed 1874
Revised 1913
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1875
Revised 1913
Edition N/A
Copyright N/A
Levelled N/A

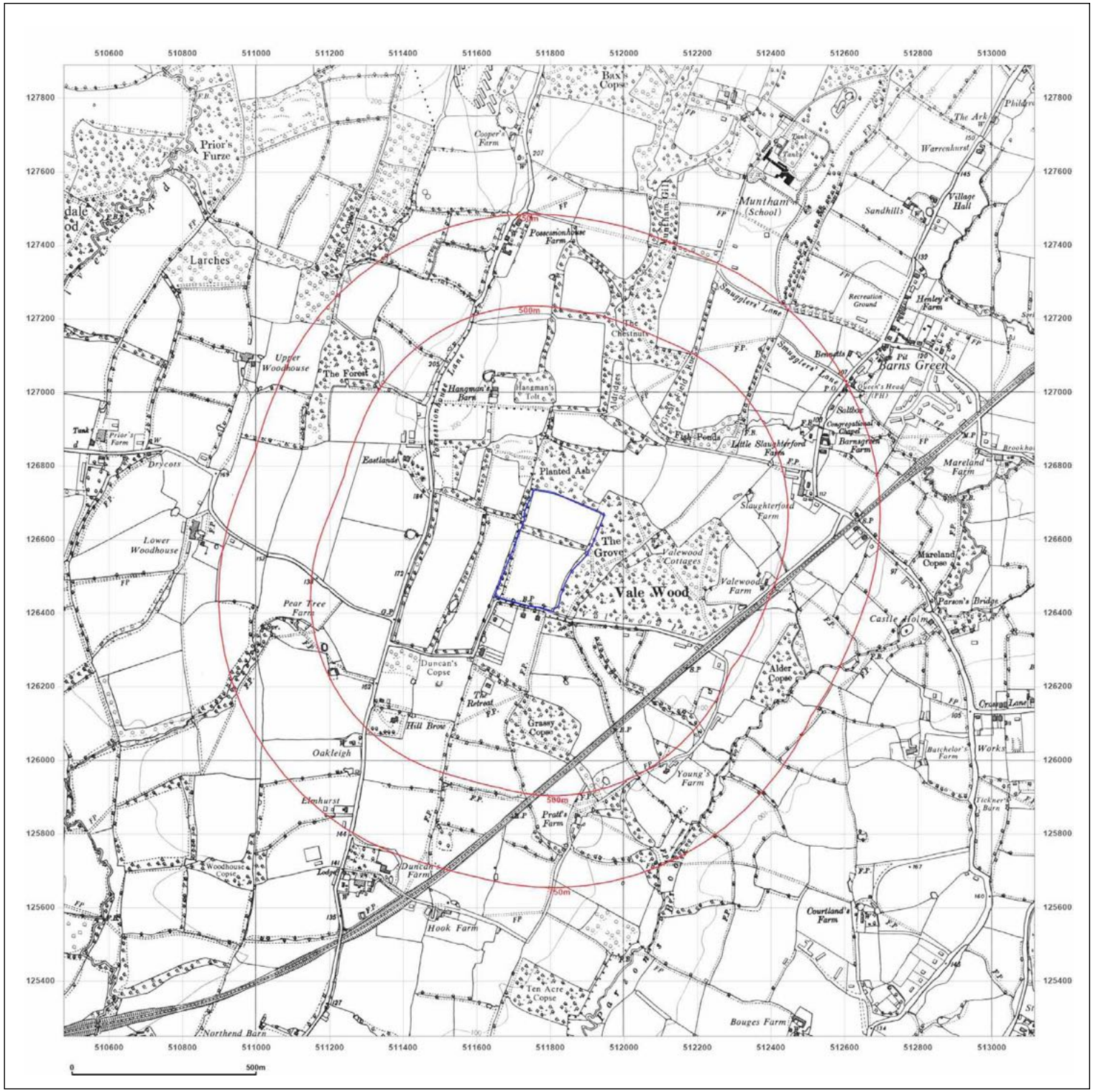
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Groundsure INSIGHTS

Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

Map Name: Provisional
Map date: **1961**
Scale: 1:10,560
Printed at: 1:10,560

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Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled N/A

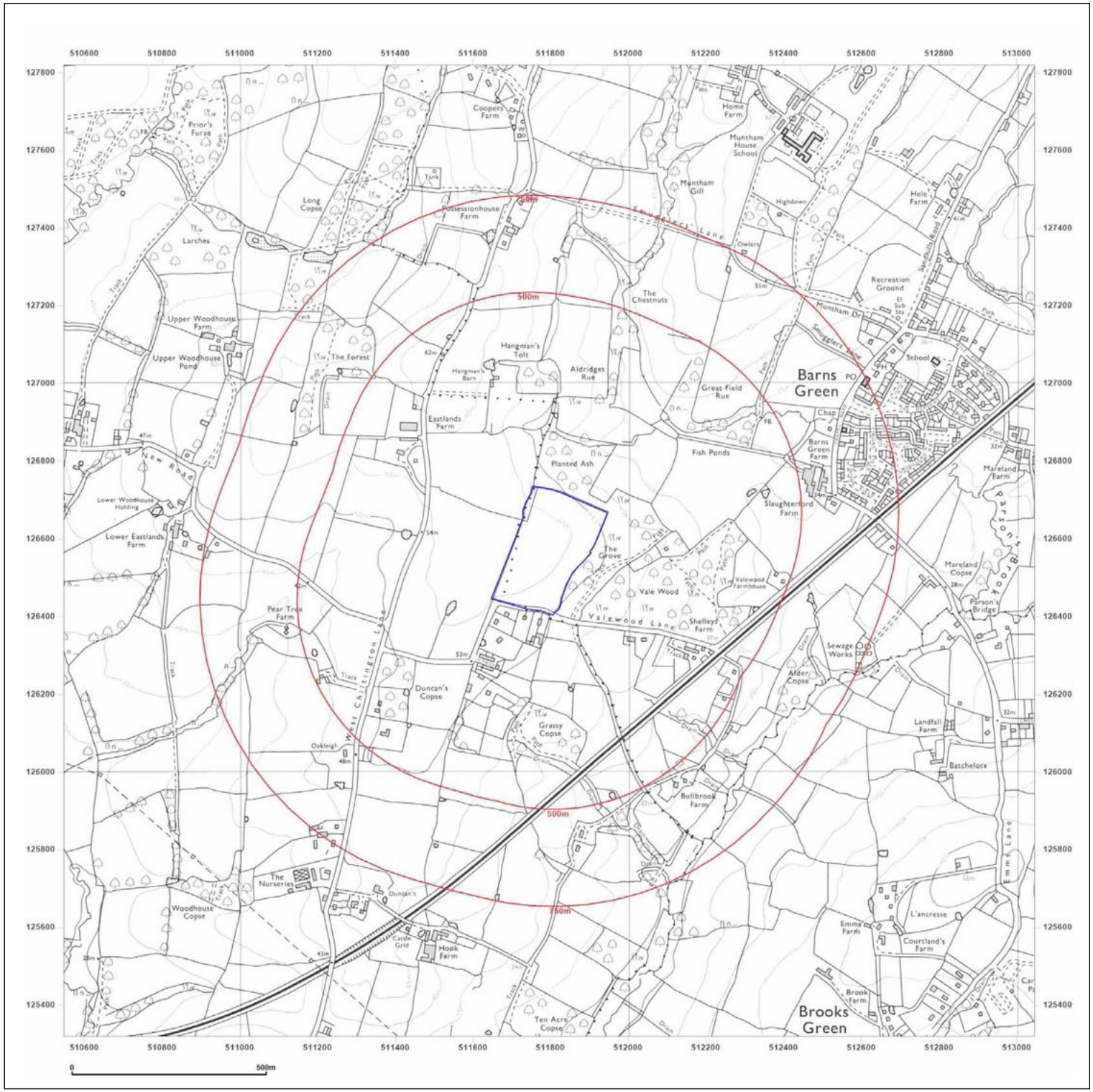
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Groundsure INSIGHTS

Site Details:

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Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

Map Name: National Grid
Map date: **1981**
Scale: 1:10,000
Printed at: 1:10,000

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Surveyed 1975
Revised 1981
Edition N/A
Copyright N/A
Levelled N/A

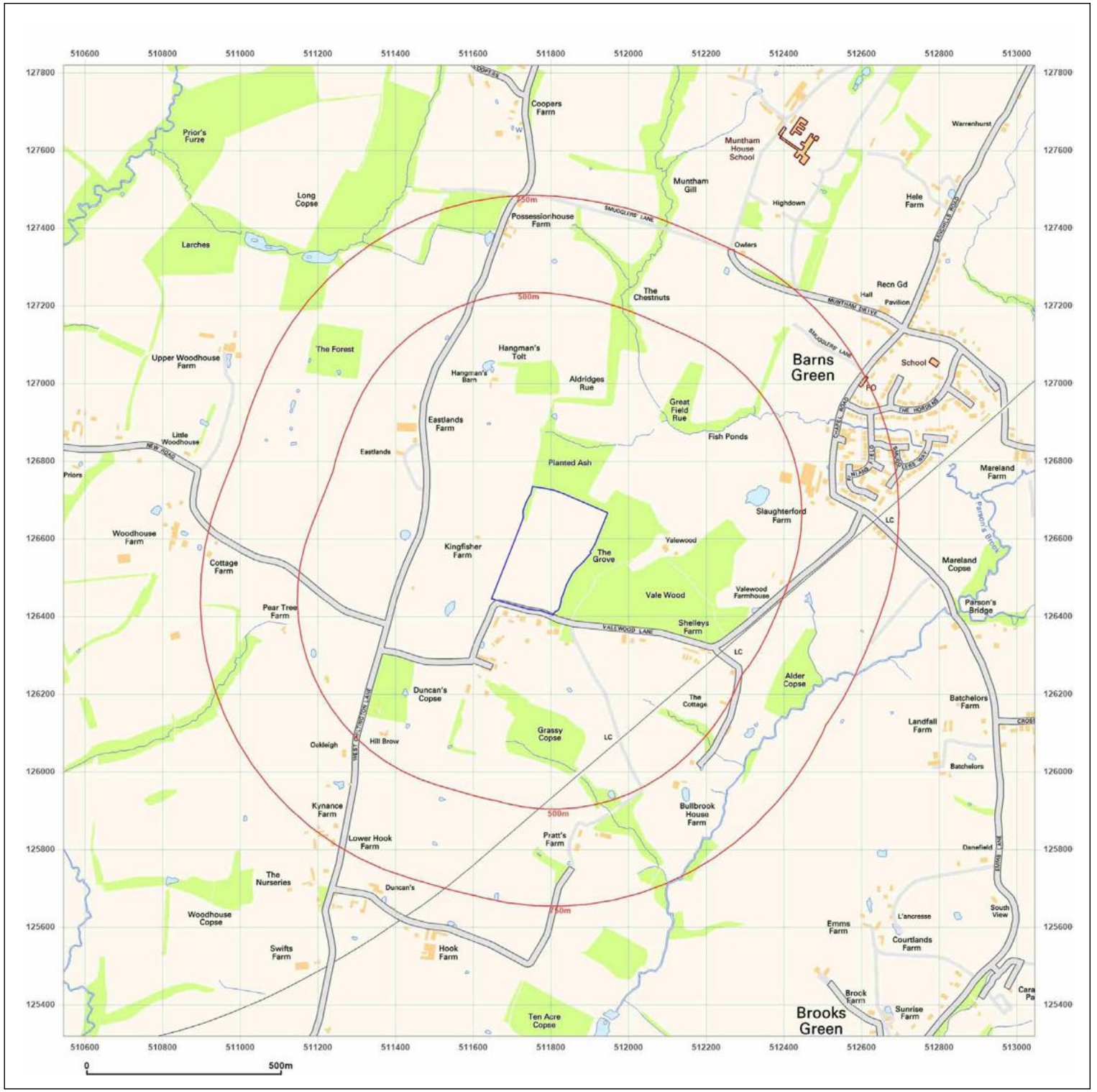
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Groundsure INSIGHTS

Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

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

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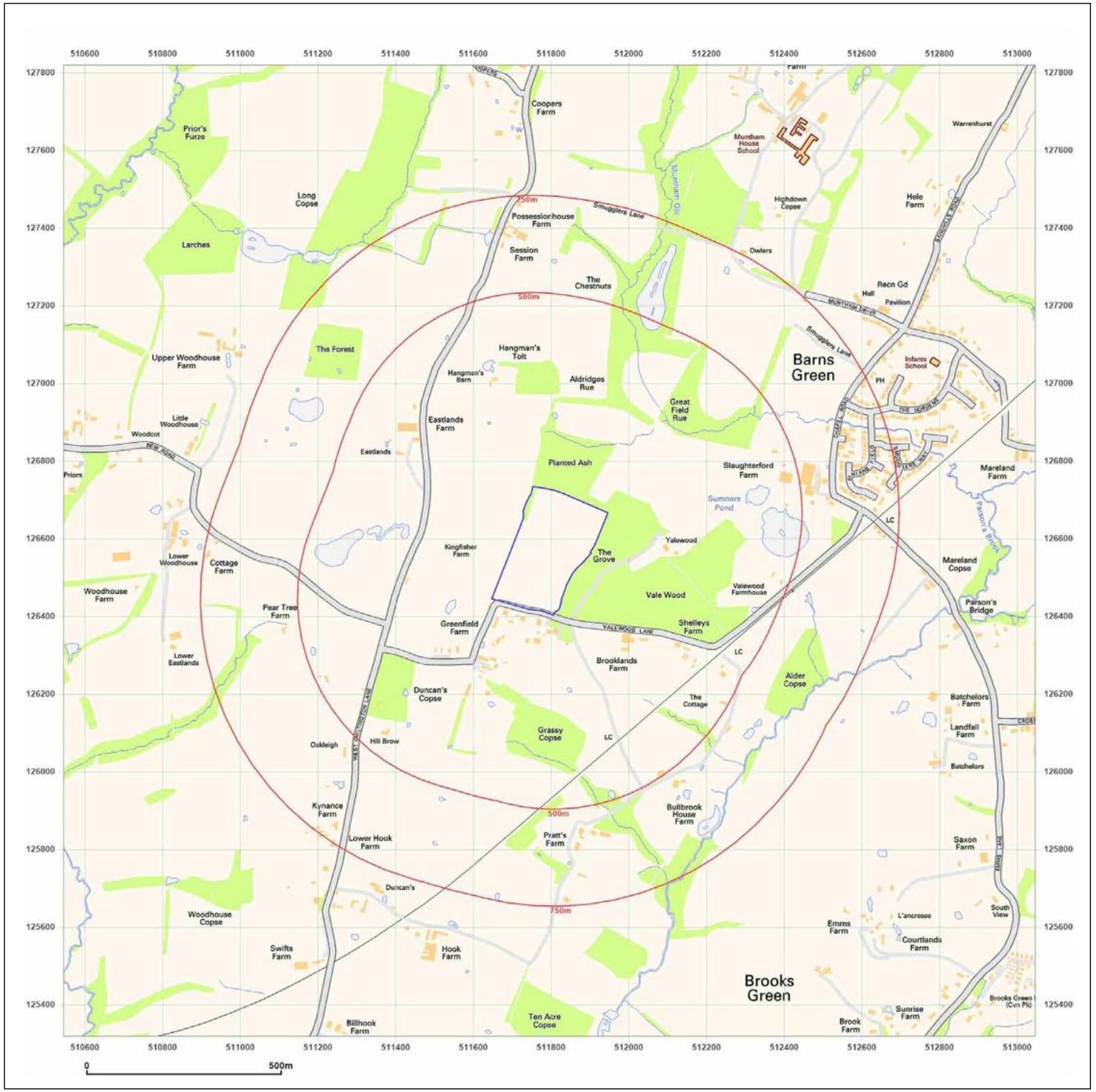
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Groundsure INSIGHTS

Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

Map Name: National Grid
Map date: 2010
Scale: 1:10,000
Printed at: 1:10,000

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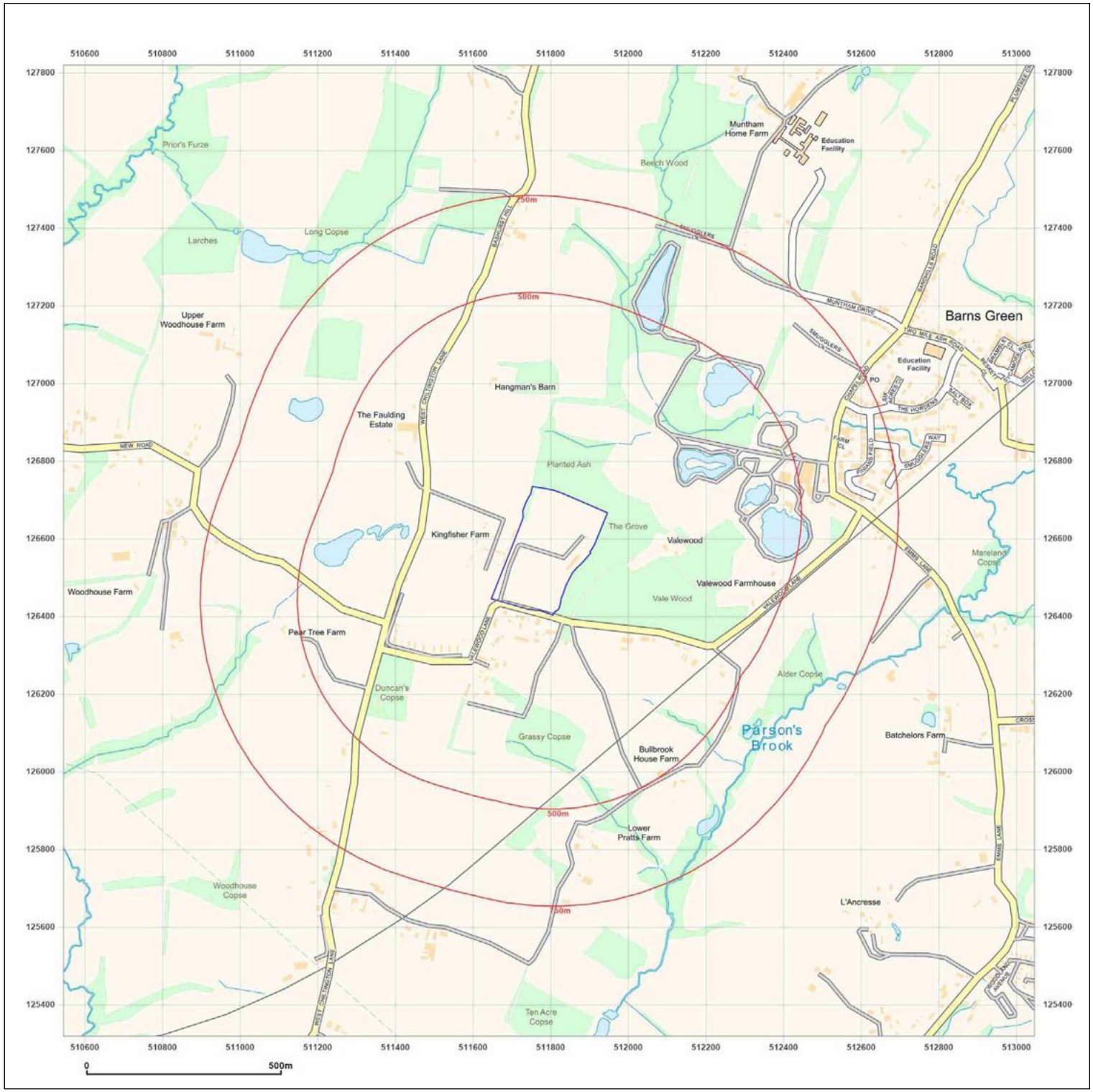
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Site Details:

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Client Ref: 499
Report Ref: HMD-47-8568944
Grid Ref: 511796, 126569

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

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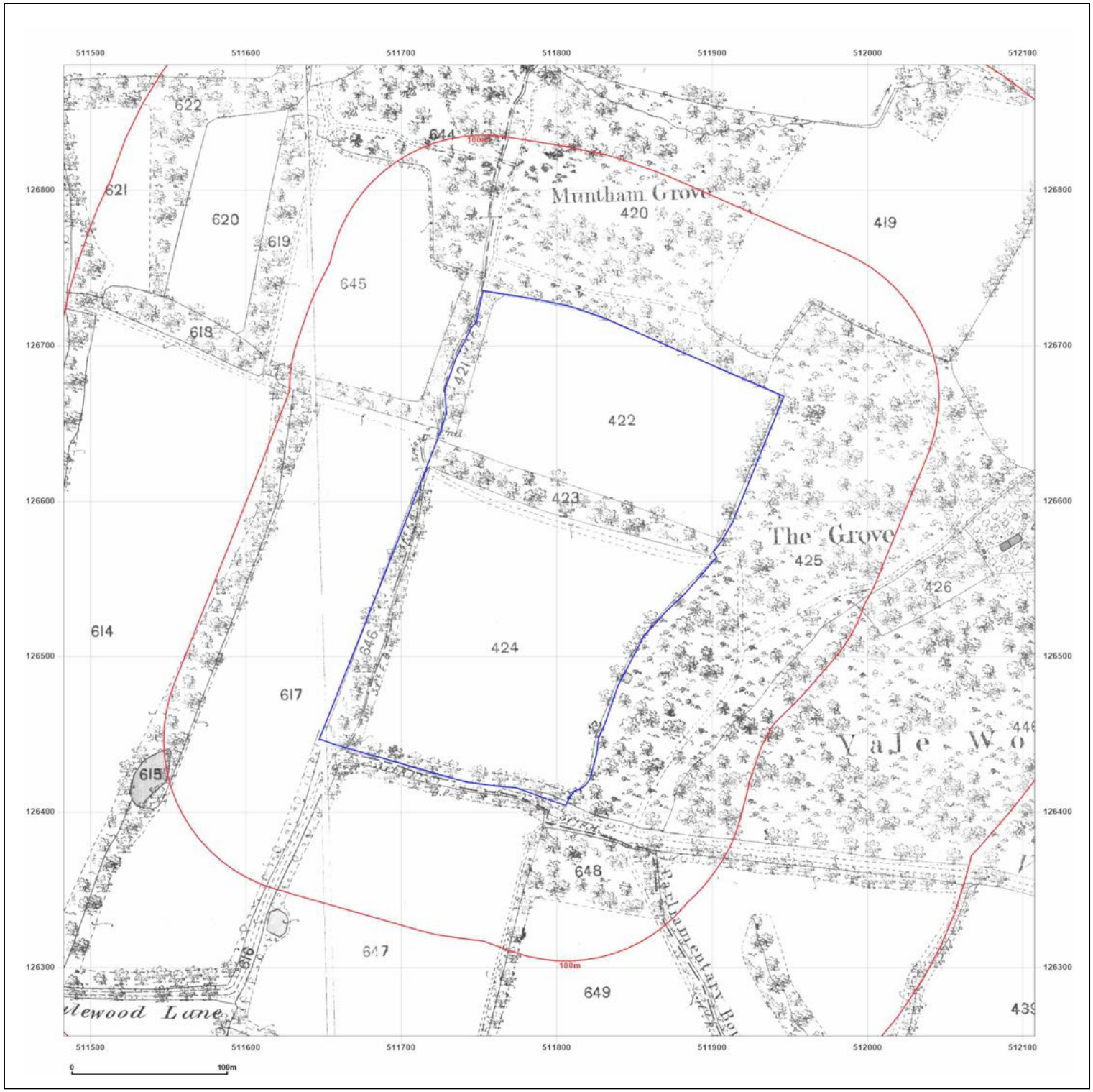
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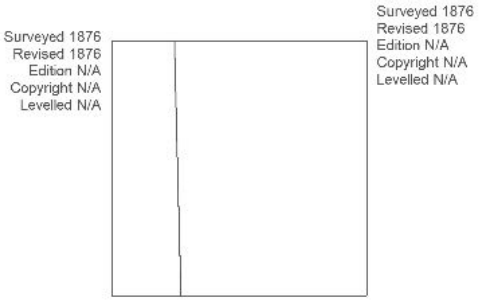
Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944_2500
Grid Ref: 511795, 126568

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

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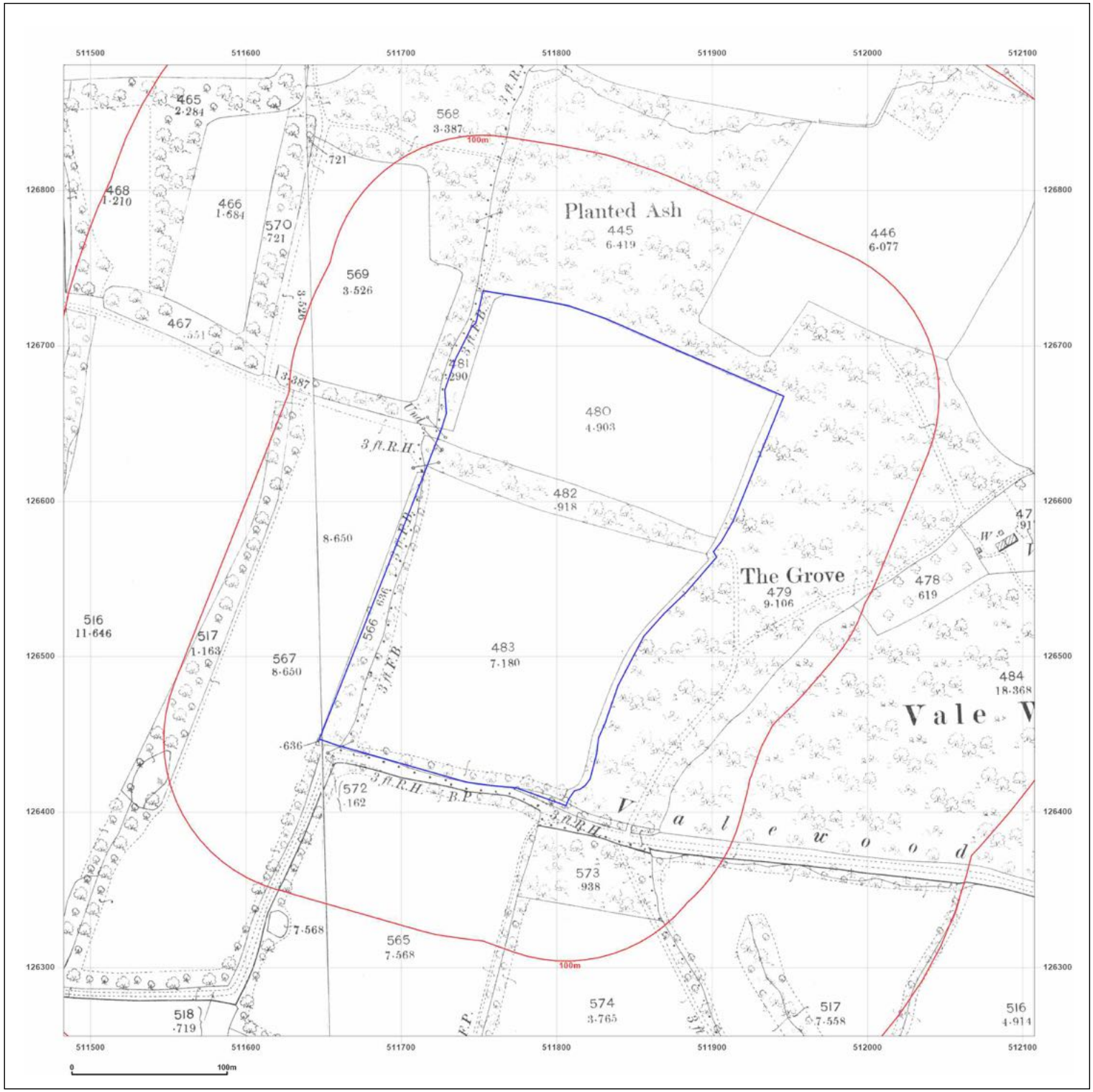
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Production date: 04 March 2022

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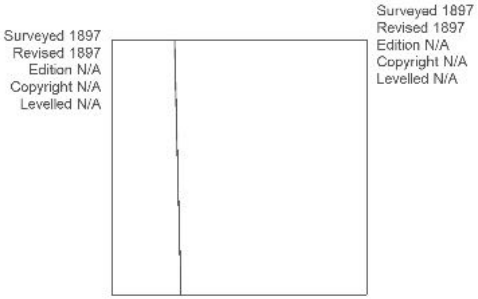
Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944_2500
Grid Ref: 511795, 126568

Map Name: County Series
Map date: **1897**
Scale: 1:2,500
Printed at: 1:2,500

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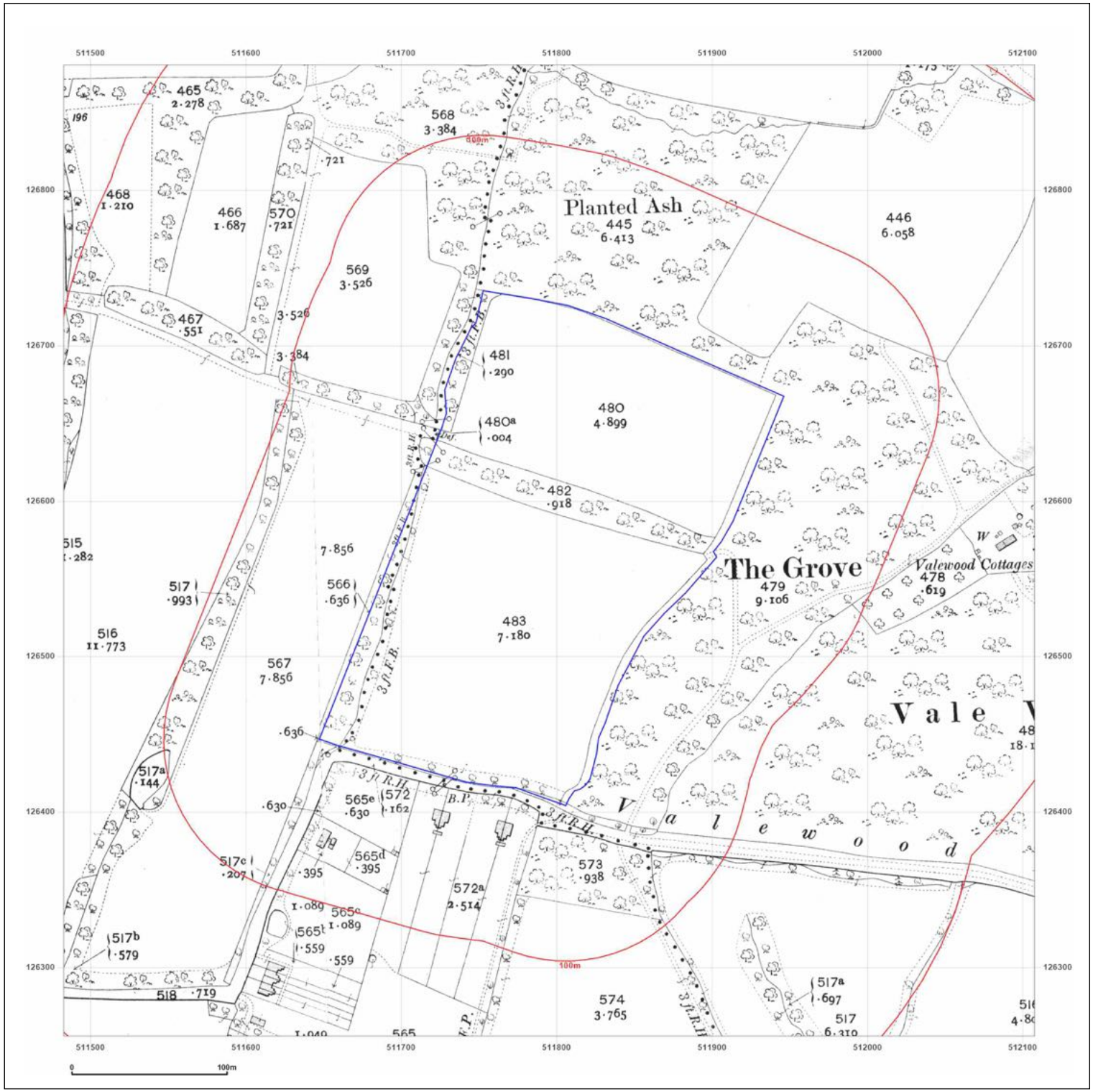
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Groundsure INSIGHTS

Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

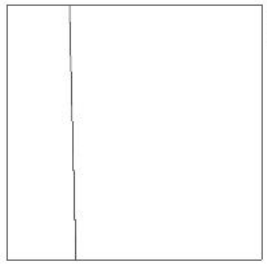
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Report Ref: HMD-47-8568944_2500
Grid Ref: 511795, 126568

