



Richard Jackson
Engineering Consultants

PHASE ONE DESK STUDY REPORT

Brook Hall Farm, Church Road, Crowfield, Suffolk, IP6 9TG

Joy Cox

June 2020

Project no: 60742

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1. Introduction

Richard Jackson Ltd received an instruction to prepare a phase one desk study report for the proposed redevelopment at Brook Hall Farm, Church Road, Crowfield, Suffolk, IP6 9TG.

The works were instructed by Whymark & Moulton Chartered Surveyors on behalf of the Client, Joy Cox, and were carried out in accordance with our fee proposal of 21 May 2020, reference KB/60742

This report has been prepared using historical Ordnance Survey maps and environmental and geological data provided by Groundsure Ltd.

The purpose of this report is to document the history and environmental setting of the site and surrounding area and to identify potential sources and receptors of contamination.

A brief assessment has also been made of the key geotechnical concerns at this site.

2. Limitations

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3. Proposed Redevelopment

The proposed redevelopment is to comprise the conversion of 2no. barns into 3no. residential units.

Proposed redevelopment plans are presented in Appendix A.

4. Site Location and Description

The site was located to the north of Church Road, Crowfield, Suffolk, IP6 9TG. The approximate Ordnance Survey grid reference for the centre of the site was TM 148 581. A site location plan is presented as Figure 1 in Appendix A.

The site was irregular in shape, with approximate dimensions of 50m east to west, and 40m north to south.

The site is indicated to form part of a larger farm site and is understood from a review of provided plans to be occupied by 2no. barns (Barn A & Barn B) with an access road. Barn A is located in the northern part of the site, and is understood to be constructed of concrete blockwork and steel and fibre cement cladding. Barn B is located in the south of the site and is understood

to be constructed of fibre cement cladding. A silo is indicated to be present to the southwest of Barn B.

The wider farm area is noted to contain various buildings together with 2no. ponds located to the southwest of the subject site and a further 2no. ponds to the east.

A site walkover was outside the scope of this report.

5. Desk Study Findings

The desk study has been compiled using historic Ordnance Survey maps dating back to 1883, together with environmental and geological data provided by Groundsure Ltd. This information is presented in Appendix C.

5.1. Site History

Table 1, provides a summary of the history of the site and surrounding area. Generally, the potentially contaminative industrial land uses mentioned have been limited to those within 500m of the site boundary.

Table 1: Summary of site history

Ordnance Survey Map Date(s)	Scale(s)	On Site History	Surrounding Area History
1883 - 1905	1: 2,500/ 1: 10,560	The site is occupied by a single square structure in the southern part of the site. Part of a larger pond encroaches onto the southeast of the site.	A cluster of buildings and ponds associated with Green Farm are shown to the immediate northeast and southwest of the site, the wider surrounding area is predominantly open farmland. Other features of note include: <ul style="list-style-type: none"> • Orchards 20m west and 60m northeast (the latter is no longer shown by 1903); • 2no. further ponds between 120m and 170m northeast; • By 1903 allotments between 100m and 200m east; • Potash Farm with associated ponds approximately 200m south.
1953	1: 10,560	The site appears to remain unchanged.	The surrounding area appears to remain largely unchanged, however, the orchards and allotments are no longer shown.

Ordnance Survey Map Date(s)	Scale(s)	On Site History	Surrounding Area History
1974 - 1978	1:2,500 (partial coverage)	The previous structure is no longer shown. A larger L-shaped building is shown in the north of the site.	The surrounding area appears to remain largely unchanged. The cluster of buildings surrounding the site are now named Brook Hall Farm.
1994	1:2,500	A smaller building is also shown to the south of the L-shaped building. In addition, another smaller building partially encroaches onto the southwest of the site.	The surrounding area appears to remain unchanged.
2001 - 2020	1:1,250; 1:10,000	The pond and small buildings in the southern part of the site are no longer shown. A rectangular building and a silo are now shown in this part of the site.	The surrounding area remains largely unchanged, with further buildings and ponds associated with Brook Hall Farm to the northeast and southwest of the site. The wider surrounding area is characterised by open farmland.

5.2. Geology & Geological Hazards

The British Geological Survey (BGS) 1:50,000 scale series online mapping of the area indicates that the site is underlain by the Lowestoft Formation (diamicton). The bedrock geology is indicated to be the Undifferentiated Lewes Nodular, Seaford, Newhaven and Culver Chalk Formations.

Table 2, provide a summary of the risk of natural hazards occurring on-site.

Table 2: Summary of Natural Hazards

Potential Hazard	On-Site Risk
Shrinking or Swelling of Clay	Low
Landslides	Very Low
Ground Dissolution	Negligible
Compressible Ground	Negligible
Collapsible Rocks	Very Low

Potential Hazard	On-Site Risk
Running Sand	Very Low

BRE document 'Radon Guidance on Protective Measures for New Buildings', 2007 indicates the site to be in an area where less than 1% of properties are affected by radon and therefore radon protection measures will not be required.

5.3. Hydrology & Hydrogeology

The underlying Lowestoft Formation is classified as a Secondary Undifferentiated Aquifer. The underlying Undifferentiated Chalk Formations are classified as a Principal Aquifer.

The Environment Agency defines Principal Aquifers as layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

Secondary (undifferentiated) aquifers are typically assigned in cases where it has not been possible to attribute either category (A) or (B) to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.

The underlying Secondary (undifferentiated) Aquifer is classified as having medium vulnerability to pollutant discharges at ground level.

The site is located within a Source Protection Zone (SPZ) 3 - total catchment.

There are no surface water or groundwater abstraction licences listed within 500m of the site.

7no. surface water features have been identified within 250m of the site. These relate to the ponds located to the immediate northeast and southwest of the site, and the ponds approximately 200m south, as identified on the review of historical maps in Section 5.1.

The site is not located within an area listed to be at risk from river or coastal flooding and no at-risk areas are listed within 500m of the site.

The site is indicated to have a moderate risk of groundwater flooding and a negligible risk of surface water flooding.

5.4. Background Soil Chemistry

The British Geological Survey (BGS) produces data and estimated background soil chemistry for a number of common elements, which reflect the average natural soil conditions of the area. It should be appreciated that

this data is not specific to the site and reflects the average conditions of the area.

Table 3, provides a summary of the soil chemistry values for the site and for **comparative purposes provides the 'Suitable 4 Use Levels' (S4ULs) published** by Land Quality Management (LQM) Ltd and the Chartered Institute of Environmental Health (CIEH), for a residential land use with plant uptake as **reference criteria. In the absence of an S4UL for Lead, the 'Category 4 Screening Values (C4SL), derived by DEFRA in 2014 has been adopted.**

Table 3: Soil Chemistry

Element	BGS Estimated Background Soil Concentration (mg/kg)	Screening Value (mg/kg)
Arsenic	15	37
Cadmium	1.8	11
Chromium	60 - 90	910
Nickel	15 - 30	180
Lead	100	200

5.5. Industrial Activities

There is a single record for a potentially contaminative current/recent land use within 250m of the site. This relates to the on-site silo.

There are no records of potentially contaminative historical land uses, tanks, energy features, petrol stations or garages within 500m of the site.

4no. licenced discharge consents are listed within 500m of the site. The closest current entry refers to the discharge of treated effluent at a location approximately 160m south of the site.

There are no Hazardous Substances Consents, Radioactive Substance Authorisations, List 1 or List 2 Dangerous Substances sites or IPC Authorisations located within 500m of the site.

5.6. Pollution

There are no Environment Agency (EA) recorded pollution incidents listed within 500m of the site.

5.7. Mining, Current & Historical Ground Workings

There are 3no. records of surface workings on site. These refer to the pond discussed in the review of historical mapping in Section 5.1. By the early 2000s the pond was no longer shown and a building was shown in its place, indicating that it is likely to have been infilled.

There are no records of mining within 500m of the site, however the site is in an area where localised sporadic underground mining of chalk may have occurred. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

5.8. Landfill

There are no records of active or historical landfills, licensed or historical waste sites, or waste exemptions within 500m of the site.

5.9. Environmentally Sensitive Areas

No Sites of Special Scientific Interest (SSSI), Environmentally Sensitive Areas (ESAs), Local or National Nature Reserves or Country Parks are listed within 250m of the site.

6. Risk Assessment

6.1. Regulatory Regime

Contaminated Land is defined under Section 78A (2) of the Environmental Protection Act 1990, Part IIA.

The most recent revision to this legislation, 'The Contaminated Land (England) (Amendment) Regulations 2012 and the Contaminated Land Statutory Guidance for England 2012. Part IIA defines contaminated land as follows:

"Any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on, or under the land that:

- a) Significant harm is being caused, or there is significant possibility of such harm being caused, or
- b) Significant Pollution of controlled waters is being or is likely to **be caused."**

Part IIA was introduced to England on 1st April 2000 and provides a risk-based approach to the identification and remediation of land where contamination poses an unacceptable risk to the environment or human health. **Part IIA of the Act introduces the concept of "pollutant linkages"**. This is that in order for land to be considered to be contaminated, there must be a contaminant or pollutant source, an exposure pathway by which that contaminant reaches a receptor and the receptor or target itself. If one or more of the elements is missing the land cannot be determined to be contaminated.

Guidance on how the statutory guidance detailed in the Act was to be **delivered was detailed in CLR11, 'Model Procedures for the Management of Contamination' (2004). The principles** outlined in CLR11 are applied to decisions relating to planning applications.

In addition to the above, the National Planning Policy Framework (NPPF) encourages a positive and proactive approach to secure developments which improve an area socially, economically and environmentally. Consideration should be given to the NPPF during the development of a proposed scheme.

For planning purposes, the NPPF requires that the assessment of risk arising from contamination and the remediation requirements should be considered on the basis of the current environmental setting and land uses, as well as its proposed new use. The NPPF states that planning policies and decisions should ensure a site is suitable for its new end use and that subject to remediation, as a minimum, the land should not be capable of being determined as Contaminated land under Part 2A.

6.2. Potential Sources of Contamination

6.2.1. On-Site

The site was occupied by a single building and part of a pond until the 1970s when this building was no longer shown, and a larger L-shaped building was constructed in the northern part of the site. Two smaller structures were also shown on-site in the 1990s. By the early 2000s, the pond and the smaller structures were no longer shown and a rectangular building and a silo were shown in this part of the site.

Made ground associated with the development history of the site, along with the potential infilling of the former pond in the south of the site, is considered a potential source of soil, groundwater and ground gas contamination.

Farming activities are considered to be a potential source of contamination to the site. Common land uses in and around farm yards include the storage and use of machinery and fuels, stockpiling of materials and presence of chemicals such as fertilisers, herbicides and pesticides, all of which are considered potential sources of soil, groundwater and ground gas contamination.

6.2.2. Off-Site

The surrounding area was characterised by open farmland from the start of the examined period (1883), with the site itself located in a cluster of buildings associated with Brook Hall Farm.

Farming activities occurring within the surrounding farm area are also considered to be a potential off-site source of contamination to the site.

Orchards and allotments were noted in the surrounding area. These land uses could be considered a potential source of contamination to the site, however given these features were small in scale, remote from the site and that neither land use was shown after the 1950s, it is considered unlikely that contamination from these sources will have migrated to affect the subject site.

6.2.3. Summary

Potential sources of contamination therefore include:

On-Site:

- Made Ground
- Infilled Pond
- Farming Activities

Off-site:

- Farming Activities

Potential contaminants therefore include:

- Heavy Metals
- Polycyclic aromatic hydrocarbons (PAH)
- Total Petroleum Hydrocarbons (TPH)
- Asbestos
- Ground Gases (carbon-dioxide & methane)

6.3. Potential Receptors of Contamination

Humans, including residential end users of the site, site workers and the general public may be considered as receptors of contamination through ingestion, inhalation or through dermal contact.