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

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

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



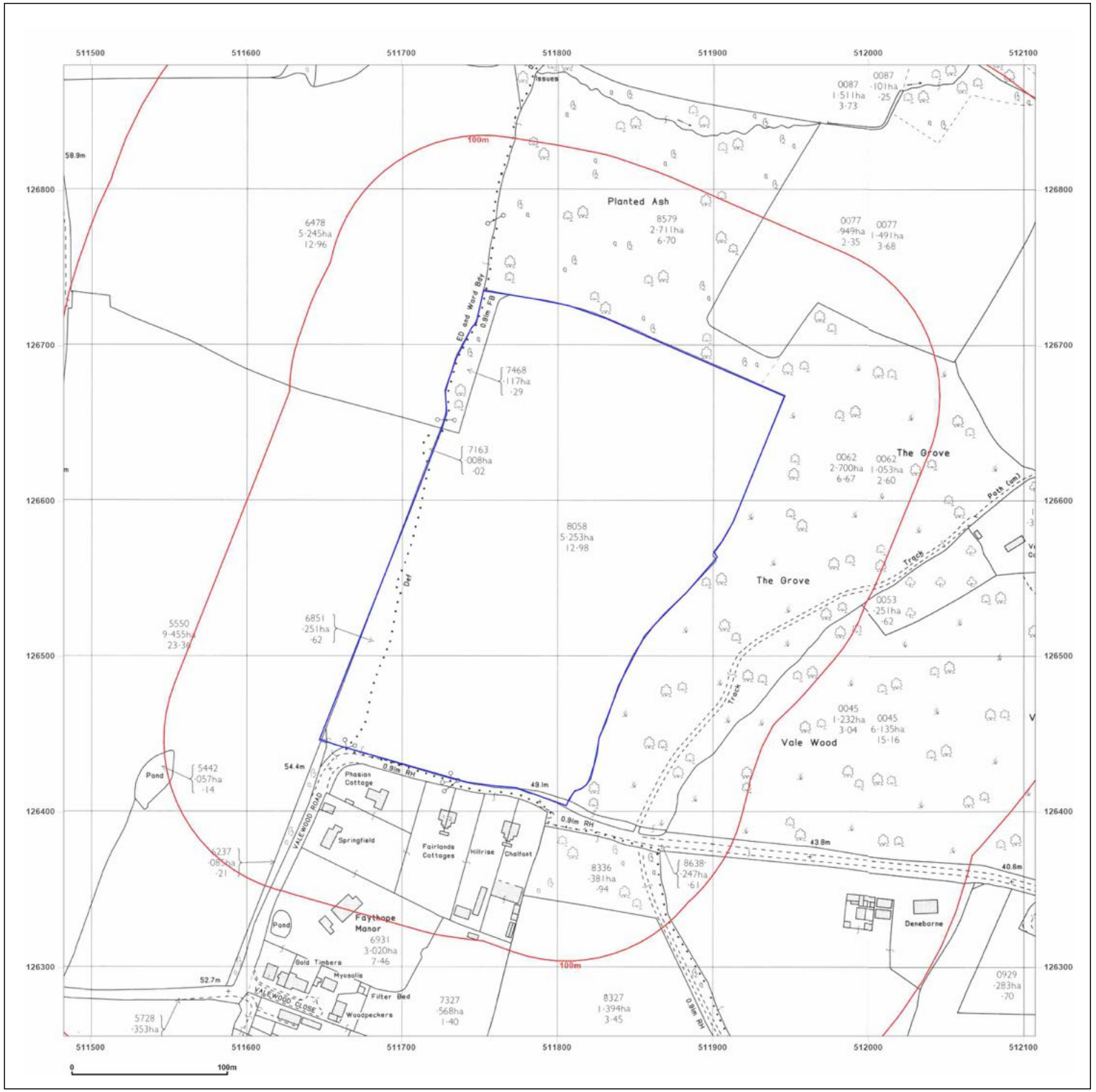
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Groundsure INSIGHTS

Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944_2500
Grid Ref: 511795, 126568

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

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Surveyed 1975
Revised 1975
Edition N/A
Copyright 1977
Levelled 1952

Surveyed 1975
Revised 1975
Edition N/A
Copyright 1977
Levelled 1952

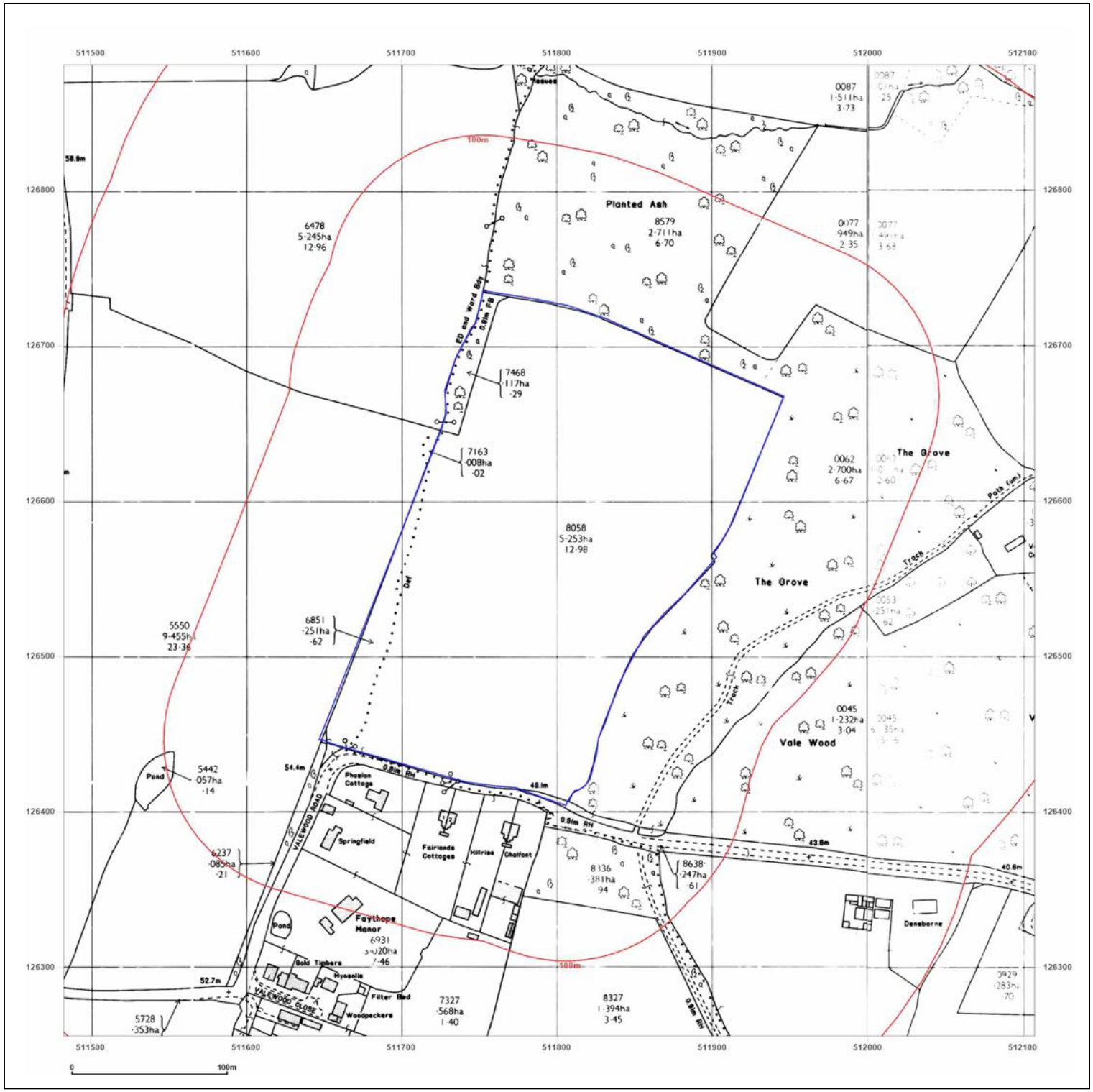
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Groundsure INSIGHTS

Site Details:

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Client Ref: 499
Report Ref: HMD-47-8568944_2500
Grid Ref: 511795, 126568

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

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

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

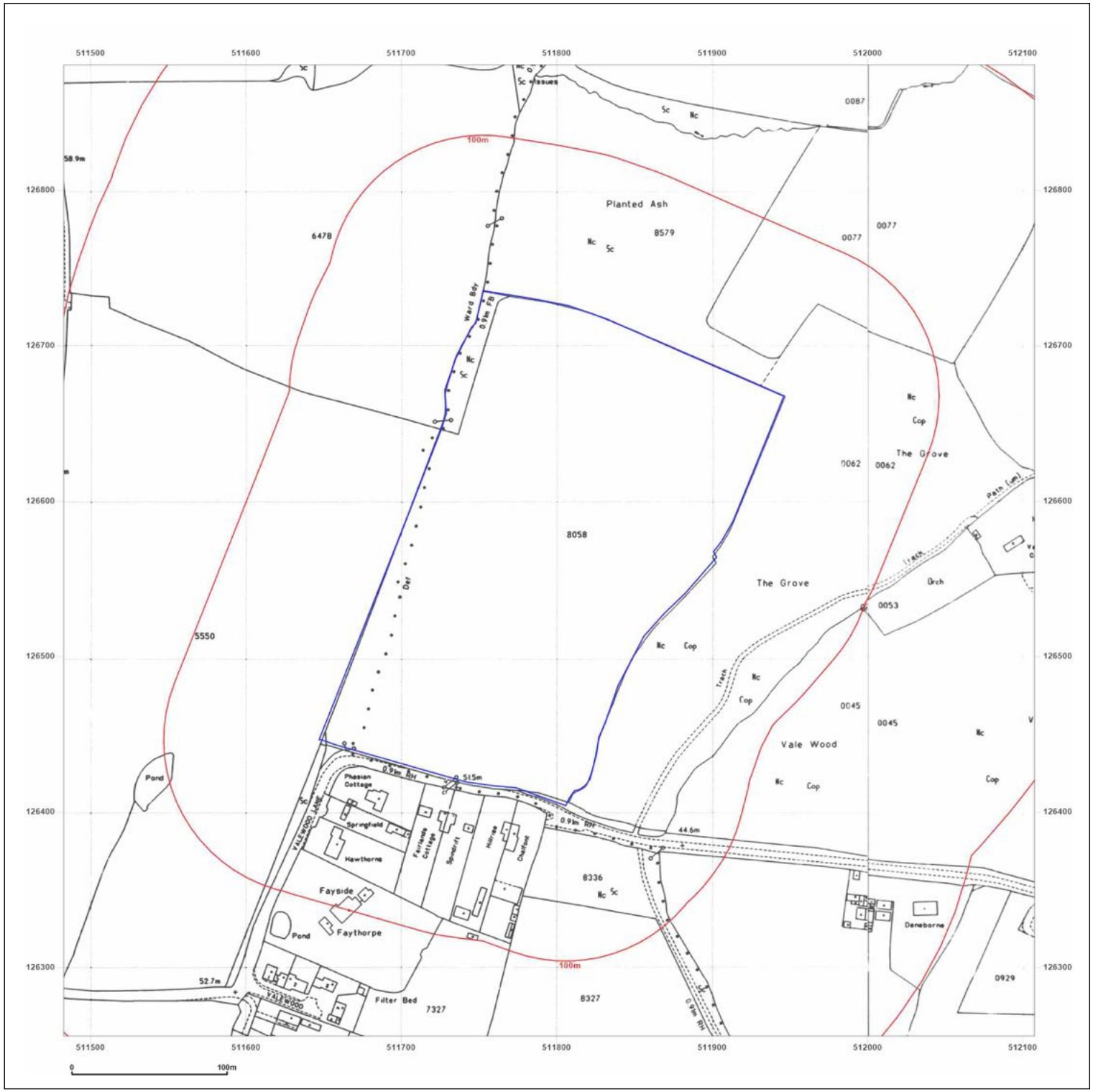
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Groundsure INSIGHTS

Site Details:

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Client Ref: 499
Report Ref: HMD-47-8568944_2500
Grid Ref: 511795, 126568

Map Name: National Grid
Map date: 1993
Scale: 1:2,500
Printed at: 1:2,500

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Surveyed 1993
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Edition N/A
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Levelled N/A

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

GroundSure Enviro+Geo Insight Report

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

CLAYFIELD FARM, VALEWOOD LANE, BARNS GREEN, RH13 0QJ

Order Details

Date: 04/03/2022

Your ref: 499

Our Ref: HMD-47-8568945

Client: Malcolm McKemey

Site Details

Location: 511783 126567

Area: 5.63 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	1	1	7	-
15	**1.2**	**Historical tanks**	0	0	0	1	-
15	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	1	1	9	-
18	**2.2**	**Historical tanks**	0	0	0	1	-
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	1	0	-
21	3.5	Historical waste sites	0	0	0	0	-
21	3.6	Licensed waste sites	0	0	0	0	-
22	**3.7**	**Waste exemptions**	1	1	5	0	-
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	0	-
24	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	-
25	4.12	Radioactive Substance Authorisations	0	0	0	0	-
26	**4.13**	**Licensed Discharges to controlled waters**	0	0	2	0	-
26	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
26	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	0	-
27	4.19	Pollution inventory substances	0	0	0	0	-
27	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	None (within 500m)				
30	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
31	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
32	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
32	5.5	Groundwater vulnerability- local information	None (within 0m)				
33	5.6	Groundwater abstractions	0	0	0	0	0
33	5.7	Surface water abstractions	0	0	0	0	0
33	5.8	Potable abstractions	0	0	0	0	0
33	5.9	Source Protection Zones	0	0	0	0	-
34	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
35	**6.1**	**Water Network (OS MasterMap)**	0	0	6	-	-

36	**6.2**	**Surface water features**	0	0	3	-	-
36	**6.3**	**WFD Surface water body catchments**	1	-	-	-	-
37	**6.4**	**WFD Surface water bodies**	0	0	0	-	-
37	6.5	WFD Groundwater bodies	0	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
38	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
38	7.2	Historical Flood Events	0	0	0	-	-
38	7.3	Flood Defences	0	0	0	-	-
39	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
39	7.5	Flood Storage Areas	0	0	0	-	-
40	7.6	Flood Zone 2	None (within 50m)				
40	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding	
41	**8.1**	**Surface water flooding**	1 in 30 year, 0.3m - 1.0m (within 50m)

Page	Section	Groundwater flooding	
43	**9.1**	**Groundwater flooding**	Negligible (within 50m)

Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
44	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
45	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
45	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
45	10.4	Special Protection Areas (SPA)	0	0	0	0	0
45	10.5	National Nature Reserves (NNR)	0	0	0	0	0
46	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
46	**10.7**	**Designated Ancient Woodland**	2	0	3	2	43
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
49	10.11	Green Belt	0	0	0	0	0
49	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
50	**10.16**	**Nitrate Vulnerable Zones**	0	0	0	0	2
51	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
52	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
53	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	0	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 4 (within 250m)				
56	12.2	Open Access Land	0	0	0	-	-
56	12.3	Tree Felling Licences	0	0	0	-	-
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**	2	2	10	-	-
59	13.2	Habitat Networks	0	0	0	-	-
59	13.3	Open Mosaic Habitat	0	0	0	-	-
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	0	0	-

63	14.4	Landslip (10k)	0	0	0	0	-
64	**14.5**	**Bedrock geology (10k)**	1	0	0	0	-
65	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
66	**15.1**	**50k Availability**	Identified (within 500m)				
67	15.2	Artificial and made ground (50k)	0	0	0	0	-
67	15.3	Artificial ground permeability (50k)	0	0	-	-	-
68	15.4	Superficial geology (50k)	0	0	0	0	-
68	15.5	Superficial permeability (50k)	None (within 50m)				
68	15.6	Landslip (50k)	0	0	0	0	-
68	15.7	Landslip permeability (50k)	None (within 50m)				
69	**15.8**	**Bedrock geology (50k)**	1	0	0	0	-
70	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				
70	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
71	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
72	**17.1**	**Shrink swell clays**	Low (within 50m)				
73	**17.2**	**Running sands**	Negligible (within 50m)				
74	**17.3**	**Compressible deposits**	Negligible (within 50m)				
75	**17.4**	**Collapsible deposits**	Very low (within 50m)				
76	**17.5**	**Landslides**	Very low (within 50m)				
77	**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
78	18.1	Natural cavities	0	0	0	0	-
79	**18.2**	**BritPits**	0	0	0	1	-
79	**18.3**	**Surface ground workings**	0	1	7	-	-
80	18.4	Underground workings	0	0	0	0	0
80	18.5	Historical Mineral Planning Areas	0	0	0	0	-

80	**18.6**	**Non-coal mining**	1	0	0	0	0
80	18.7	Mining cavities	0	0	0	0	0
81	18.8	JPB mining areas	None (within 0m)				
81	18.9	Coal mining	None (within 0m)				
81	18.10	Brine areas	None (within 0m)				
81	18.11	Gypsum areas	None (within 0m)				
81	18.12	Tin mining	None (within 0m)				
82	18.13	Clay mining	None (within 0m)				

Page	Section	Radon					
83	**19.1**	**Radon**	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
84	**20.1**	**BGS Estimated Background Soil Chemistry**	2	0	-	-	-
84	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
84	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
85	21.1	Underground railways (London)	0	0	0	-	-
85	21.2	Underground railways (Non-London)	0	0	0	-	-
85	21.3	Railway tunnels	0	0	0	-	-
85	21.4	Historical railway and tunnel features	0	0	0	-	-
85	21.5	Royal Mail tunnels	0	0	0	-	-
86	21.6	Historical railways	0	0	0	-	-
86	21.7	Railways	0	0	0	-	-
86	21.8	Crossrail 1	0	0	0	0	-
86	21.9	Crossrail 2	0	0	0	0	-
86	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 24/04/2021

Site Area: 5.63ha

Recent site history - 2018 aerial photograph



Capture Date: 14/05/2018

Site Area: 5.63ha

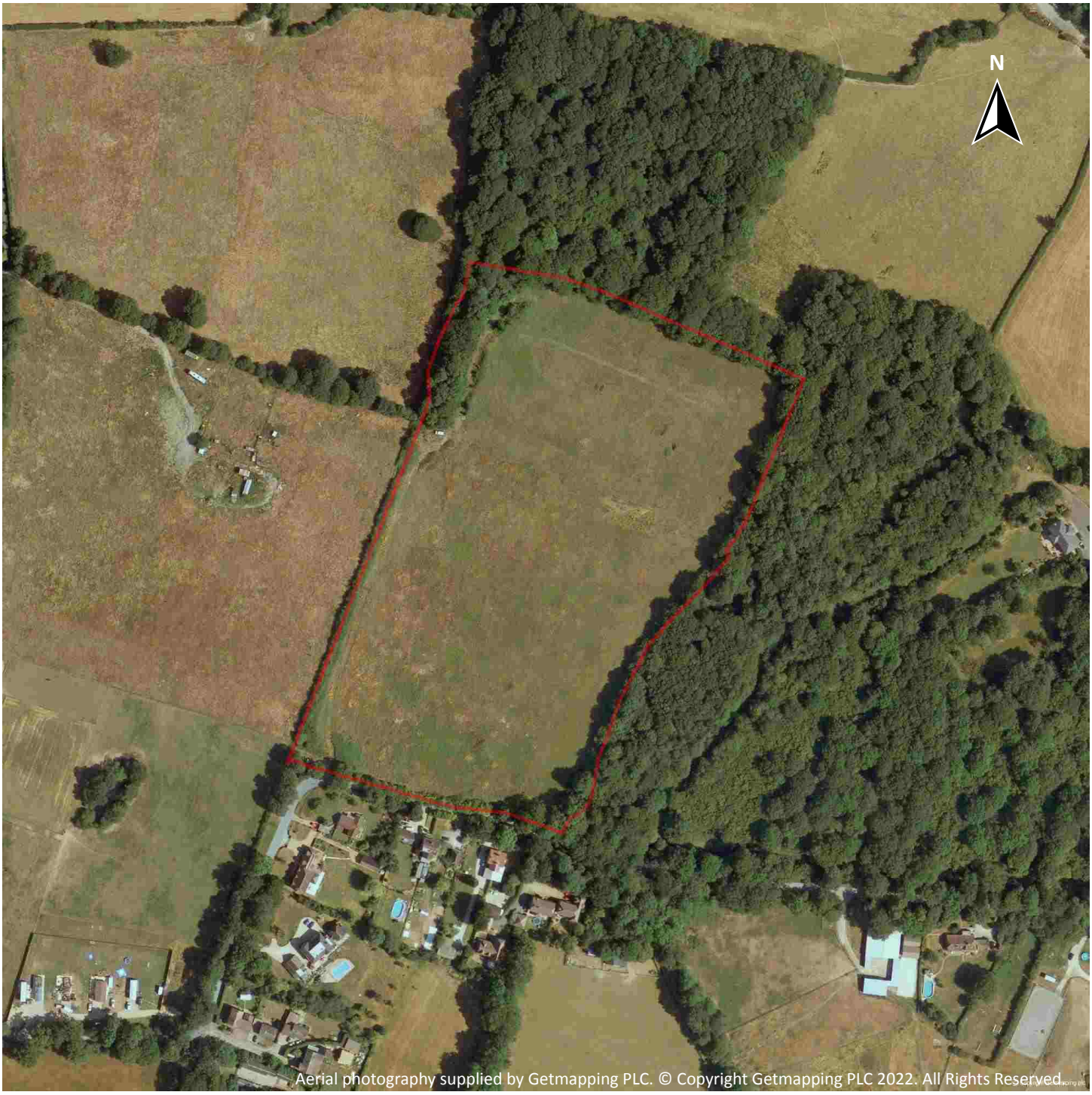
Recent site history - 2012 aerial photograph



Capture Date: 31/08/2012

Site Area: 5.63ha

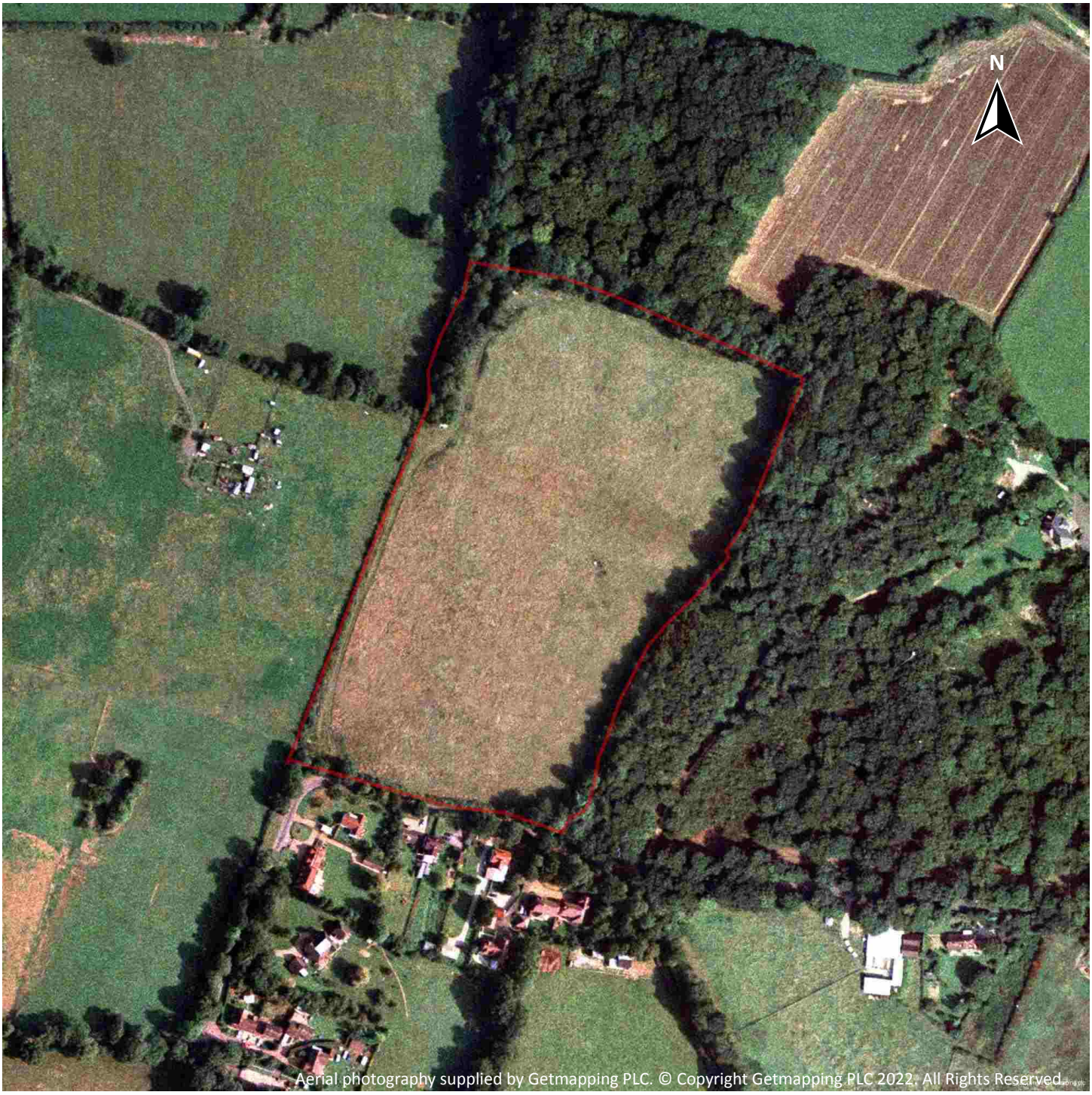
Recent site history - 2005 aerial photograph



Capture Date: 17/07/2005

Site Area: 5.63ha

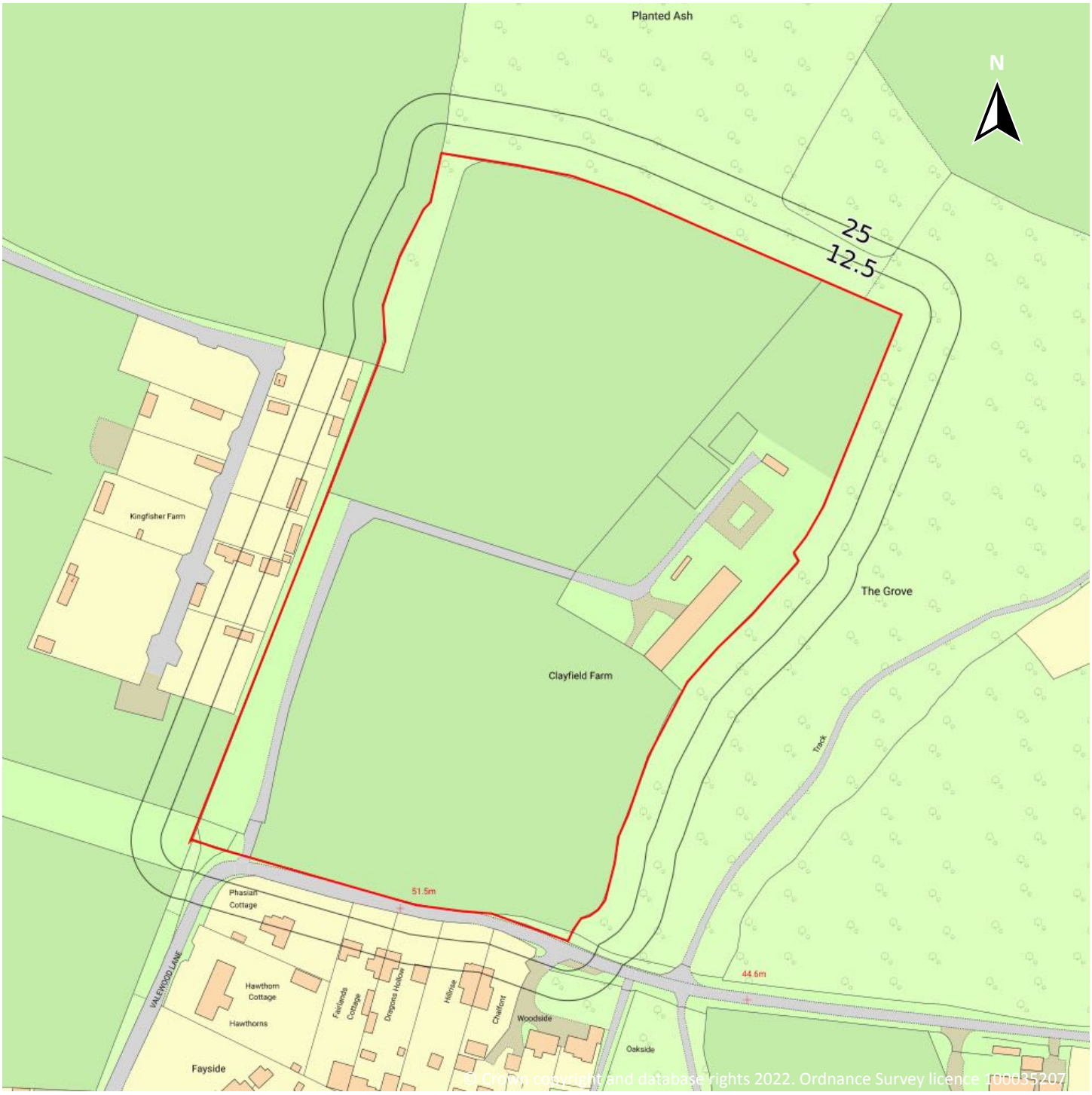
Recent site history - 1999 aerial photograph



Capture Date: 29/08/1999

Site Area: 5.63ha

OS MasterMap site plan



Site Area: 5.63ha

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	9

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
1	38m SE	Cuttings	1876	2129127

ID	Location	Land use	Dates present	Group ID
A	229m SW	Old Clay Pit	1896	2128026
A	269m SW	Unspecified Pit	1913	2235162
A	271m SW	Unspecified Pit	1961	2207070
A	272m SW	Unspecified Pit	1913	2188720
3	294m NE	Unspecified Heap	1961	2135732
4	339m SE	Cuttings	1876	2129125
5	383m E	Cuttings	1876	2129126
6	409m NE	Unspecified Heap	1913 - 1961	2282639

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**1**

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
2	287m W	Unspecified Tank	1911	359587

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	11

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
1	38m SE	Cuttings	1876	2129127
A	229m SW	Old Clay Pit	1896	2128026
A	269m SW	Unspecified Pit	1913	2235162

ID	Location	Land Use	Date	Group ID
A	271m SW	Unspecified Pit	1961	2207070
A	272m SW	Unspecified Pit	1913	2188720
A	272m SW	Unspecified Pit	1913	2188720
3	294m NE	Unspecified Heap	1961	2135732
4	339m SE	Cuttings	1876	2129125
5	383m E	Cuttings	1876	2129126
B	409m NE	Unspecified Heap	1961	2282639
B	412m NE	Unspecified Heap	1913	2282639

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**1**

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
2	287m W	Unspecified Tank	1911	359587

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)

Historical landfill (EA/NRW)

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	1

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

Features are displayed on the Waste and landfill map on **page 20**

ID	Location	Details		
3	66m SE	Site Address: Vale Wood Lane, Barns Green, Sussex Licence Holder Address: -	Waste Licence: - Site Reference: WD27/051 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded 31/12/1964 Last Recorded: 31/12/1970

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	7

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
1	**On site**	**BURLANDS FARM, CHARLWOOD ROAD, IFIELD, CRAWLEY, RH11 0JZ**	**WEX091587**	**Using waste exemption**	**On a farm**	**Use of waste in construction**
2	49m W	-	WEX266087	Using waste exemption	On a farm	Use of waste in construction
A	156m SW	4 Greenfield Farm Valewood Lane HORSHAM West Sussex RH13 0QJ	EPR/AE5742CT/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste in construction
A	157m SW	1 GREENFIELD FARM, VALEWOOD LANE, BARNS GREEN, HORSHAM, RH13 0QJ	WEX166133	Using waste exemption	On a farm	Use of waste in construction
B	191m W	Kingfisher Farm West Chiltington Lane West Sussex RH14 9DP	EPR/VF0834SP/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
B	191m W	Kingfisher Farm West Chiltington Lane West Sussex RH14 9DP	EPR/VF0834SP/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Screening and blending of waste
B	191m W	Kingfisher Farm West Chiltington Lane West Sussex RH14 9DP	EPR/VF0834SP/A001	Using waste exemption	Both agricultural and non-agricultural waste	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)

Licensed Discharges to controlled waters

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	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	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	77m SE	NEW DEVELOPMENT NEAR CHALFONTS, VALEPOOL LANE, BARNS GREEN, WEST SUSSEX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: P06024 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 09/01/1996 Effective Date: 09/01/1996 Revocation Date: -
2	168m E	WOODPECKERS, VALEWOOD LANE, BARNS GREEN, HORSHAM WEST SUSSEX	Effluent Type: SEWAGE DISCHARGES - UNSPECIFIED - NOT WATER COMPANY Permit Number: P02828 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/03/1990 Effective Date: 19/03/1990 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	0

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

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer

5.1 Superficial aquifer

Records within 500m	0

Aquifer status of groundwater held within superficial geology.