Structures and water supply services are considered as potential receptors of contamination through direct contact with contaminated soils.

Flora is also considered as a potential receptor of contamination through uptake of contamination through the roots.

Controlled waters including the underlying Principal and Secondary (A) Aquifers, as well as a number of off-site ponds, may also be considered as potential receptors of contamination through leaching and migration of contaminants in the soils.

6.4. Preliminary Conceptual Model & Risk Assessment

From the preceding sections, plausible potential pollutant linkages may be proposed for the site and level of risk assigned. A preliminary qualitative risk assessment has been undertaken, which considers the magnitude of the potential consequence (severity) of the risk occurring, the magnitude of the probability (likelihood) of the risk occurring and provides an overall risk classification.

Table 4, details the relationship between probability, consequence and risk used in the assessment and is based on guidance given in CIRIA Report C552 'Contaminated Land Risk Assessment. A Guide to Good Practice' 2001.

Table 4: Relationship between probability, consequence and risk

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High likelihood	Very high risk	High risk	Moderate risk	Moderate/low risk
	Likely	High risk	Moderate risk	Moderate/low risk	Low risk
	Low likelihood	Moderate risk	Moderate/low risk	Low risk	Very low risk
	Unlikely	Moderate/low risk	Low risk	Very low risk	Very low risk

This risk assessment is based on the findings from the desk-based research. Table 5 provides a preliminary conceptual model and risk assessment.

Table 5: Preliminary Conceptual Model

Contaminants	Source	Pathway	Receptor	Consequence of risk being realised	Probability of risk being realised	Risk Classification
Asbestos, Heavy Metals, PAH, TPH	Made Ground / Infilled Pond (on-site) / Farming activities (on & off-site)	Direct Contact, Ingestion, Inhalation	Residential End Users, Site Workers, Maintenance Workers	Medium	Likely	Moderate
		Leaching / Migration	Controlled Waters (Primary & Secondary Aquifers, Ponds)	Medium	Likely	Moderate
		Uptake through Roots	Flora	Mild	Likely	Moderate / Low
		Direct Contact	Structures & Services	Mild	Likely	Moderate / Low
Ground Gases (carbon-dioxide & methane)	Made Ground / Infilled Pond (on-site)	Inhalation, Accumulation, Explosion	Residential End Users, Site Workers, Maintenance Workers	Severe	Likely	High

7. Conclusions & Recommendations

The site has undergone various phases of development and redevelopment associated with a farm, since 1884. Current plans indicate that two large barns are present on-site, with a silo adjacent to the southern barn. A pond was also shown in the southern part of the site until the early 2000s when it is believed to have been infilled.

The surrounding area was characterised by open farmland from the start of the examined period (1883), with the site itself located in a cluster of buildings associated with Brook Hall Farm.

Potential sources of contamination on-site were identified as made ground and the infilled pond, in addition to farming activities both on and off-site.

Several potential receptors of contamination were identified including residential end users, construction workers, flora, controlled waters, structures and services.

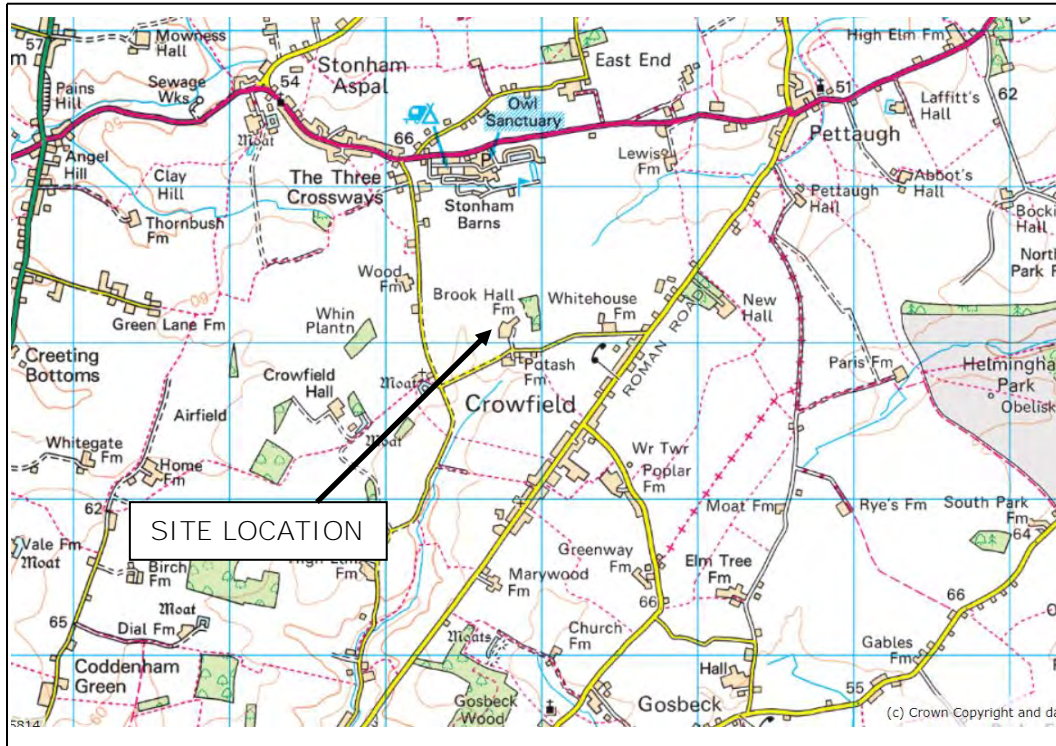
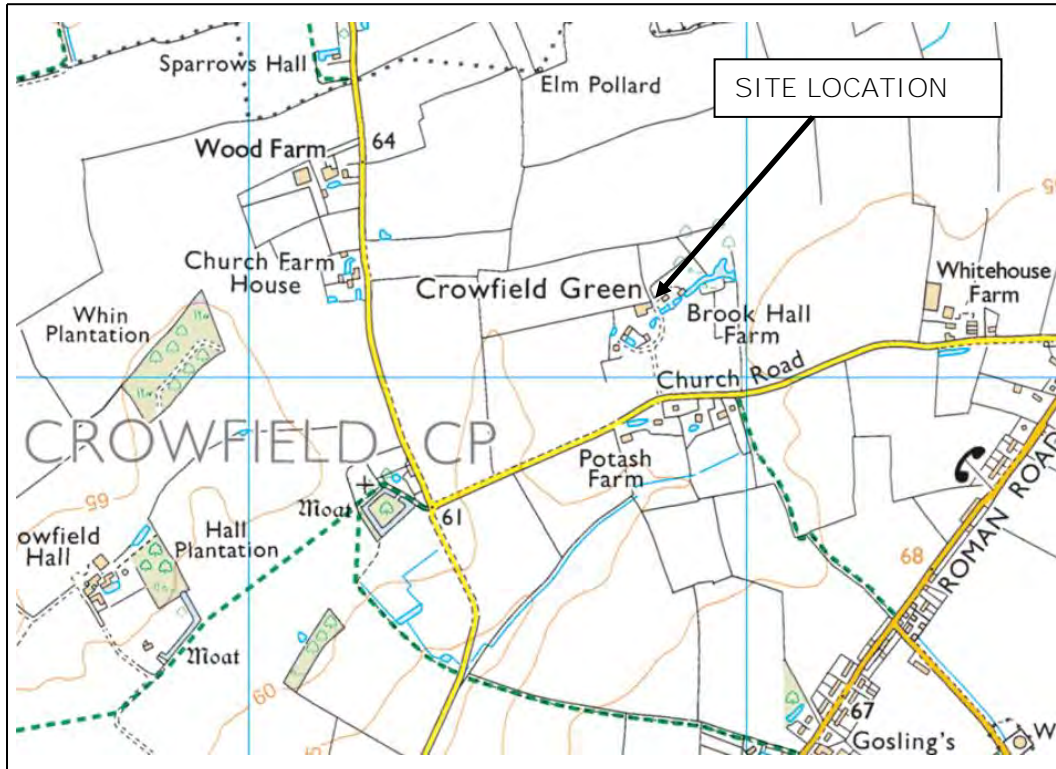
A moderate risk from soil and groundwater contamination to the identified sensitive receptors at the site was considered to exist. A high risk was presented to the site from ground gases.

It is recommended that intrusive ground investigations are undertaken at the site to confirm the prevailing ground conditions, establish the presence and extent of made ground and assess the contamination status of the site. Intrusive investigations should include the installation and subsequent monitoring of standpipes to assess the gassing regime beneath the site. It would be prudent to undertake asbestos testing on soil samples recovered as part of the intrusive investigations at the site.

It should be appreciated that as part of the planning process it is a requirement for the Local Planning Authority (LPA) to be satisfied that there is sufficient information about the condition of the land and its impacts and if required, viable remedial options.

Appendix A

Figures & Drawings



REPRODUCED FROM ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONARY OFFICE, © CROWN COPYRIGHT RICHARD JACKSON LTD – ACC No. 100002572



consulting civil & structural engineers
847 The Crescent, Colchester, CO4 9YQ
Tel: 01206 228 800

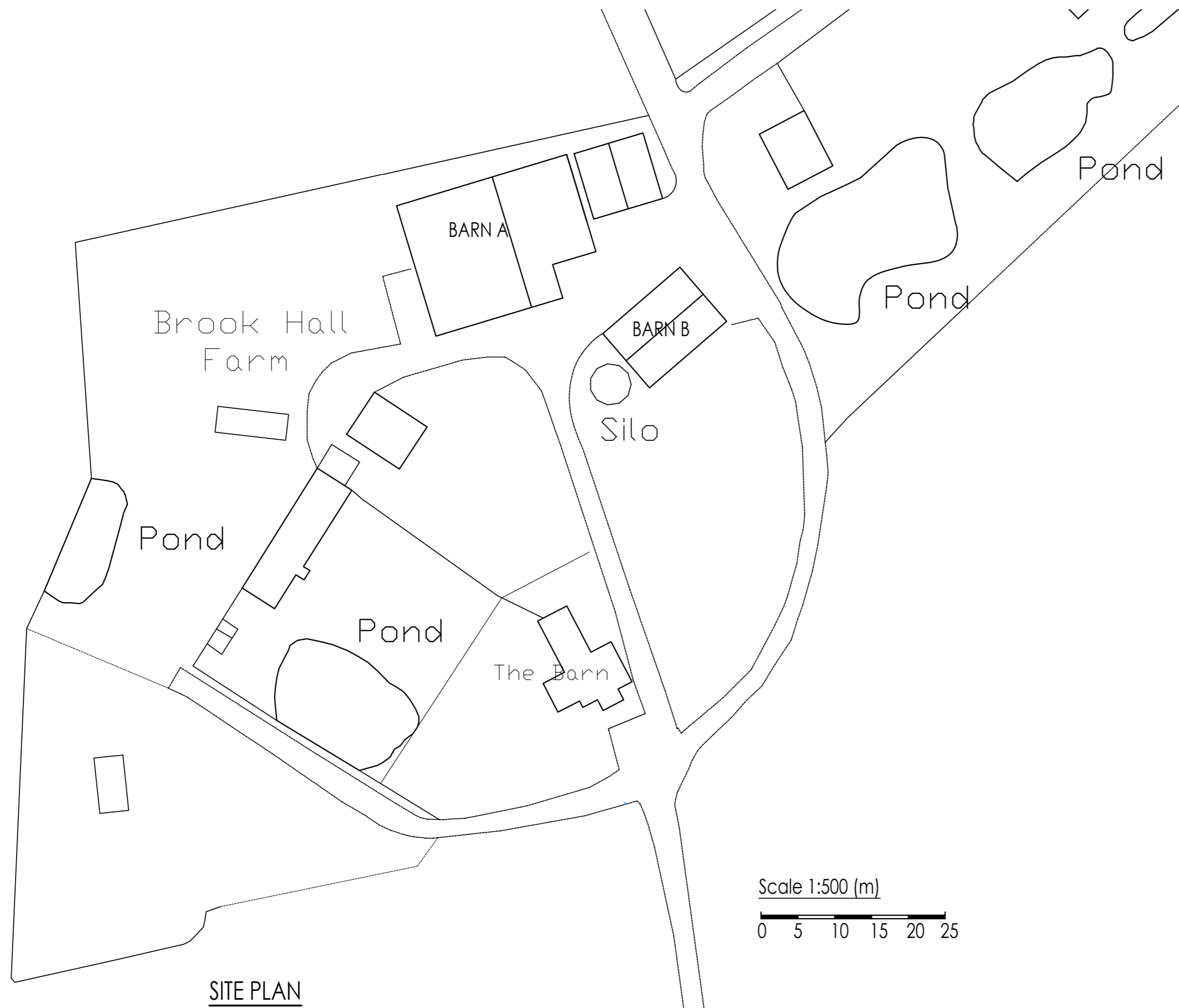
Brook Hall Farm, Church Road,
Crowfield, Suffolk, IP6 9TG