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	1

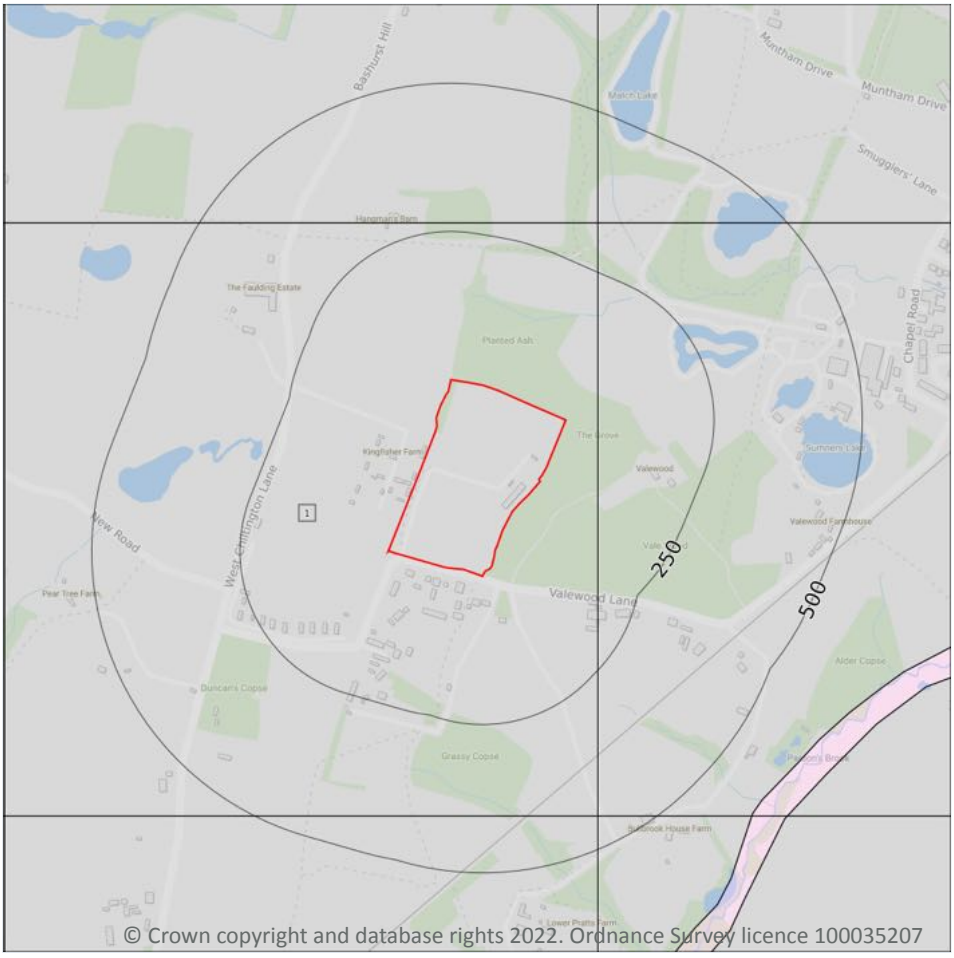
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 30**

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**

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	1

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

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

Features are displayed on the Groundwater vulnerability map on **page 31**

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**

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

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

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

5.5 Groundwater vulnerability- local information

Records on site	0

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

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

Abstractions and Source Protection Zones

5.6 Groundwater abstractions

Records within 2000m	0

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

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

5.7 Surface water abstractions

Records within 2000m	0

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

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

5.8 Potable abstractions

Records within 2000m	0

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**6**

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 35**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	132m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
B	172m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	174m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	234m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	239m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	247m NE	Inland river not influenced by normal tidal action.	Underground	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 35**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**1**

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 35**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Adur West**	**GB107041012290**	**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	1

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

Features are displayed on the Hydrology map on **page 35**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	626m SE	River	Adur West	GB107041012290	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.

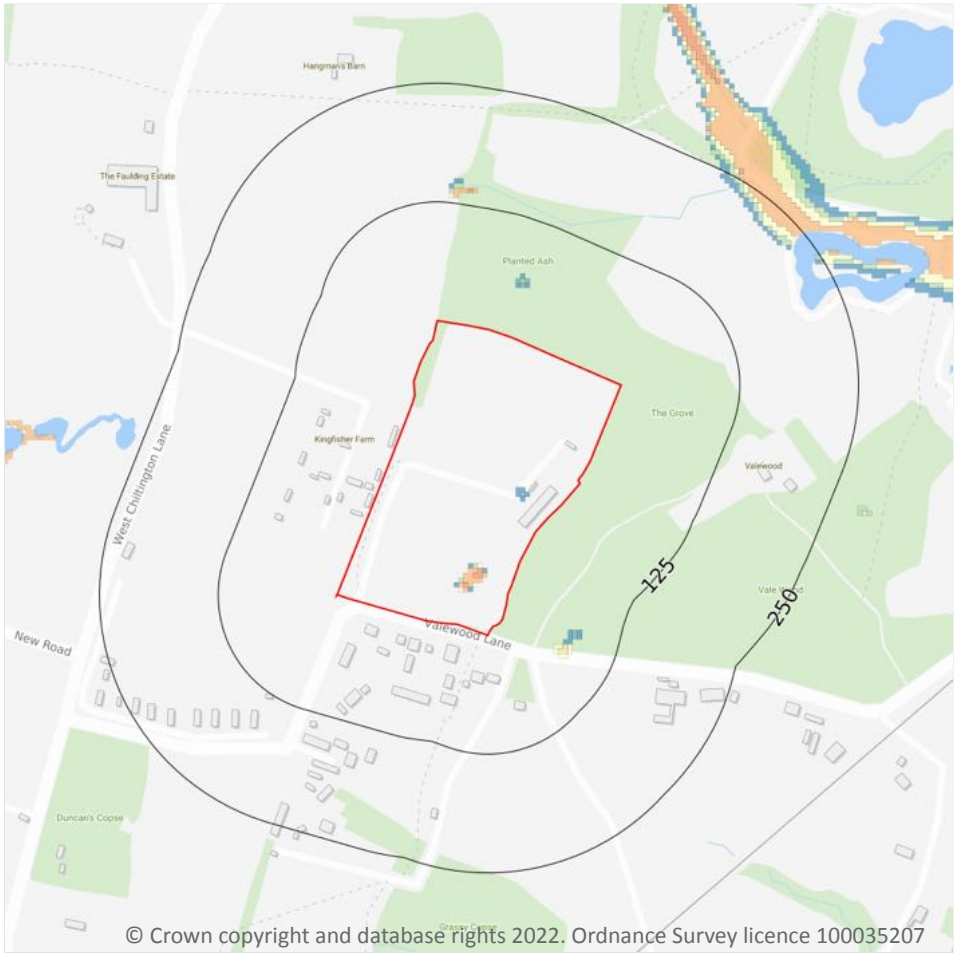
7.7 Flood Zone 3

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



Site Outline

Search buffers in metres (m)

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

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

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

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

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

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

Features are displayed on the Surface water flooding map on **page 41**

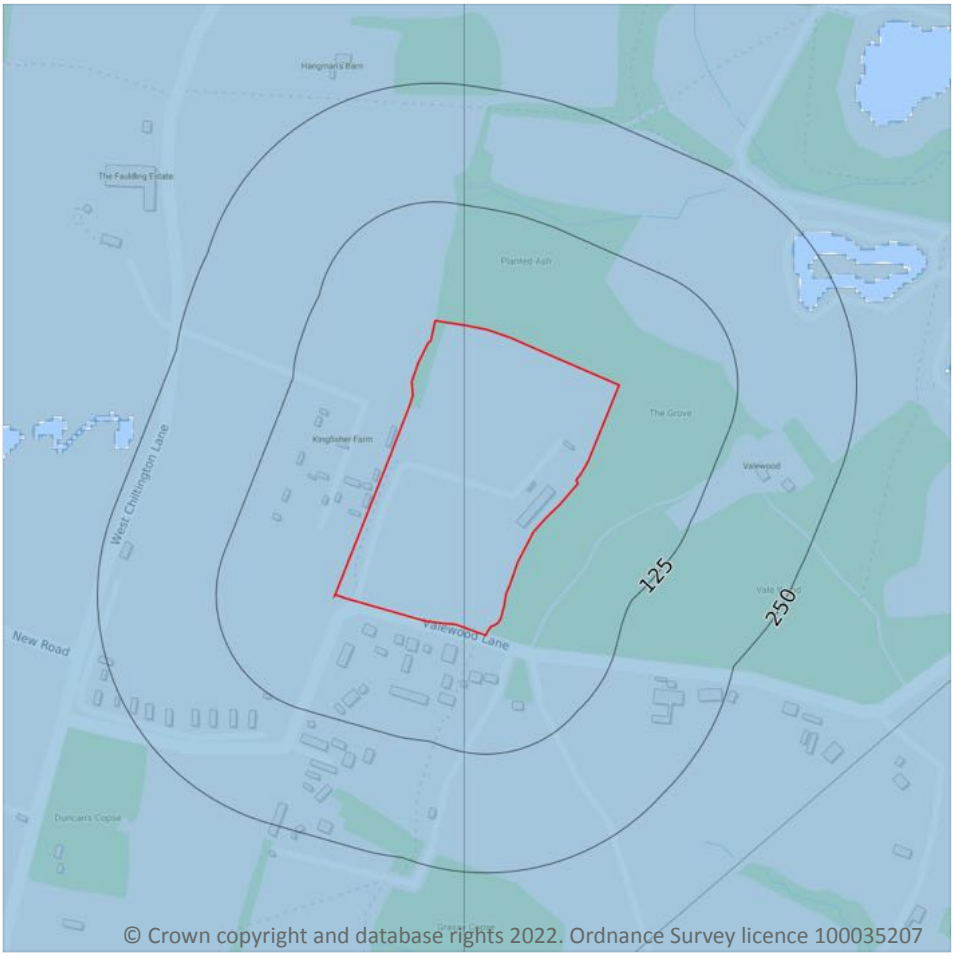
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

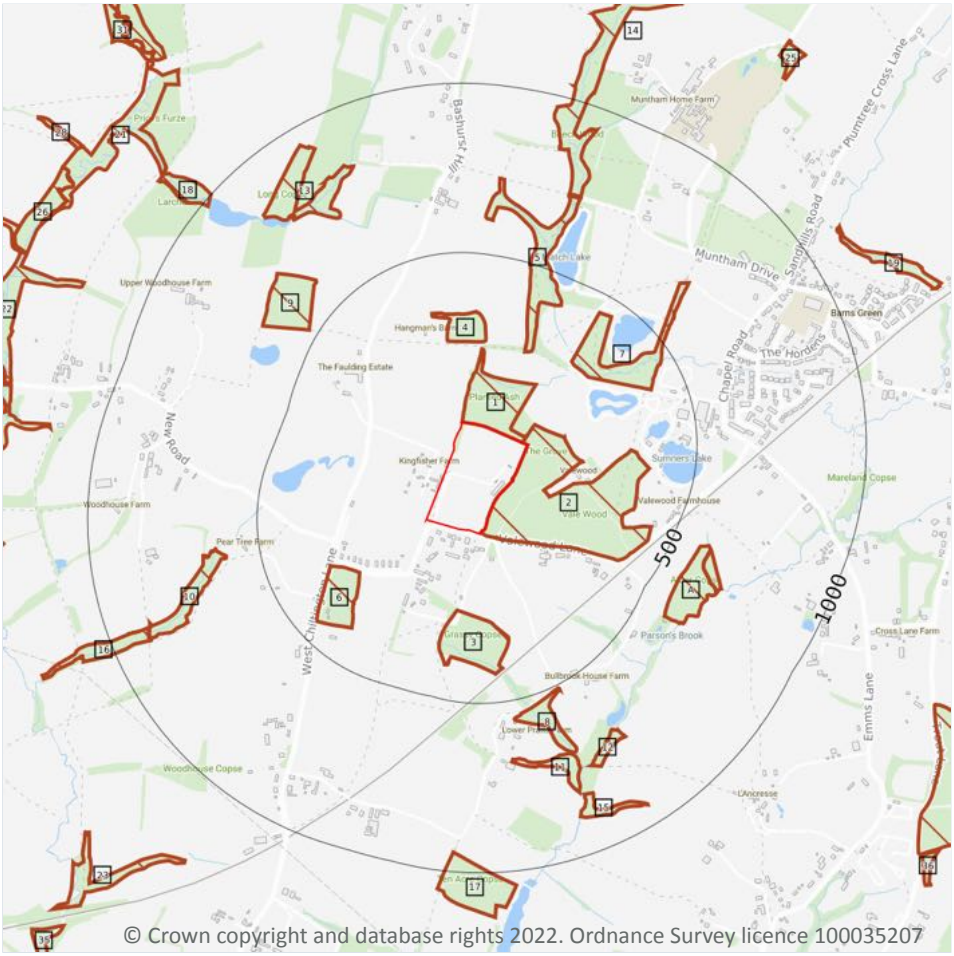
Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

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 43**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



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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	50

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 44**

ID	Location	Name	Woodland Type
1	**On site**	**Unknown**	**Ancient & Semi-Natural Woodland**
2	**On site**	**Vale Wood**	**Ancient & Semi-Natural Woodland**
3	235m S	Unknown	Ancient & Semi-Natural Woodland
4	237m N	Unknown	Ancient & Semi-Natural Woodland
5	248m NE	Unknown	Ancient & Semi-Natural Woodland
6	251m SW	Unknown	Ancient & Semi-Natural Woodland
7	268m NE	Unknown	Ancient & Semi-Natural Woodland
8	510m SE	Unknown	Ancient & Semi-Natural Woodland
9	527m NW	Unknown	Ancient & Semi-Natural Woodland
A	570m SE	Alder Copse	Ancient & Semi-Natural Woodland
10	600m W	Unknown	Ancient & Semi-Natural Woodland
A	613m SE	Unknown	Ancient & Semi-Natural Woodland
11	672m S	Unknown	Ancient & Semi-Natural Woodland
12	695m SE	Unknown	Ancient & Semi-Natural Woodland
13	703m NW	Unknown	Ancient & Semi-Natural Woodland
14	731m N	Unknown	Ancient & Semi-Natural Woodland

ID	Location	Name	Woodland Type
15	828m S	Unknown	Ancient & Semi-Natural Woodland
16	880m W	Unknown	Ancient & Semi-Natural Woodland
17	942m S	Unknown	Ancient & Semi-Natural Woodland
18	984m NW	Unknown	Ancient & Semi-Natural Woodland
19	1104m NE	Unknown	Ancient & Semi-Natural Woodland
20	1143m W	Unknown	Ancient & Semi-Natural Woodland
21	1147m NW	Unknown	Ancient & Semi-Natural Woodland
22	1189m W	Unknown	Ancient & Semi-Natural Woodland
23	1232m SW	Unknown	Ancient & Semi-Natural Woodland
24	1250m W	Unknown	Ancient & Semi-Natural Woodland
25	1321m NE	Unknown	Ancient & Semi-Natural Woodland
26	1337m NW	Unknown	Ancient & Semi-Natural Woodland
-	1352m E	Unknown	Ancient & Semi-Natural Woodland
28	1383m NW	Unknown	Ancient & Semi-Natural Woodland
29	1388m NW	Unknown	Ancient & Semi-Natural Woodland
30	1389m W	Unknown	Ancient & Semi-Natural Woodland
31	1406m NW	Unknown	Ancient & Semi-Natural Woodland
-	1408m N	Unknown	Ancient & Semi-Natural Woodland
33	1411m SE	Madgeland Wood	Ancient Replanted Woodland
-	1519m N	Unknown	Ancient & Semi-Natural Woodland
35	1607m SW	Unknown	Ancient & Semi-Natural Woodland
36	1610m SE	Unknown	Ancient & Semi-Natural Woodland
-	1617m N	Unknown	Ancient Replanted Woodland
-	1712m E	Unknown	Ancient & Semi-Natural Woodland
-	1731m NE	Unknown	Ancient & Semi-Natural Woodland
-	1784m NE	Unknown	Ancient & Semi-Natural Woodland
-	1835m NE	Unknown	Ancient & Semi-Natural Woodland
-	1899m NW	Unknown	Ancient & Semi-Natural Woodland

ID	Location	Name	Woodland Type
-	1958m N	Unknown	Ancient & Semi-Natural Woodland
-	1969m S	Unknown	Ancient & Semi-Natural Woodland
-	1975m NW	Unknown	Ancient & Semi-Natural Woodland
-	1976m NE	Unknown	Ancient & Semi-Natural Woodland
-	1982m S	Unknown	Ancient & Semi-Natural Woodland
-	1999m NE	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

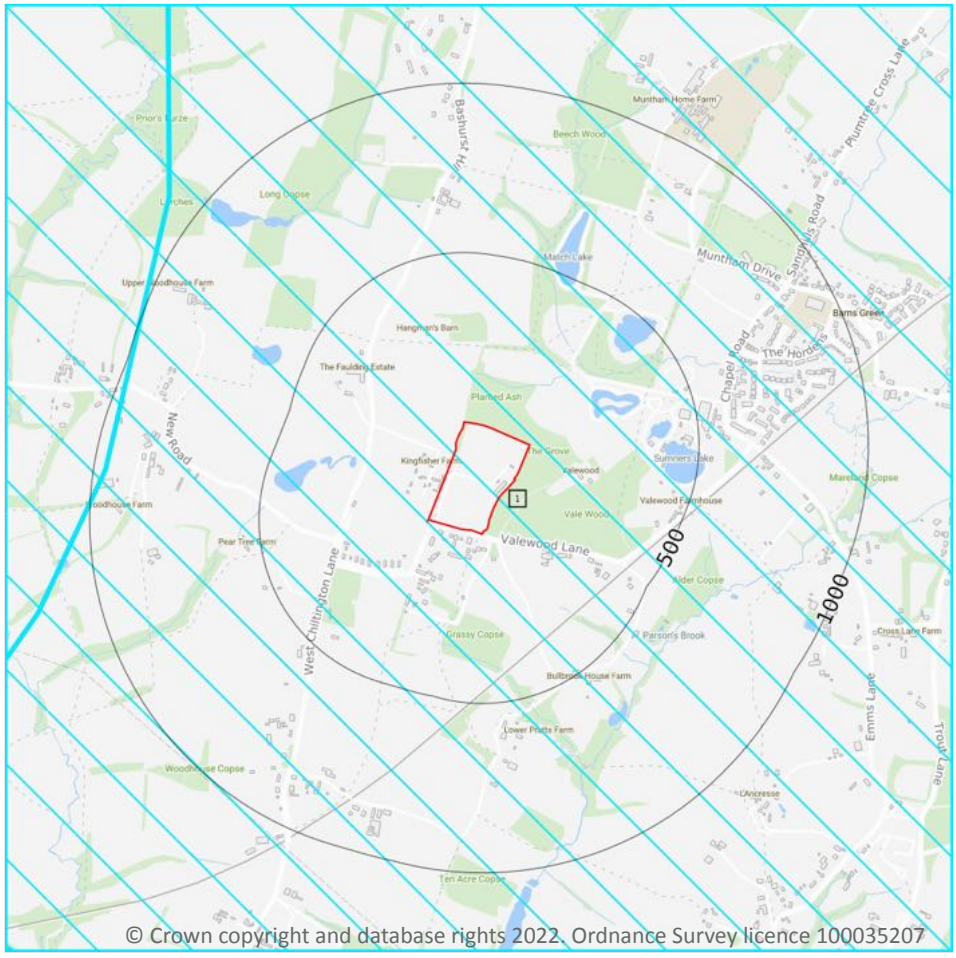
Records within 2000m	**2**

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

Location	Name	Type	NVZ ID	Status
1820m SW	River Arun (u/s Pallingham) NVZ	Surface Water	523	Existing
1825m NW	River Arun (u/s Pallingham) NVZ	Surface Water	523	Existing

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

SSSI Impact Zones and Units



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Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

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

10.17 SSSI Impact Risk Zones

Records on site	1

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

Features are displayed on the SSSI Impact Zones and Units map on **page 51**

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 > 4000m². Combustion - General combustion processes >50mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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

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

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	0

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

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

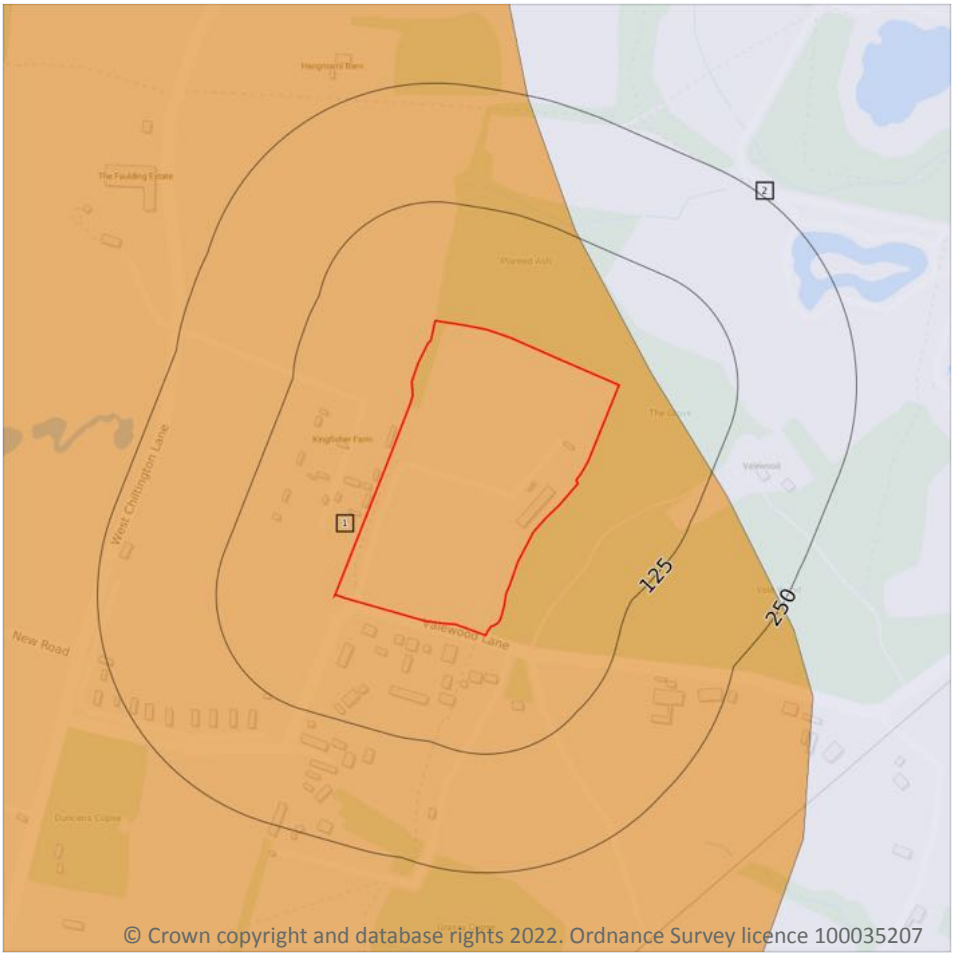
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

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

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

ID	Location	Classification	Description
2	36m NE	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.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

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

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

12.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	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.

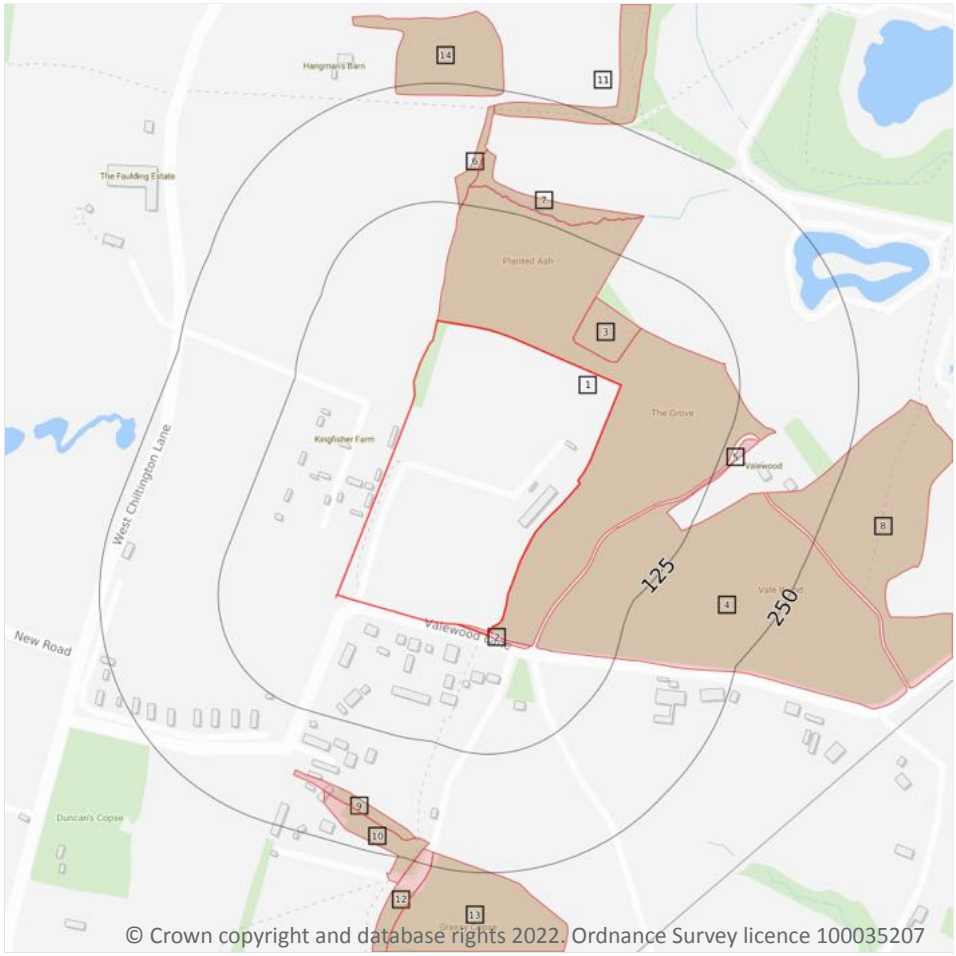
12.5 Countryside Stewardship Schemes

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



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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	**14**

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	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
3	18m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	43m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	112m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	120m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	132m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	185m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	189m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	201m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	225m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	235m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	235m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
14	237m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	**0**

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	**0**

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m	**0**

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs

which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



14.1 10k Availability

Records within 500m	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**	**TQ12NW**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

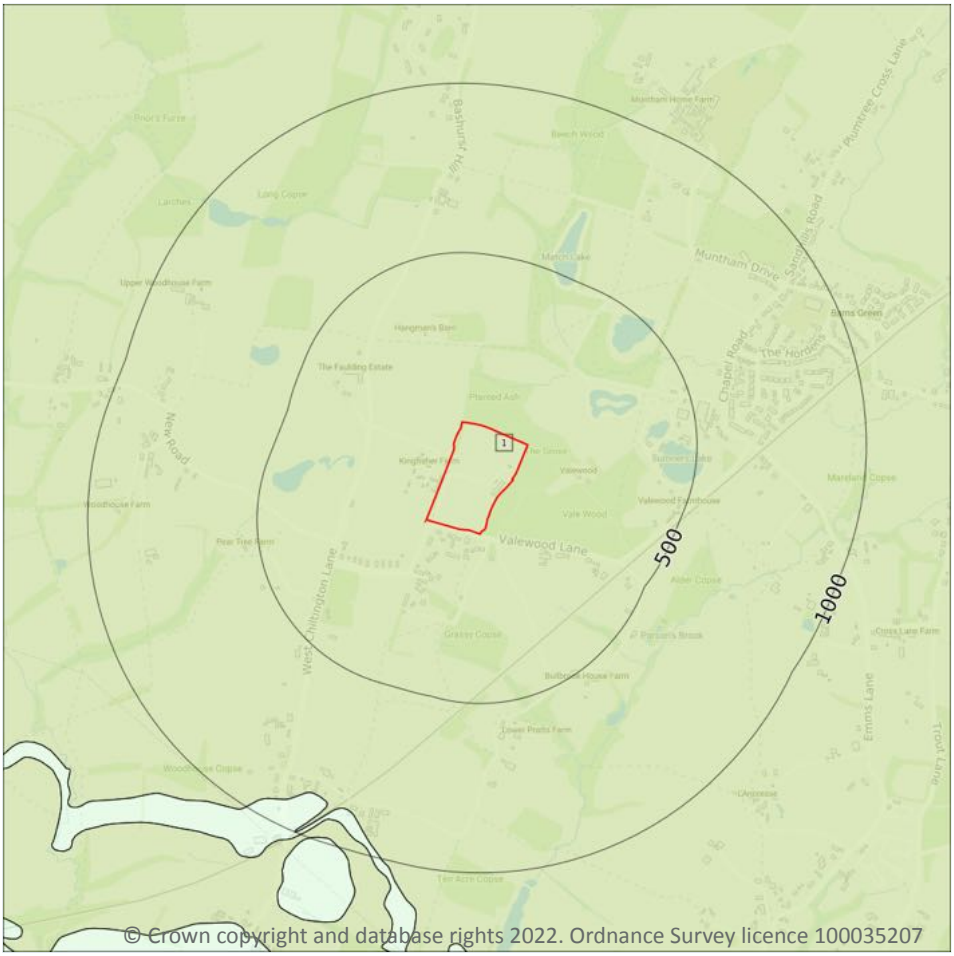
14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



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	1

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 64**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**WC-MDST**	**Weald Clay Formation - Mudstone**	**Barremian Age - Hauterivian Age**

This data is sourced from the British Geological Survey.

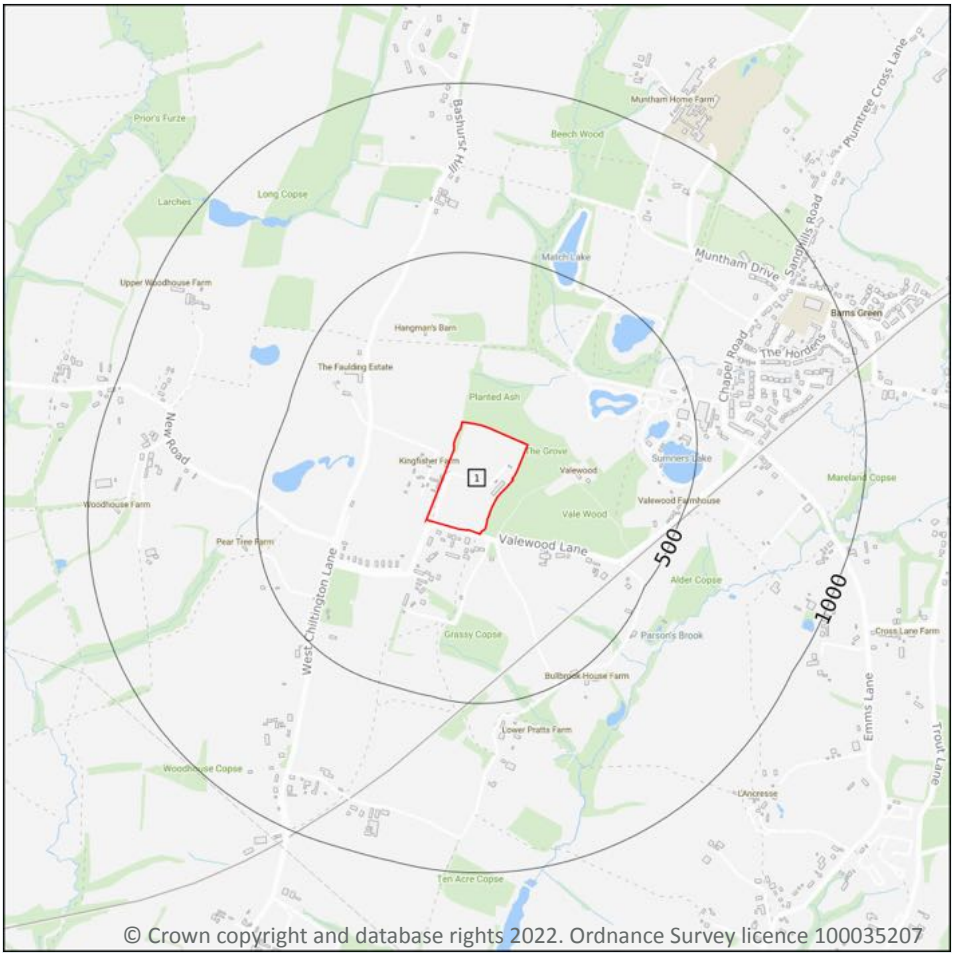
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



15.1 50k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 66**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW302_horsham_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

15.4 Superficial geology (50k)

Records within 500m	0

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.