SITE LOCATION PLAN

FIGURE 1

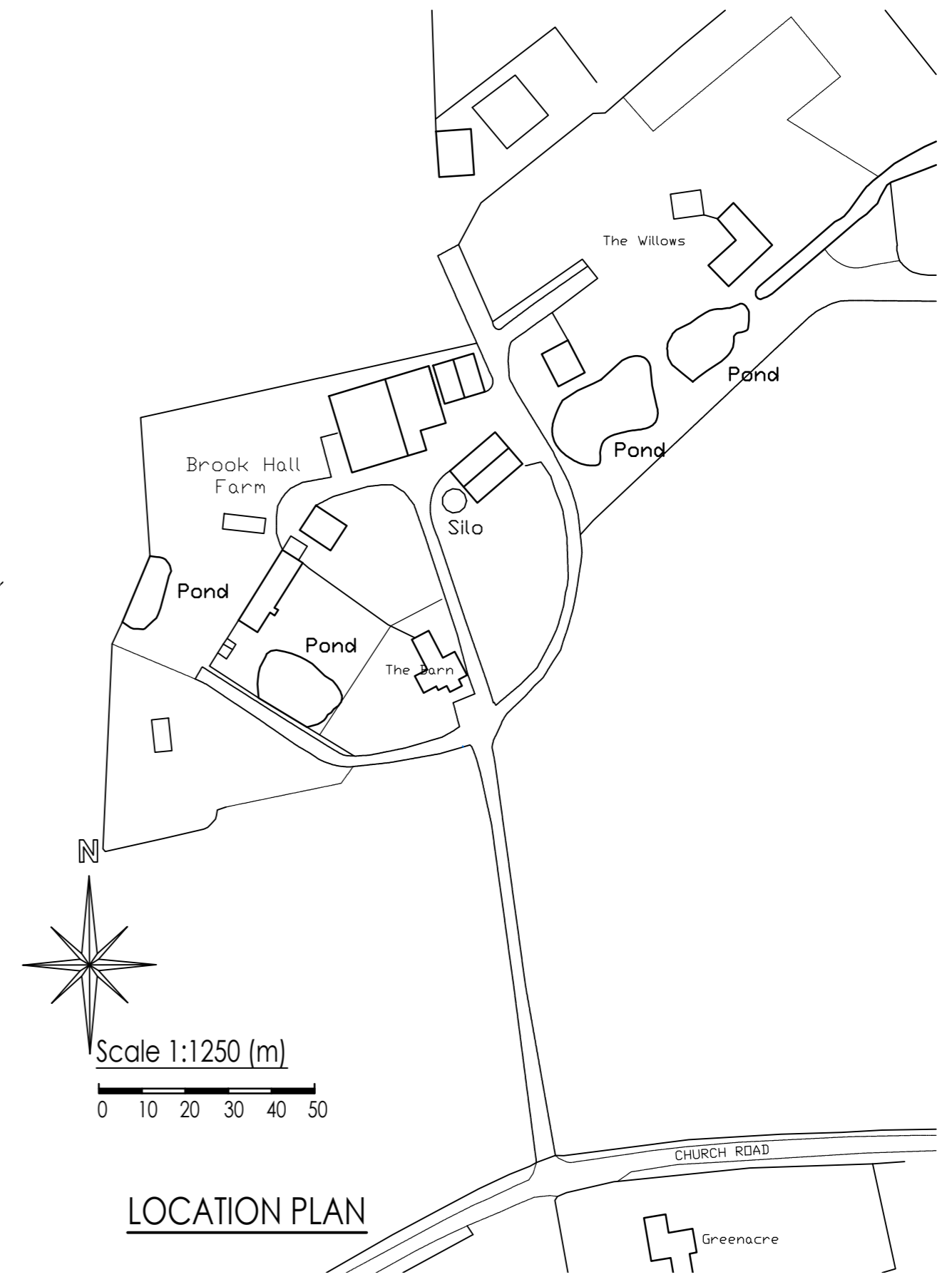
SCALE: N.T.S.

JOB NO: 60742



SITE PLAN

Scale 1:500 (m)
 0 5 10 15 20 25



Scale 1:1250 (m)
 0 10 20 30 40 50

LOCATION PLAN

Whymark & Moulton
 Chartered Surveyors &
 Building Engineers

14 Cornard Road, Sudbury,
 Suffolk. CO10 2XA

Tele: 01787 371371



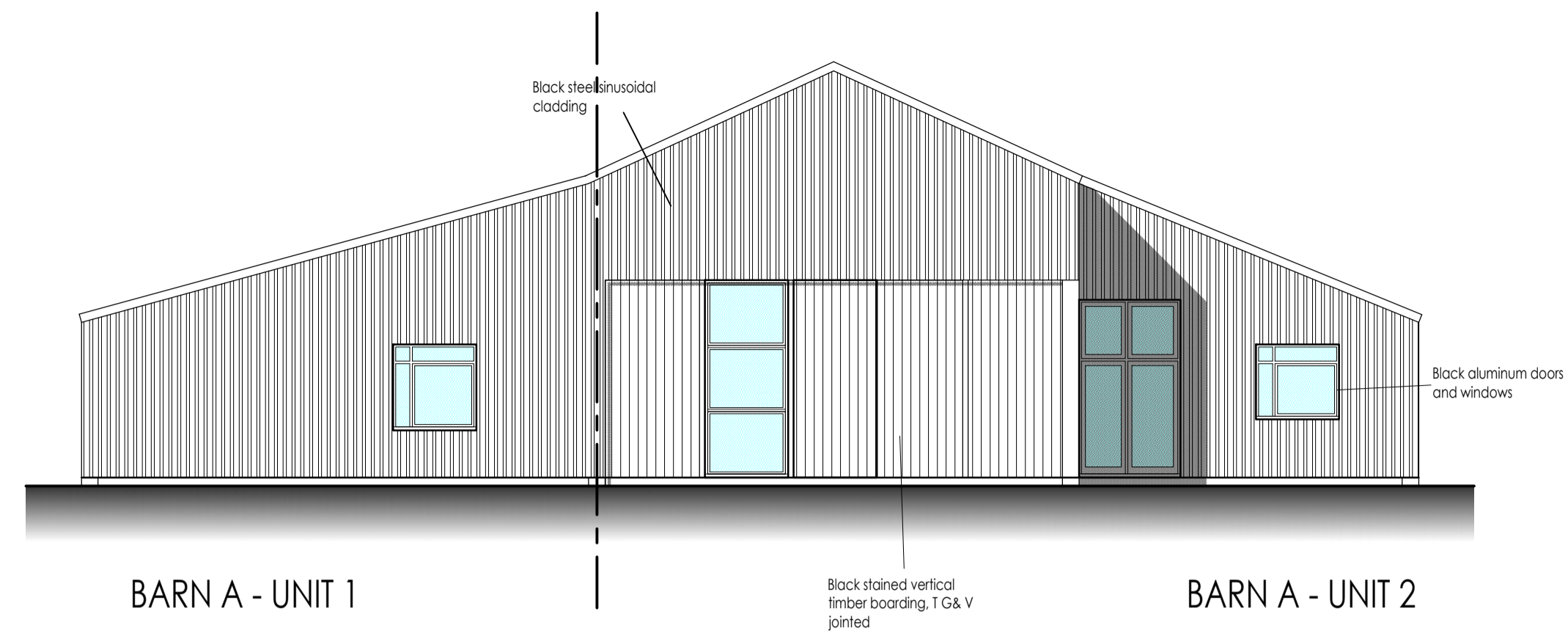

Project **BROOK HALL
 CHURCH ROAD
 CROWFIELD
 IPSWICH
 IP6 9TG**

SITE PLAN AS EXISTING

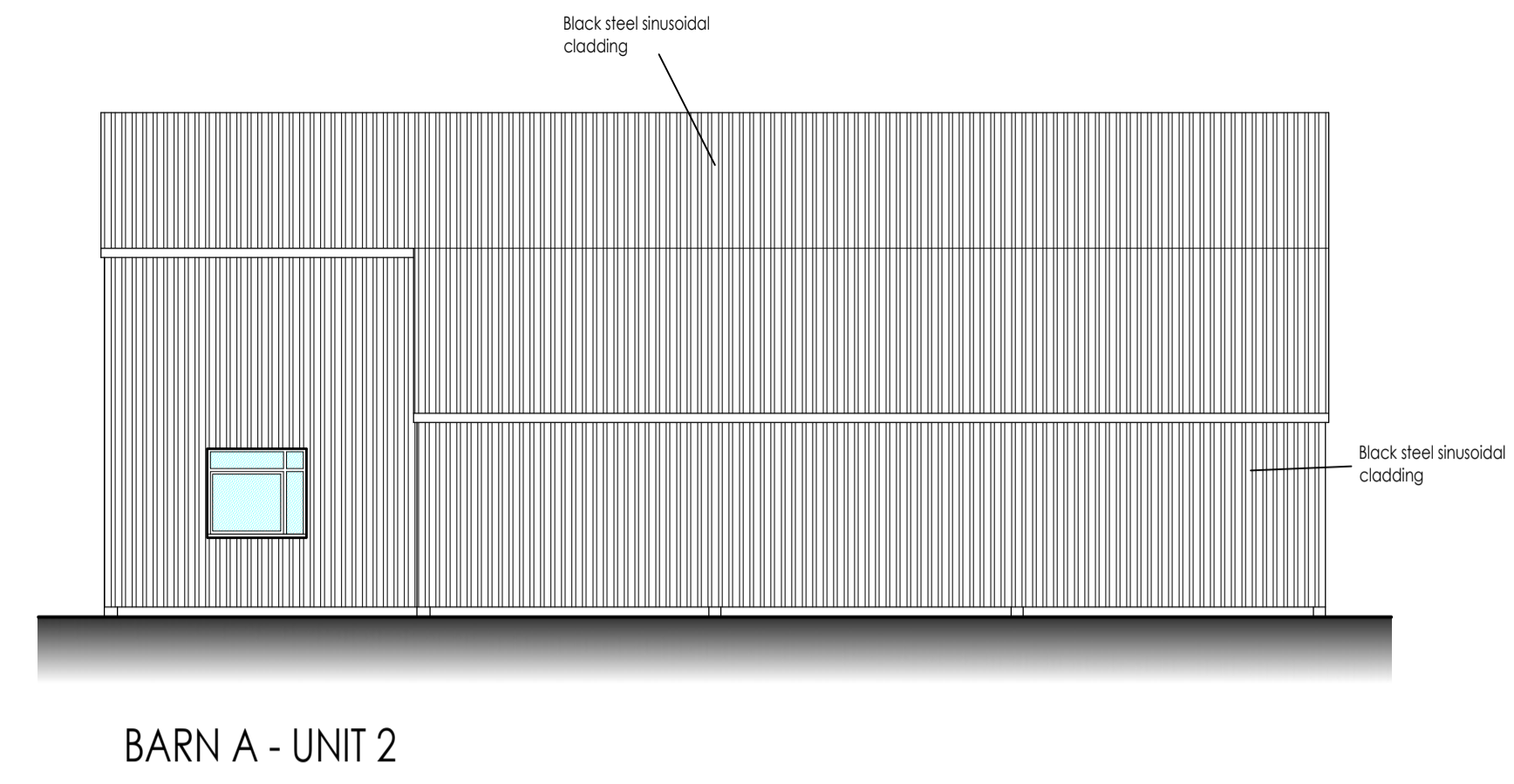
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Drawing No **19/070 - 01**