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.

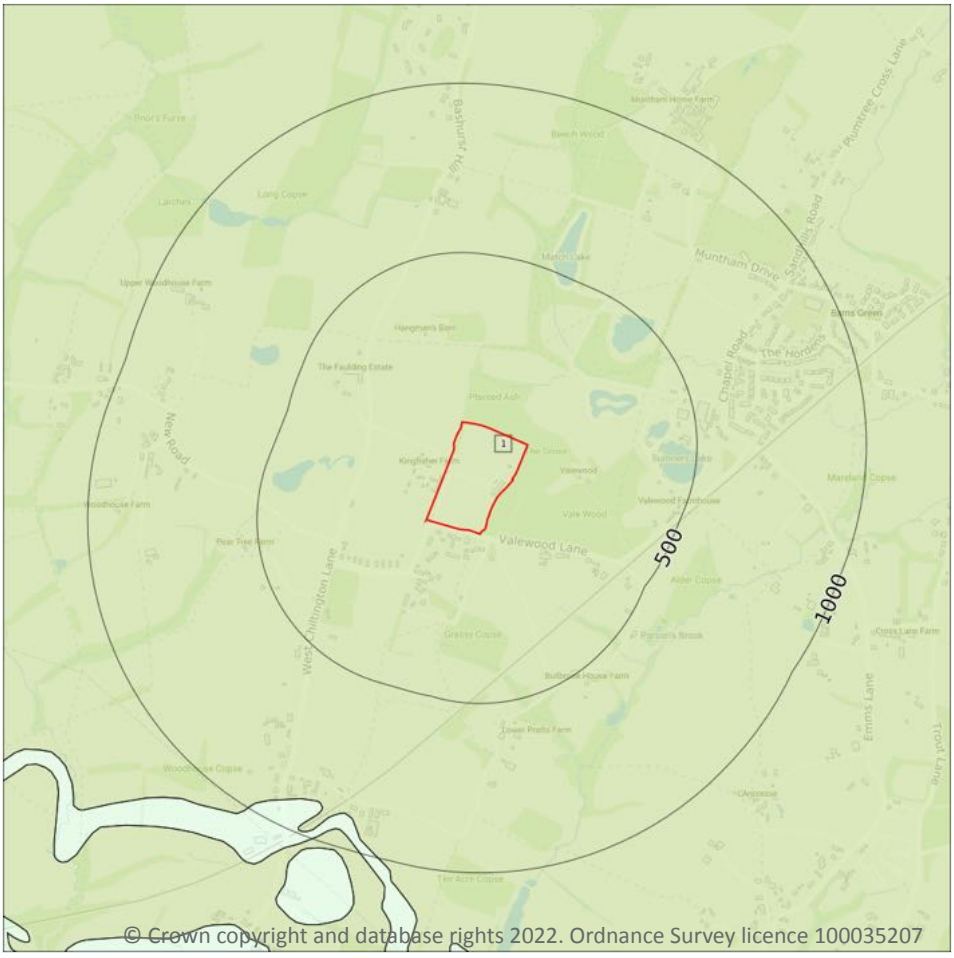
15.7 Landslip permeability (50k)

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	1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 69**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**WC-MDST**	**WEALD CLAY FORMATION - MUDSTONE**	**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	0

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

This data is sourced from the British Geological Survey.

16 Boreholes

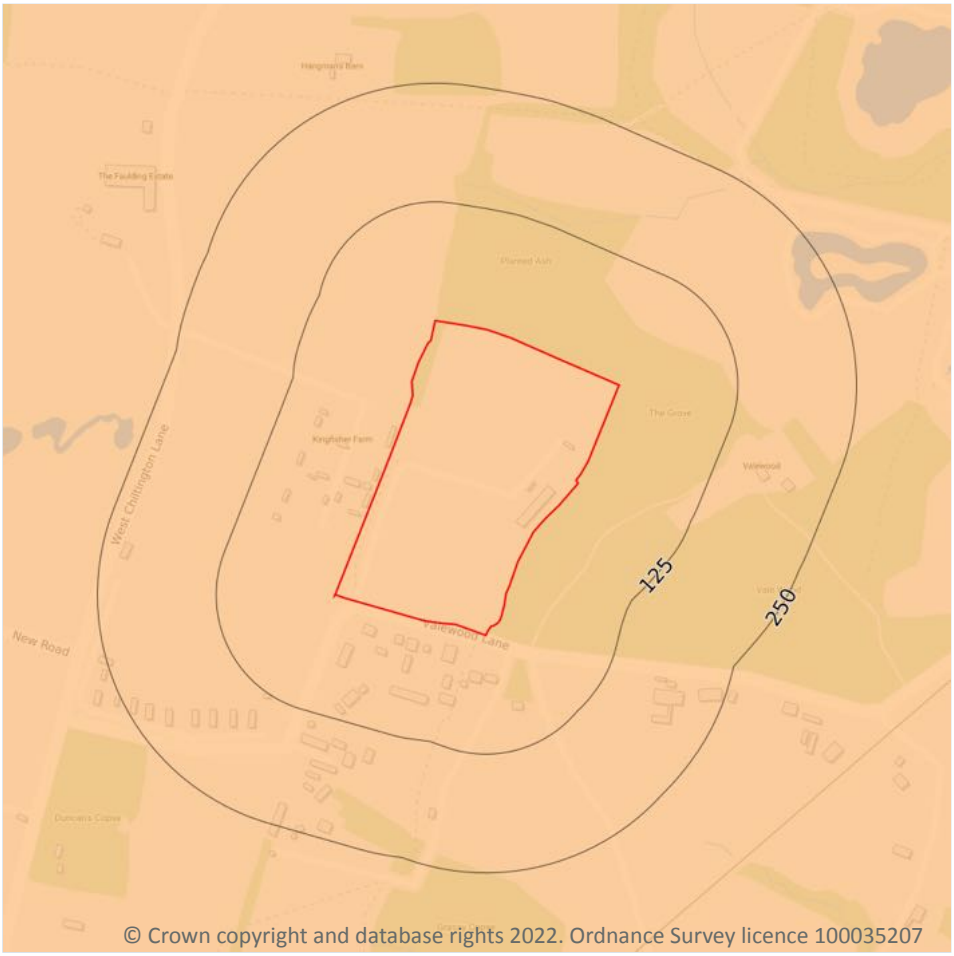
16.1 BGS Boreholes

Records within 250m	0

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

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



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Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	1

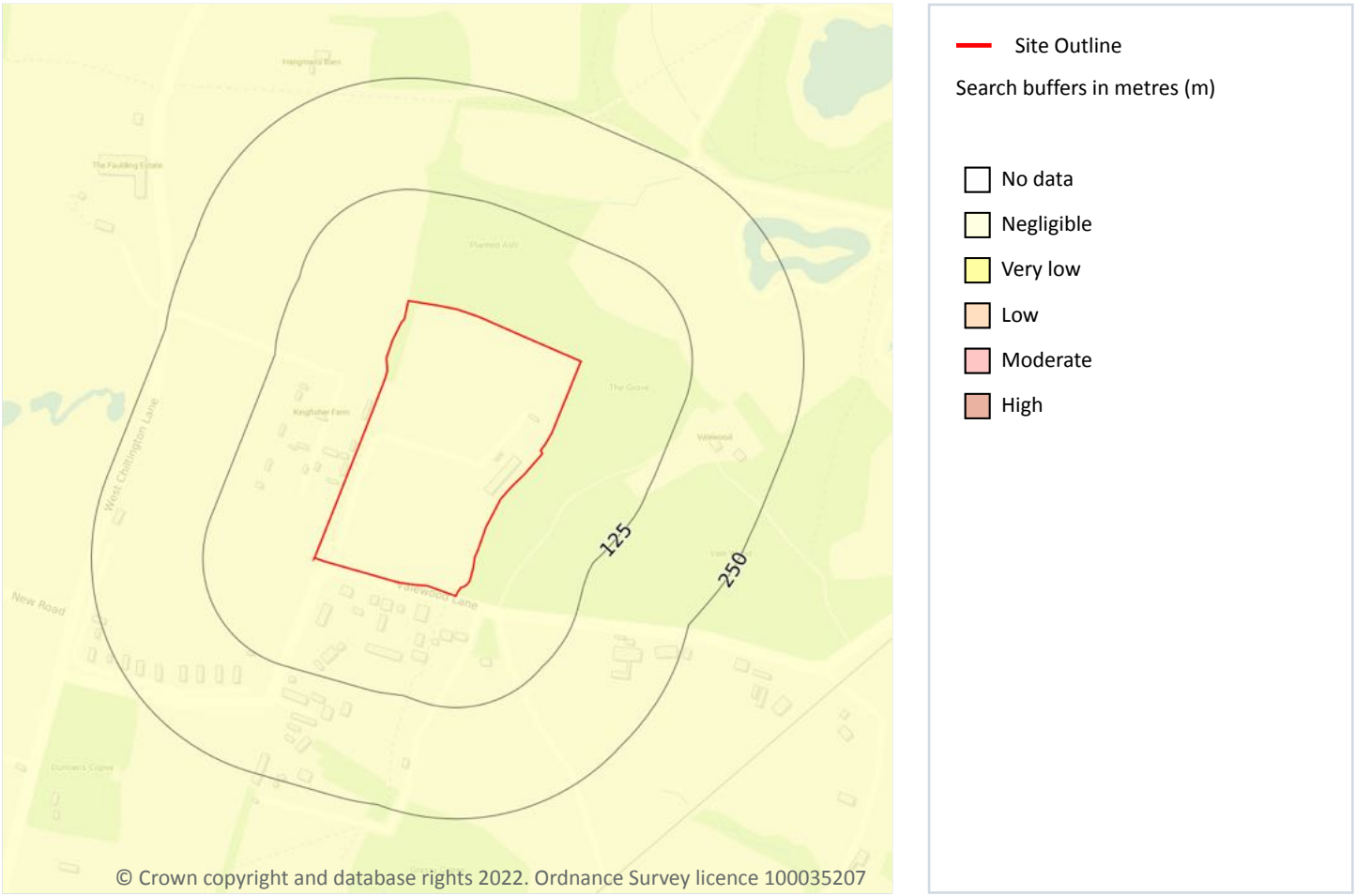
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 72**

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



17.2 Running sands

Records within 50m	1

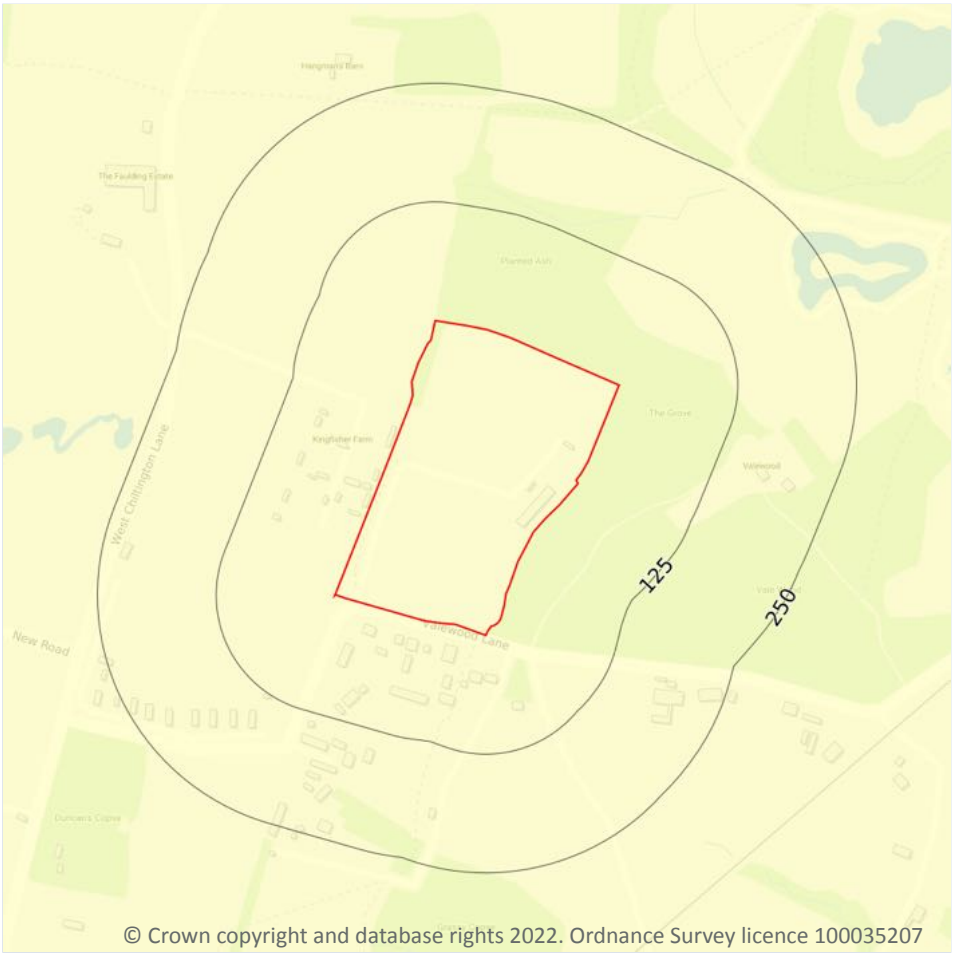
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 73**

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



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Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	1

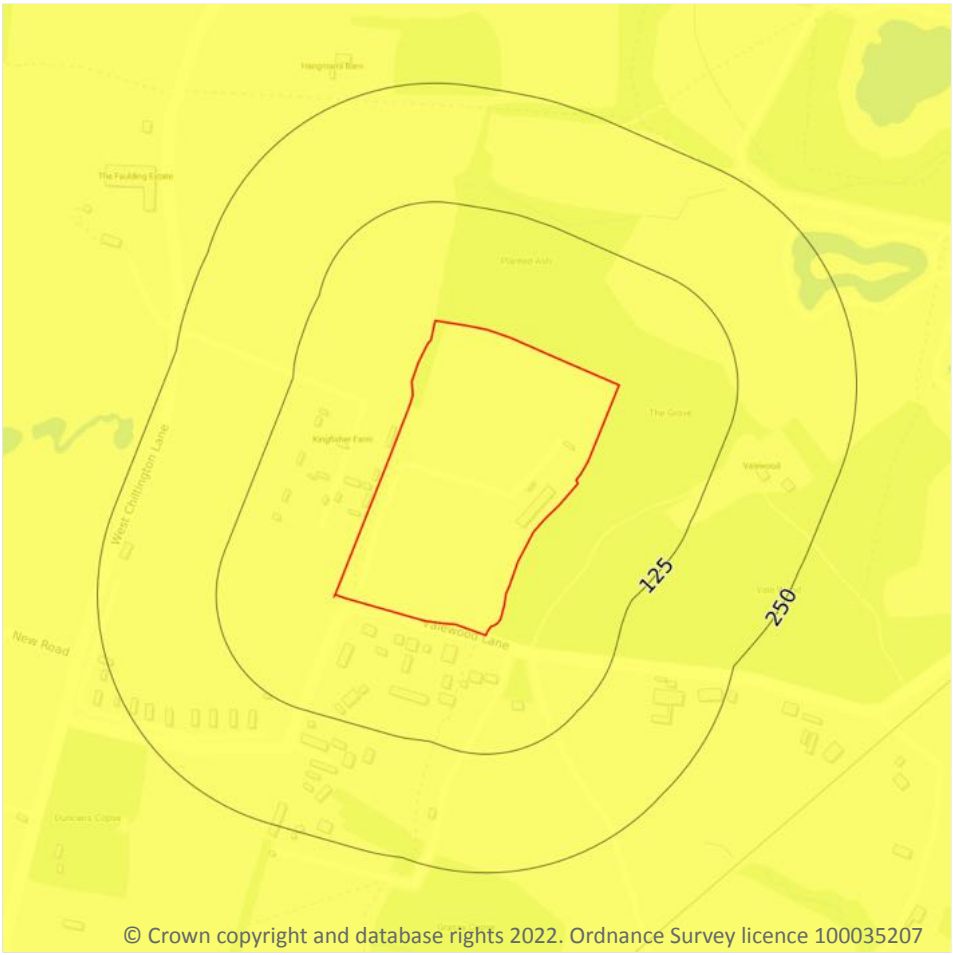
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 74**

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



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Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	1