Amendments

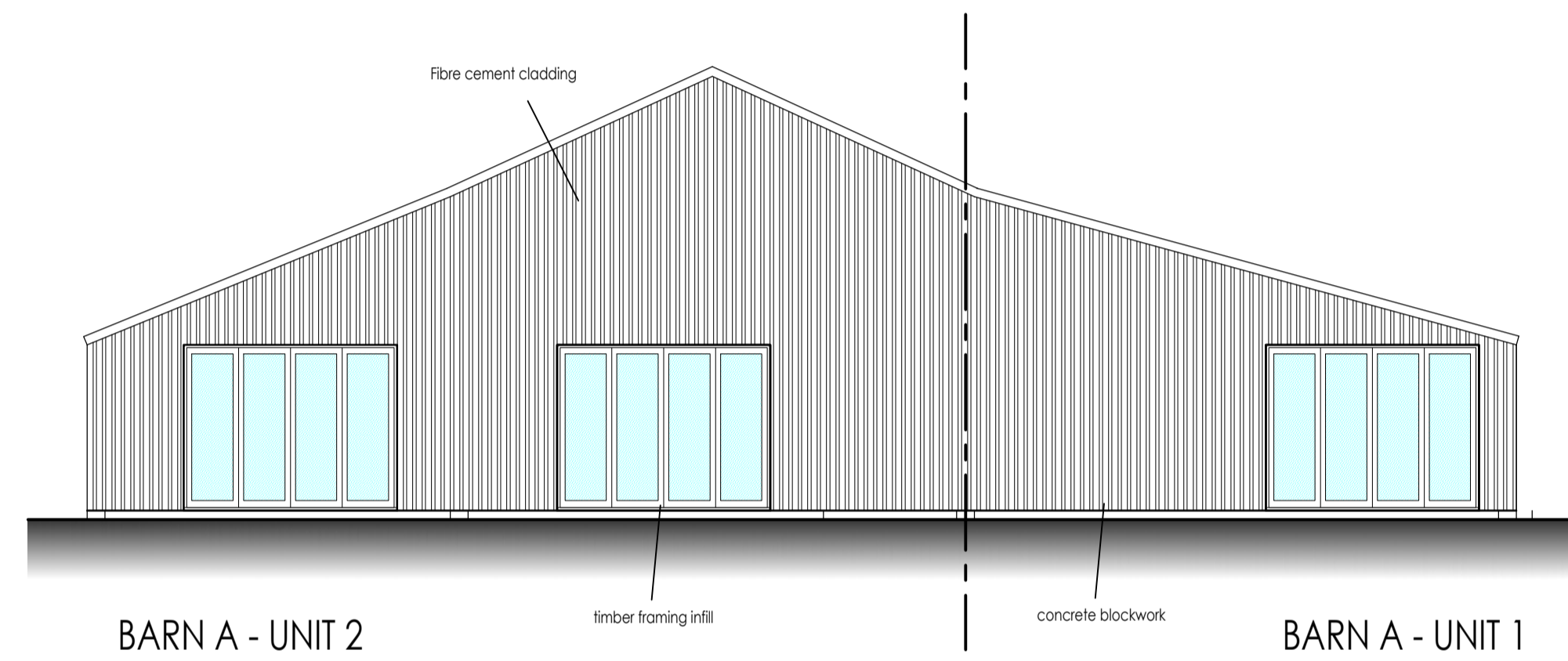


FRONT ELEVATION (South)

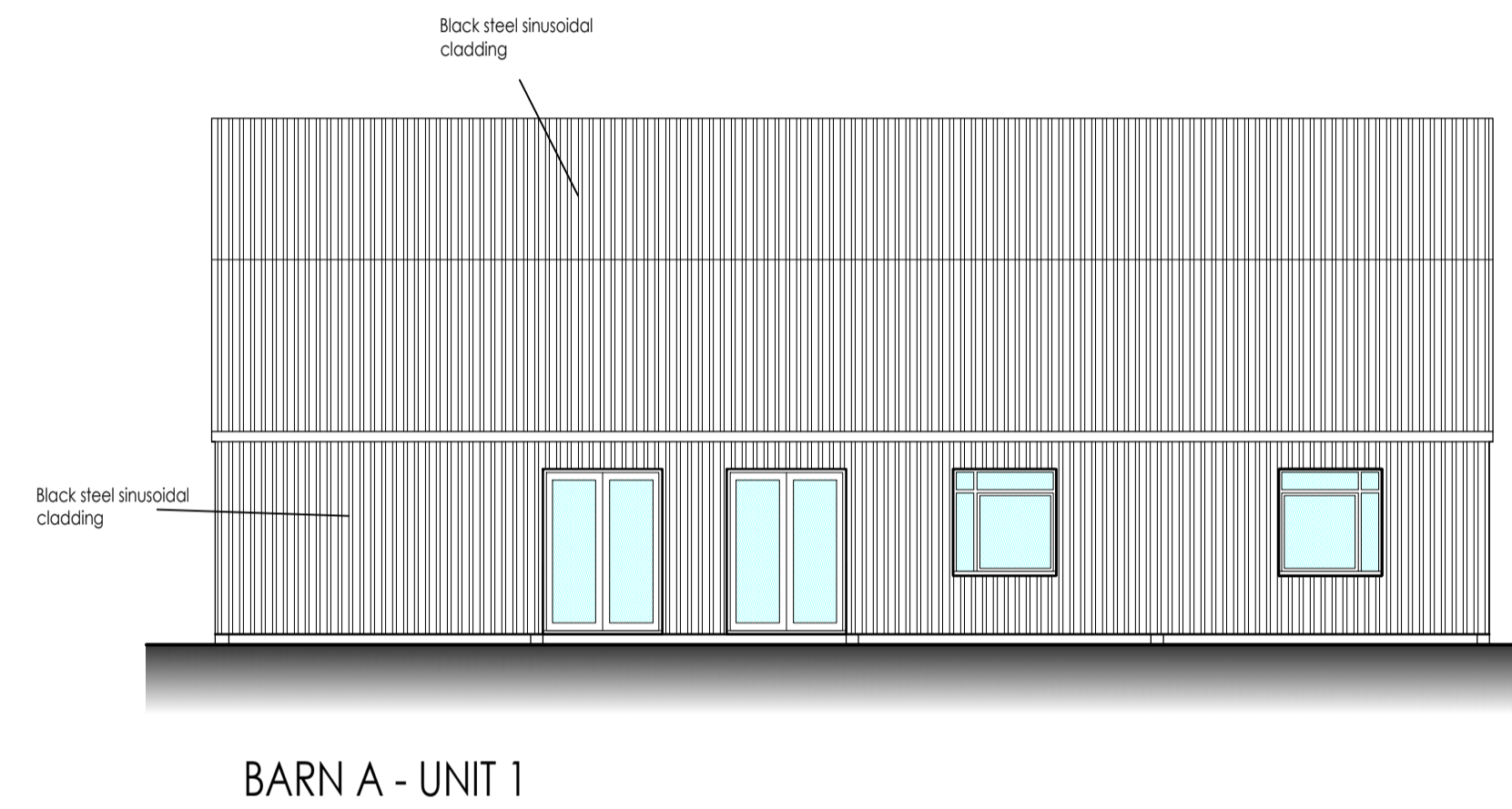


BARN A - UNIT 2

SIDE ELEVATION (East)

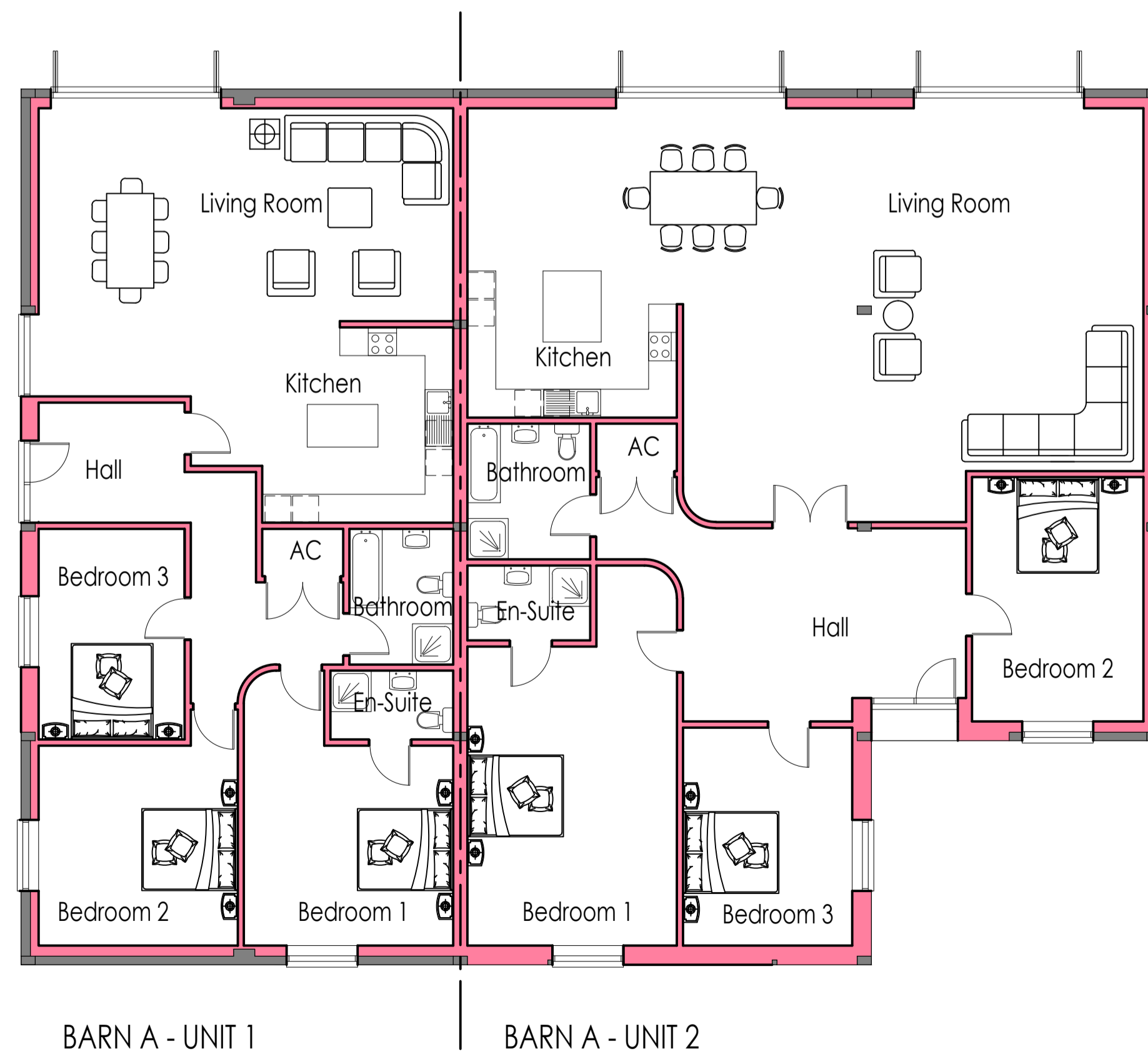


FRONT ELEVATION (North)



BARN A - UNIT 1

SIDE ELEVATION (West)

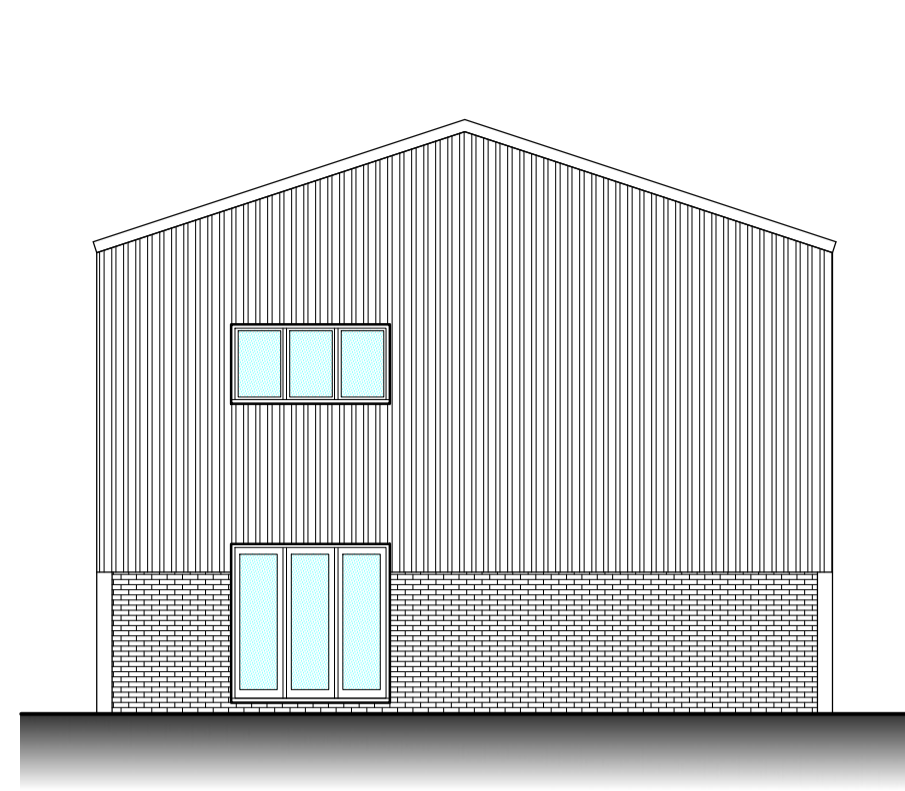


FLOOR PLAN

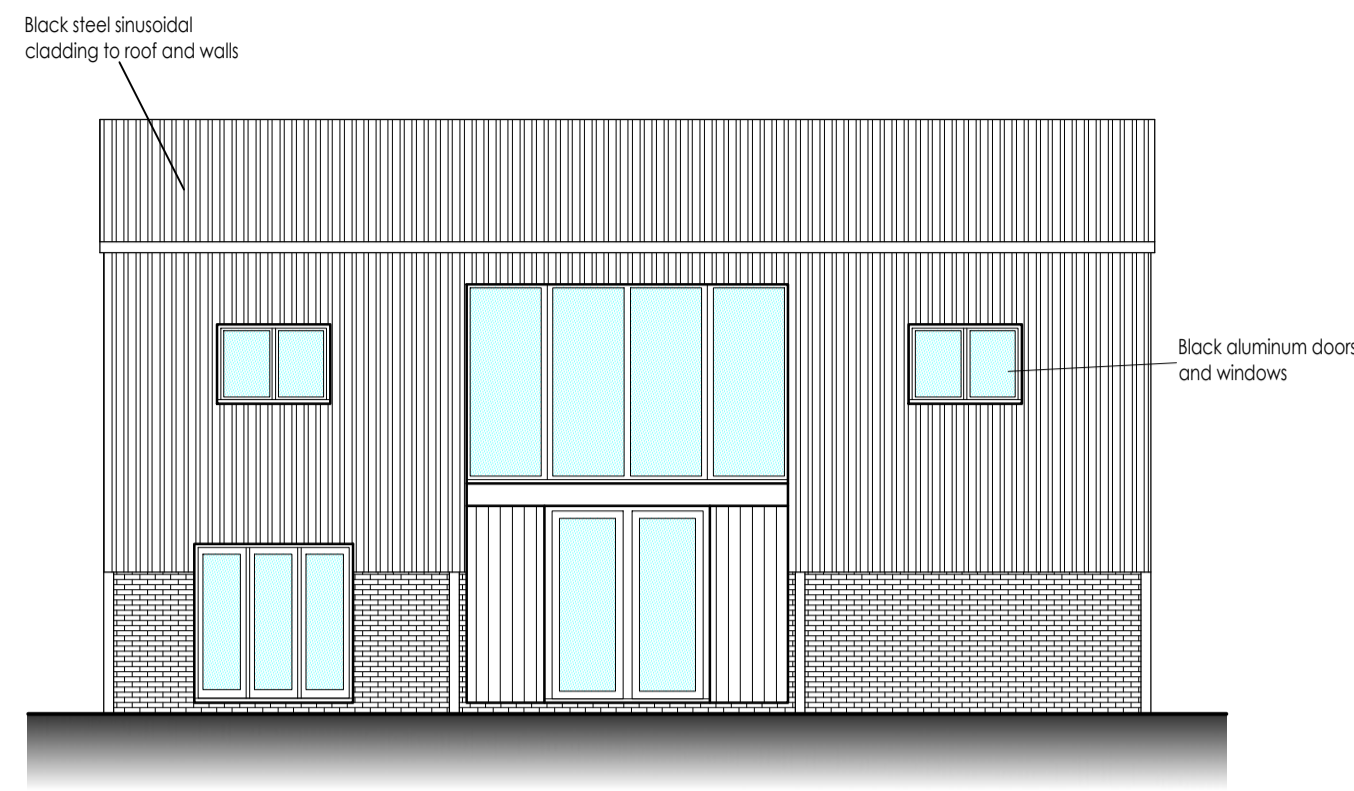

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 Building Engineers
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 Suffolk. CO10 2XA
 Tele: 01787 371371

Project **BROOK HALL**
CHURCH ROAD
CROWFIELD
IPSWICH
IP6 9TG
 BARN A AS PROPOSED
 Scale **1:100** Date **May 2020**
 Drawing No **19/070 - 04**

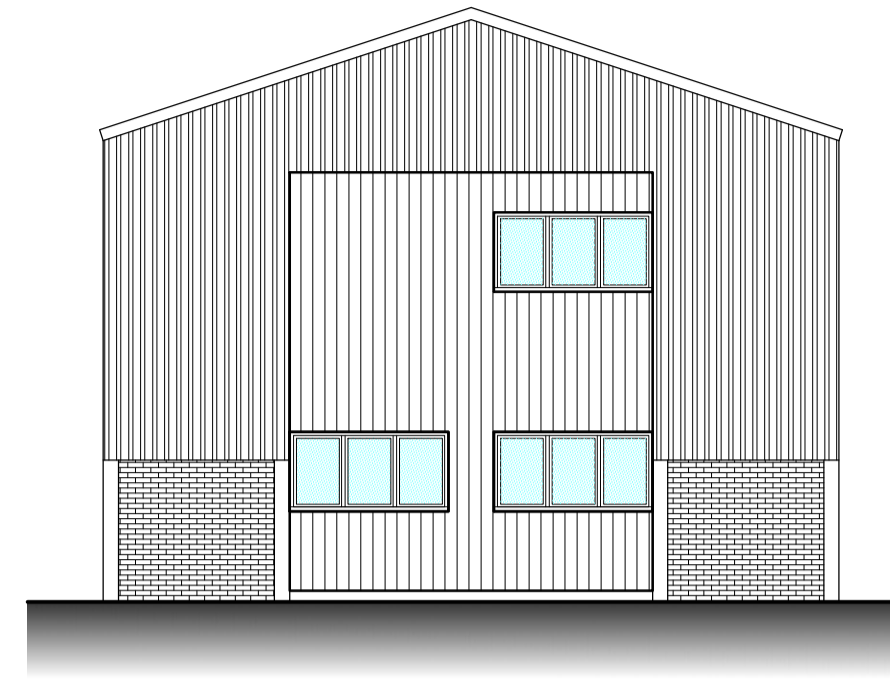
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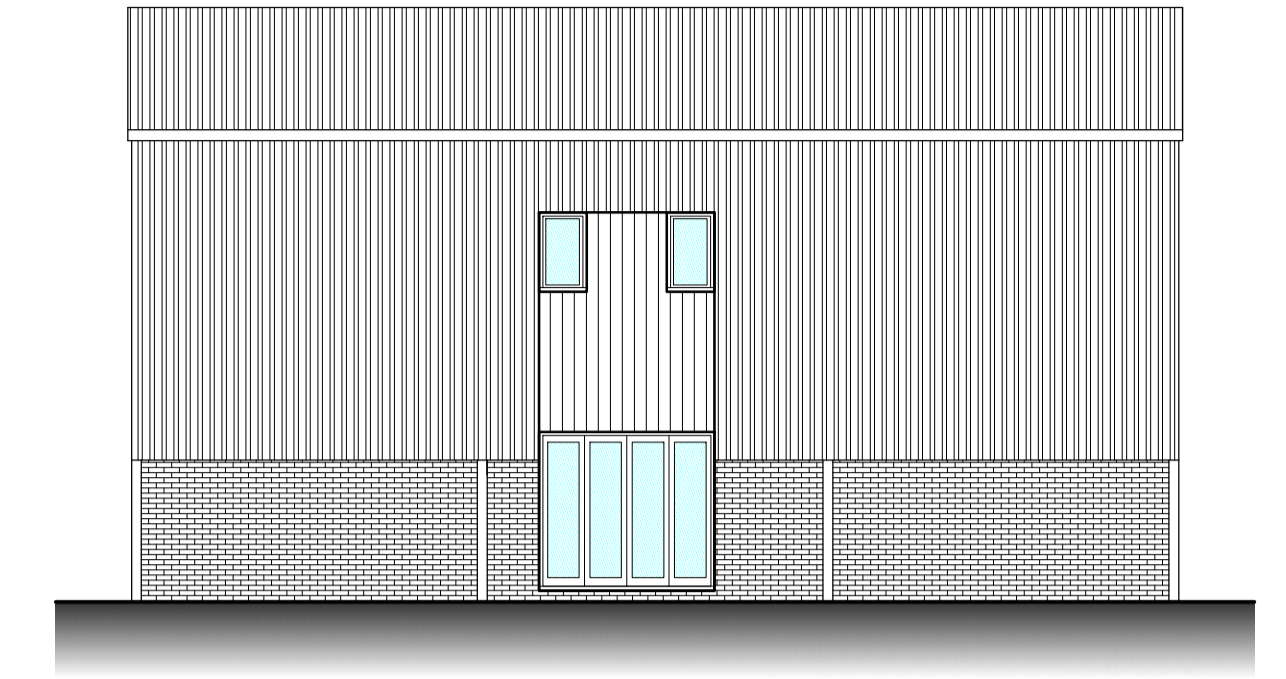
SIDE ELEVATION (Southwest)