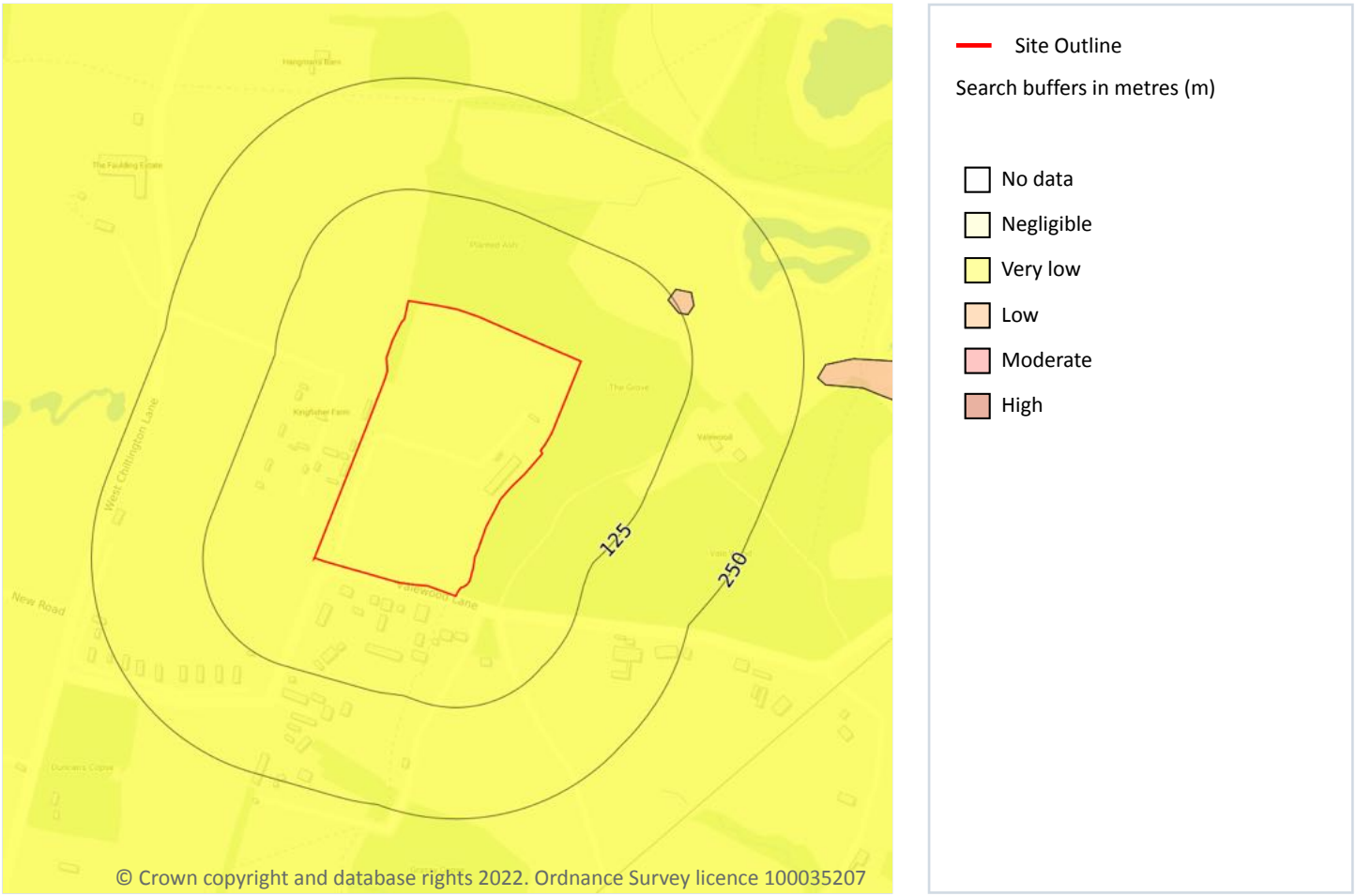
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 75**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m	1

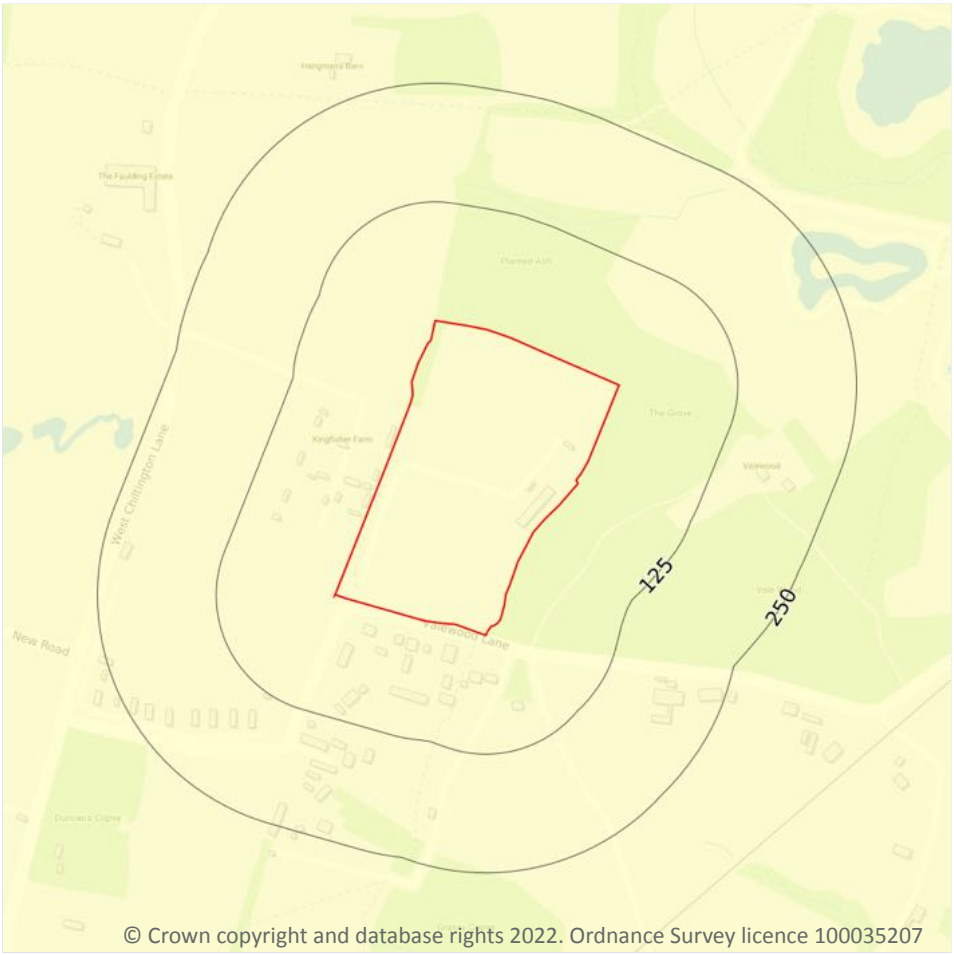
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

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

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



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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

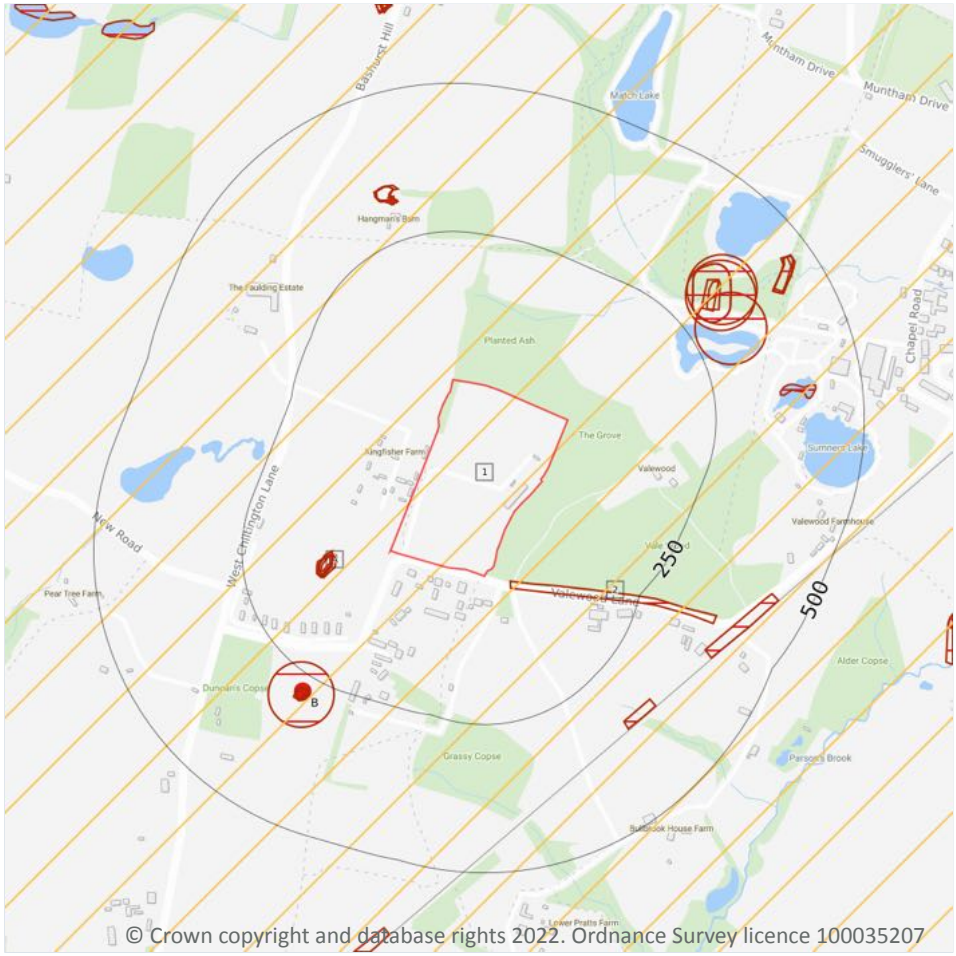
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 77**

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	1

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 78**

ID	Location	Details	Description
B	277m SW	Name: Duncan's Copse Clay Pit Address: Barns Green, HORSHAM, 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

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	8

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 78**

ID	Location	Land Use	Year of mapping	Mapping scale
2	38m SE	Cuttings	1876	1:10560
A	92m W	Pond	1981	1:10000
A	97m W	Pond	1913	1:10560
A	97m W	Pond	1896	1:10560
A	98m W	Pond	1876	1:10560
A	99m W	Pond	1913	1:10560
A	103m W	Pond	1961	1:10560
B	229m SW	Old Clay Pit	1896	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	0

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

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	1

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 78**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**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.

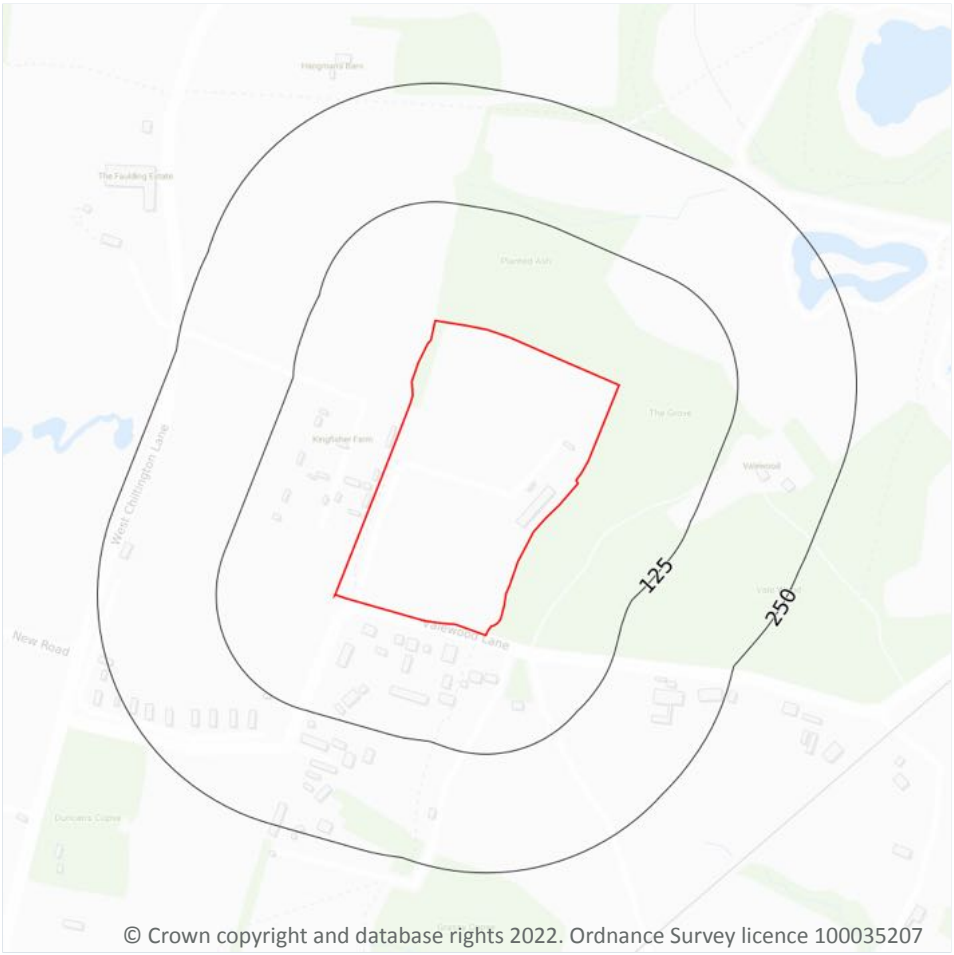
18.13 Clay mining

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 83**

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	2

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

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

Site Photographs



Photo 1: View of barn from access track.



Photo 2: Livestock pens, stored hay and various equipment.



Photo 3: Old dung mound in southern horse field.



Photo 4: Overgrown brambles and trees to rear of barn.



Photo 5: View of lower ground level and pooled water to front of barn.



Photo 6: Various piled debris, trailers and farm equipment.



Photo 7: View of mobile homes, caravan, straw piles and dog kennel.



Photo 8: Workshop entrance in northern section of barn.



Photo 9: Workshop contents.



Photo 10: Various small containers of fluids and items of machinery.



Photo 11: Abandoned car in brambles to rear of workshop.



Photo 12: View of storage container and access track.

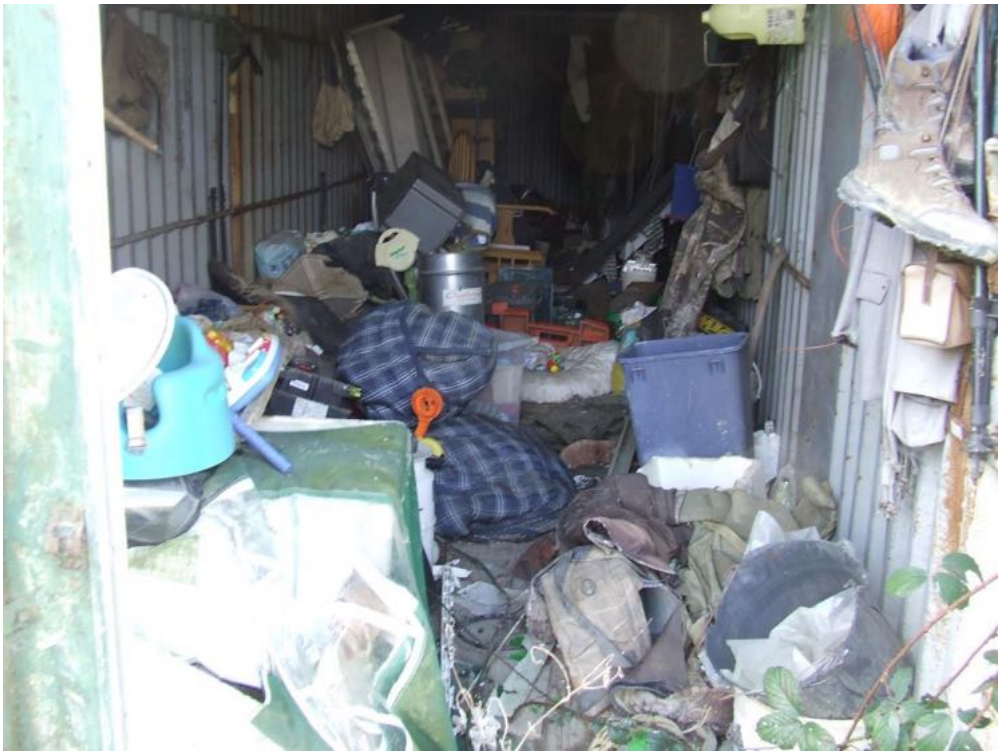
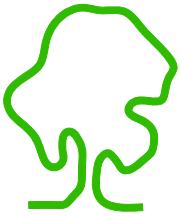


Photo 13: Contents of storage container.



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