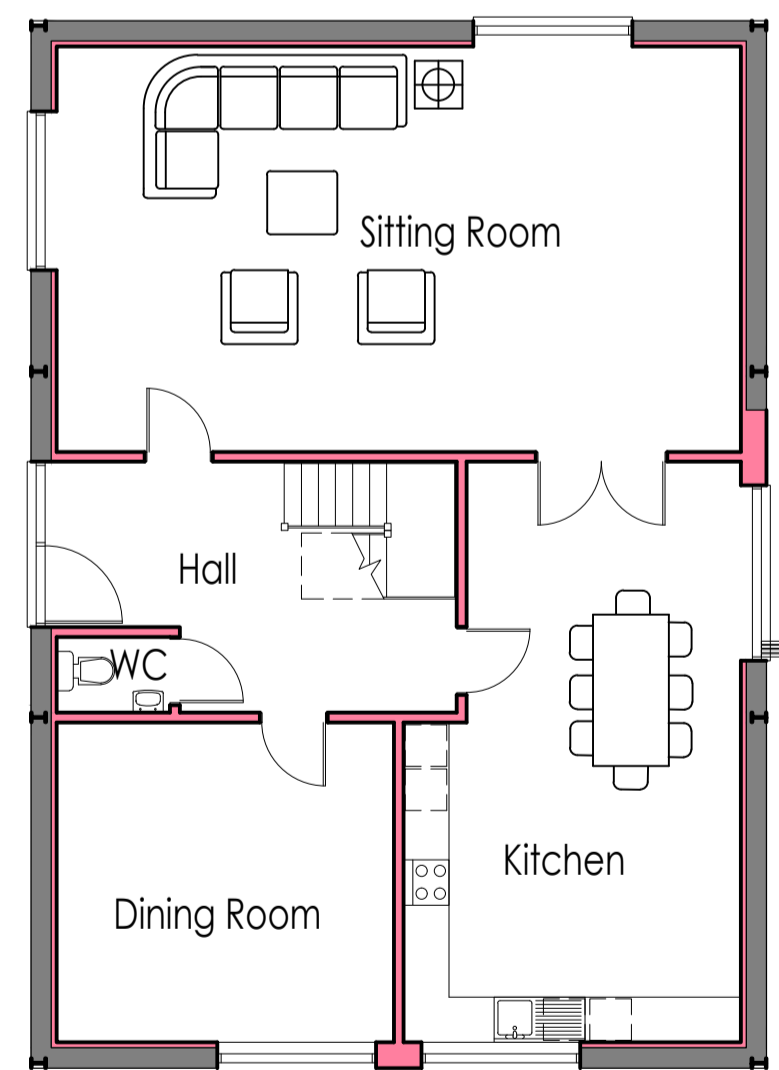
FRONT ELEVATION (Southeast)



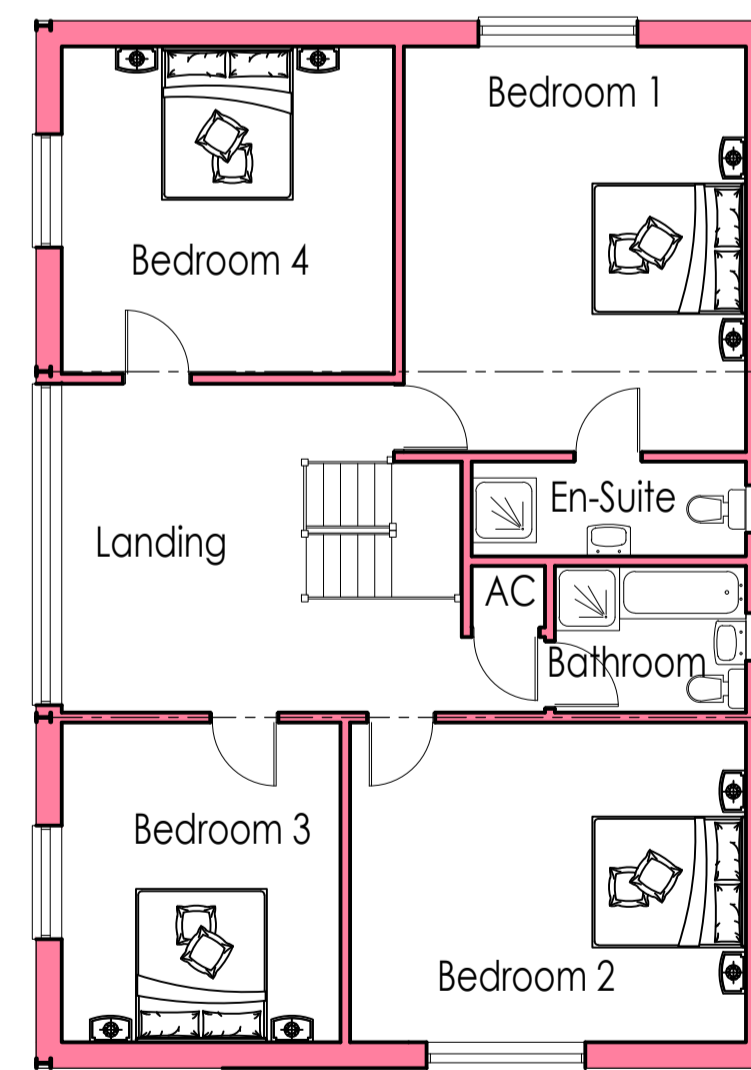
SIDE ELEVATION (Northeast)



REAR ELEVATION (Northwest)



GROUND FLOOR PLAN
BARN B



FIRST FLOOR PLAN


Whymark & Moulton
 Chartered Surveyors &
 Building Engineers
 14 Cornard Road, Sudbury,
 Suffolk. CO10 2XA
 Tel: 01787 371371



Project
**BROOK HALL
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 IPSWICH
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BARN B AS PROPSOED
 Scale 1:100 Date **May 2020**
 Drawing No **19/070 - 05**

Amendments

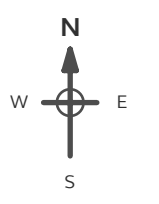
Appendix B

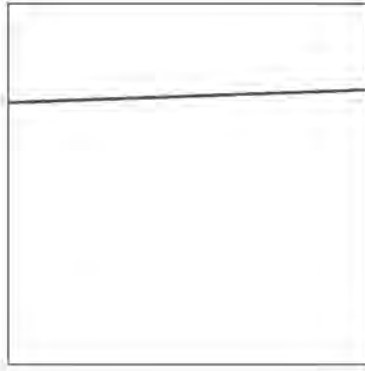
Desk Study Information

Site Details:
 BROOK HALL, CHURCH ROAD,
 CROWFIELD, IP6 9TG

Client Ref: 60742
Report Ref: GS-6784728
Grid Ref: 614800, 258127

Map Name: County Series
Map date: 1884
Scale: 1:2,500
Printed at: 1:2,500





Surveyed 1884
 Revised 1884
 Edition N/A
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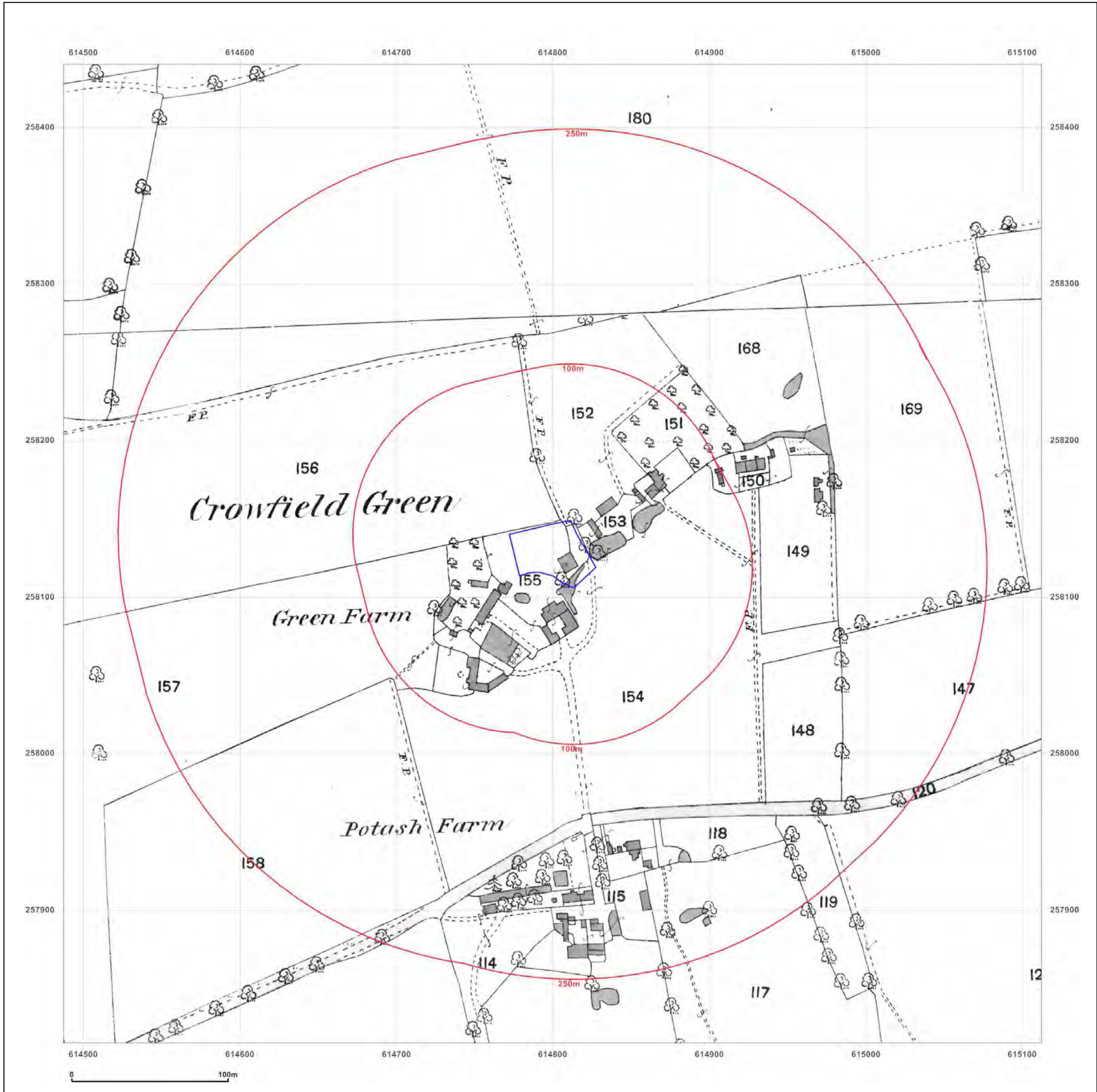


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 Groundsure Insights
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 E: info@groundsure.com
 W: www.groundsure.com

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Production date: 08 June 2020

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

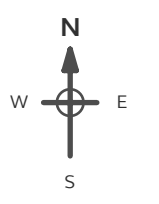


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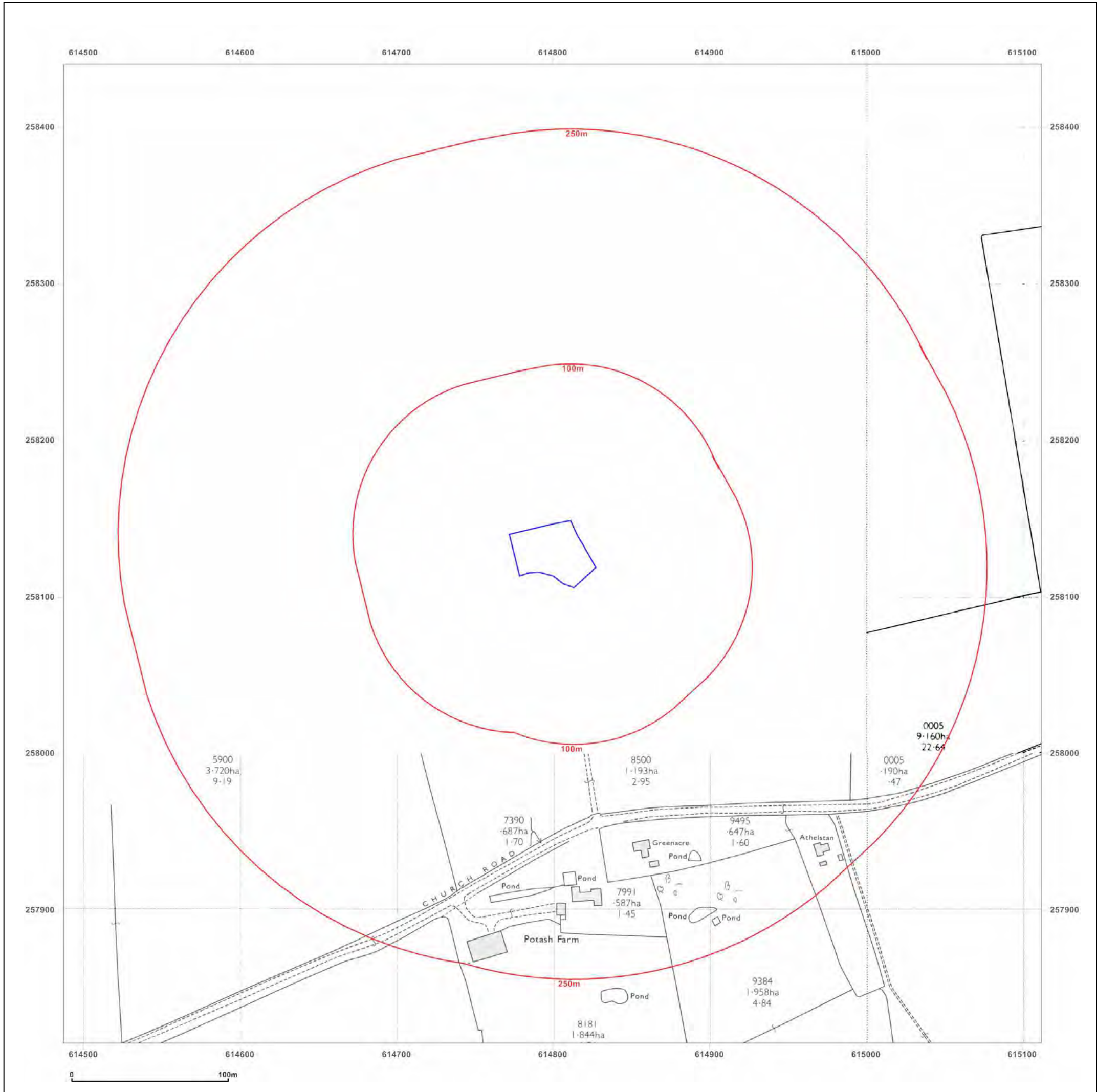
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Client Ref: 60742
Report Ref: GS-6784728
Grid Ref: 614800, 258127

Map Name: National Grid
Map date: 1974-1975
Scale: 1:2,500
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Site Details:

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CROWFIELD, IP6 9TG

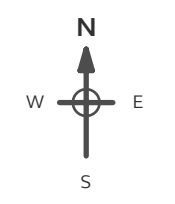
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Report Ref: GS-6784728
Grid Ref: 614800, 258127

Map Name: National Grid

Map date: 1994

Scale: 1:2,500

Printed at: 1:2,500



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Revised N/A
Edition N/A
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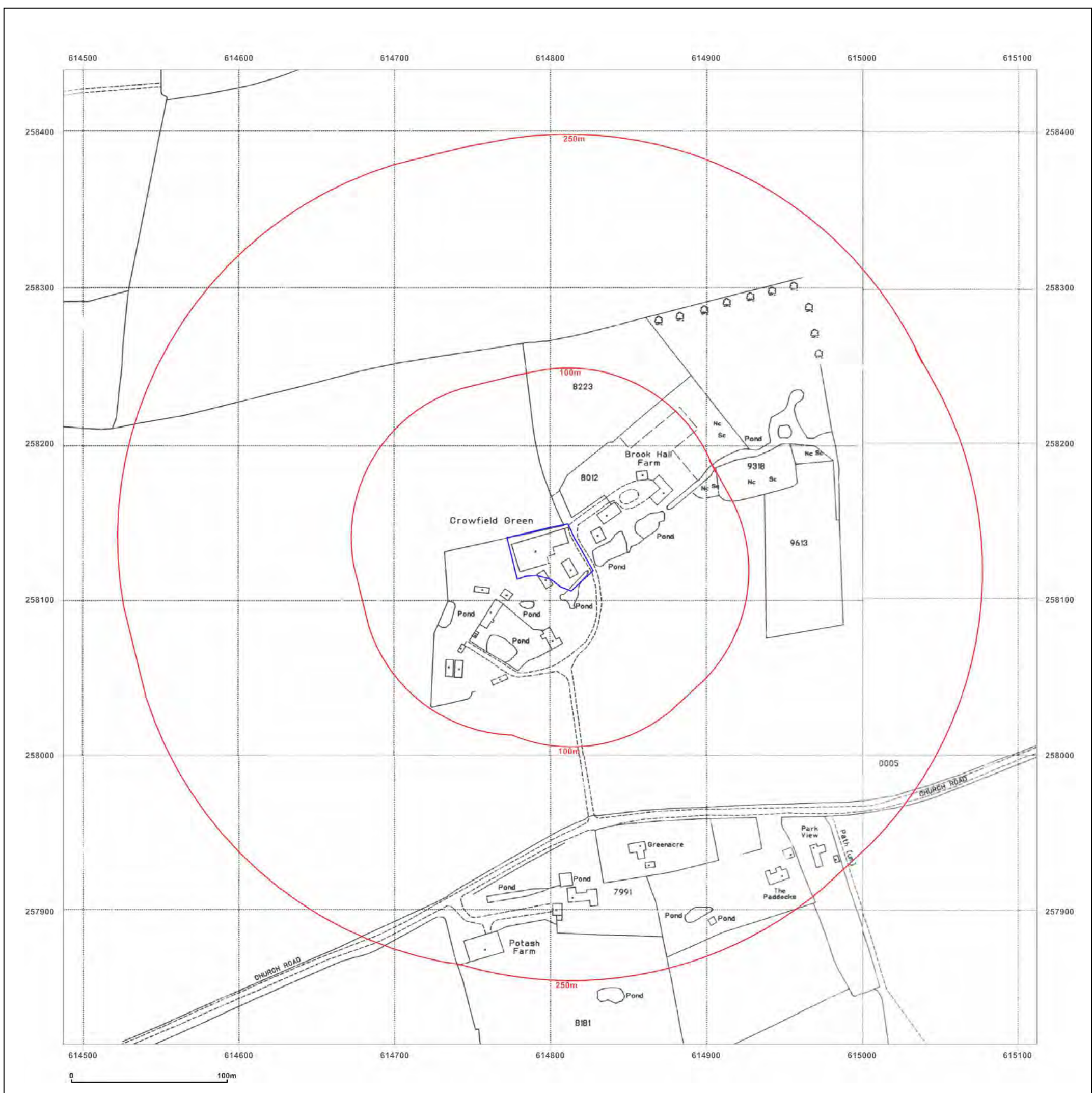


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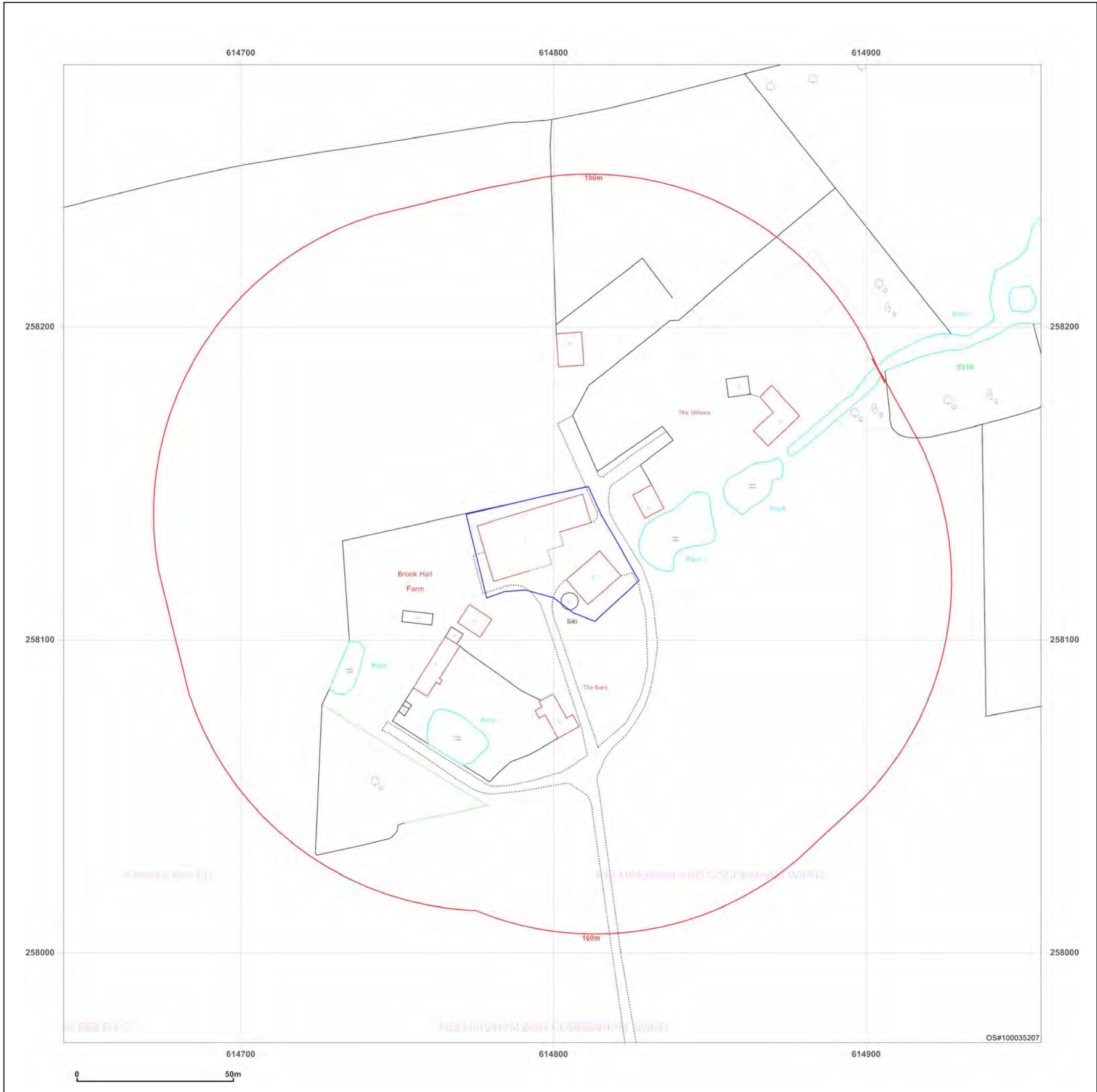
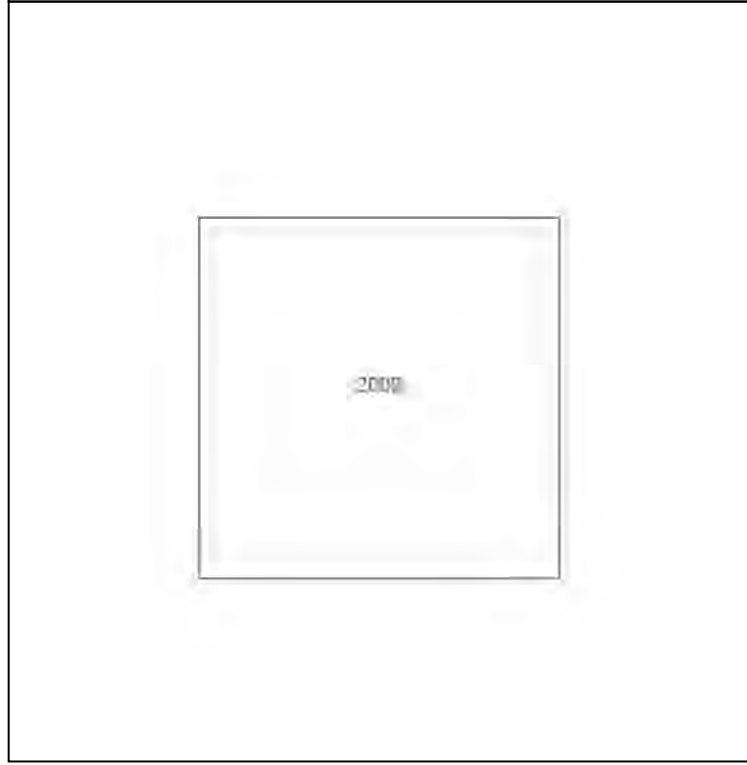
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Grid Ref: 614800, 258127

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

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Client Ref: 60742
Report Ref: GS-6784728
Grid Ref: 614800, 258127

Map Name: County Series

Map date: 1883-1888

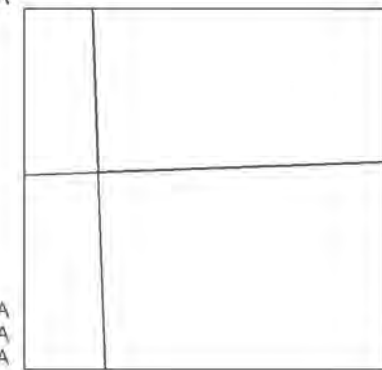
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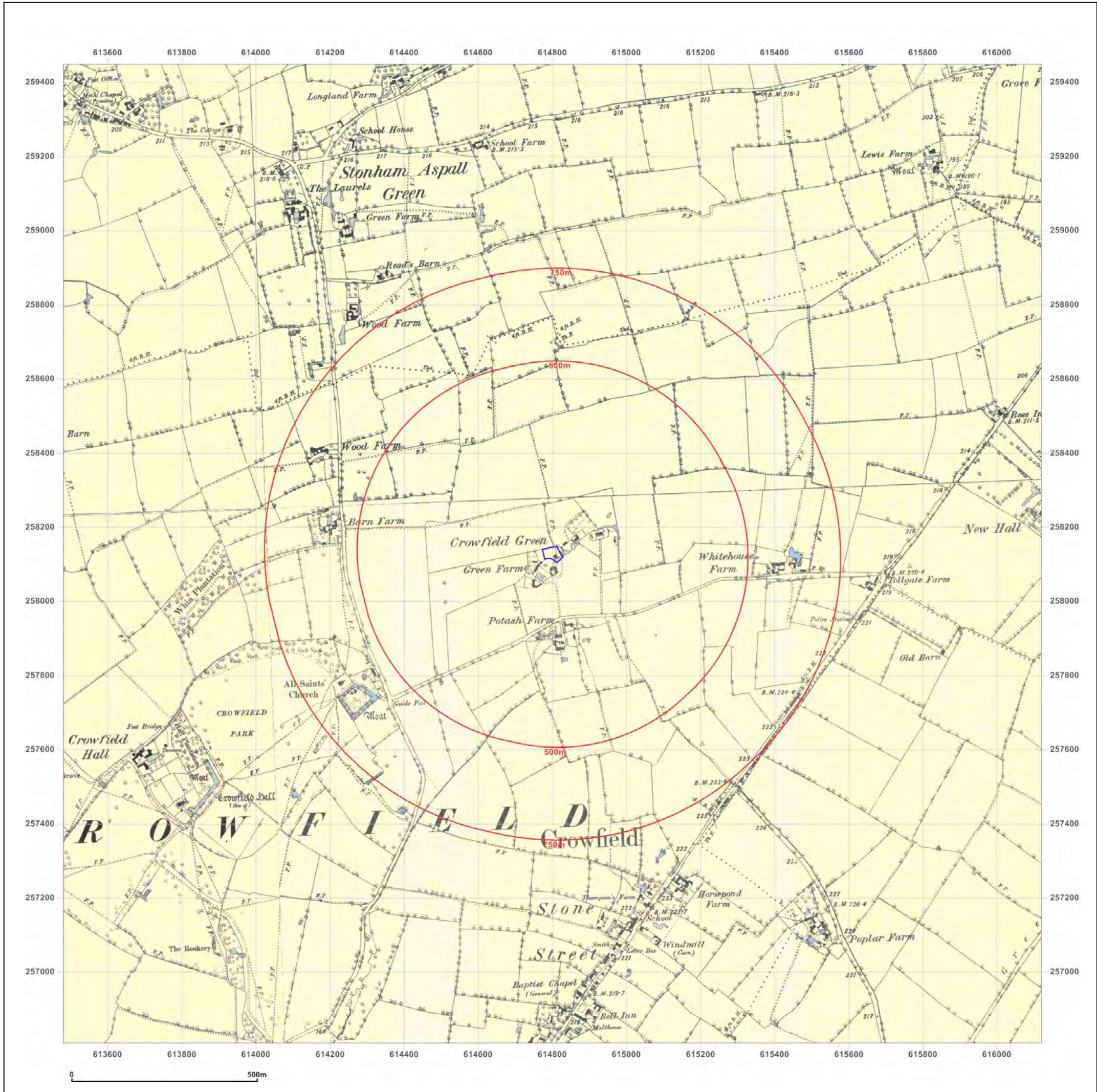


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Grid Ref: 614800, 258127

Map Name: County Series

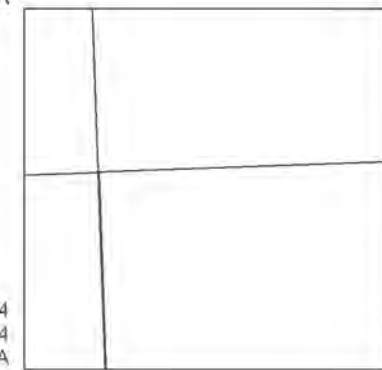
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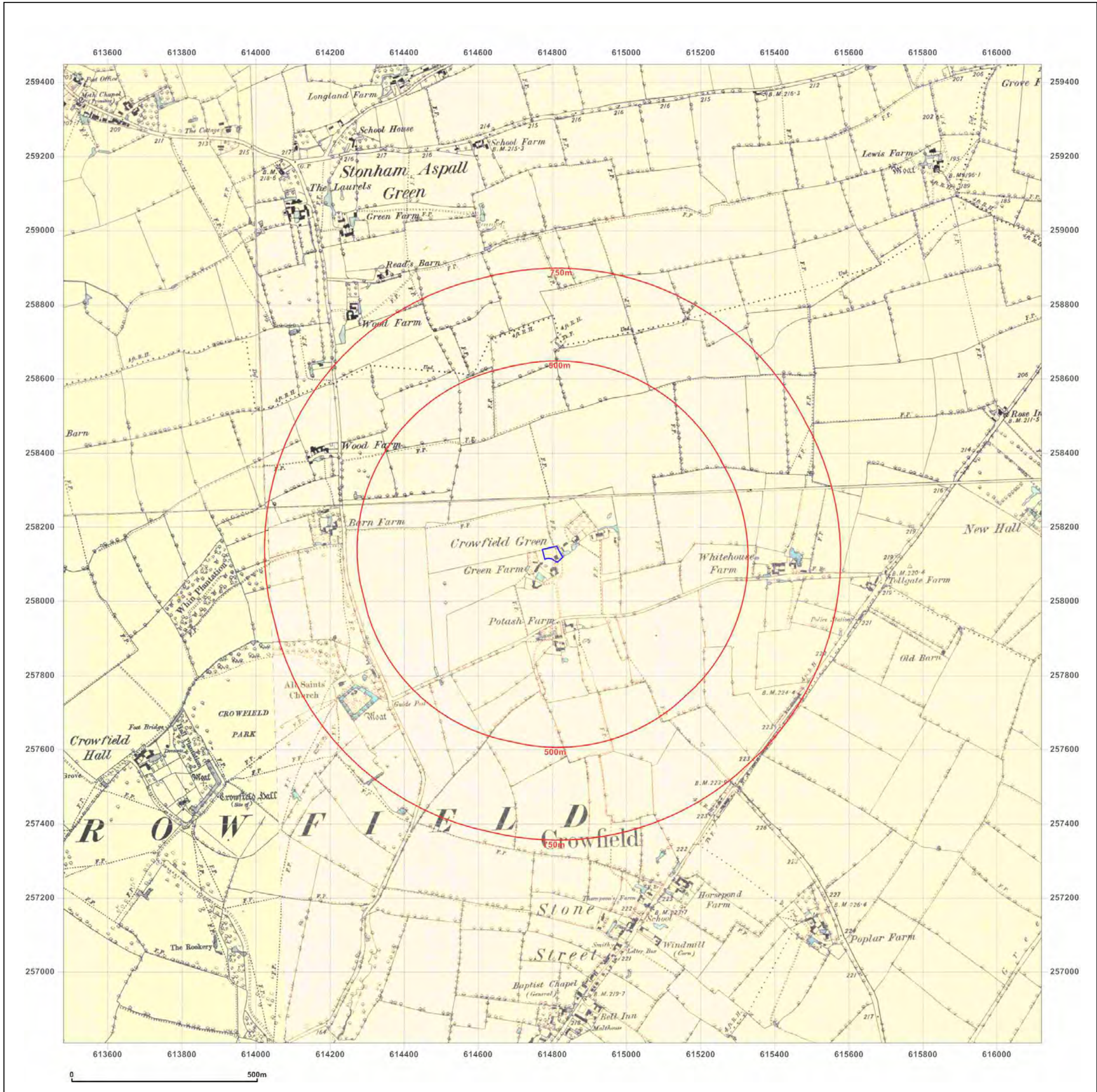


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Report Ref: GS-6784728
Grid Ref: 614800, 258127

Map Name: County Series

Map date: 1905

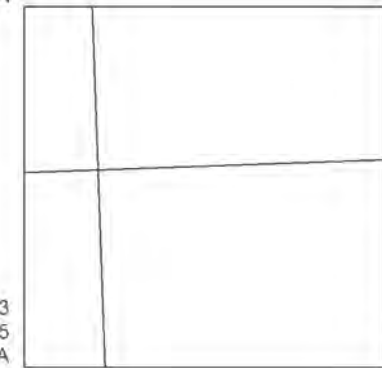
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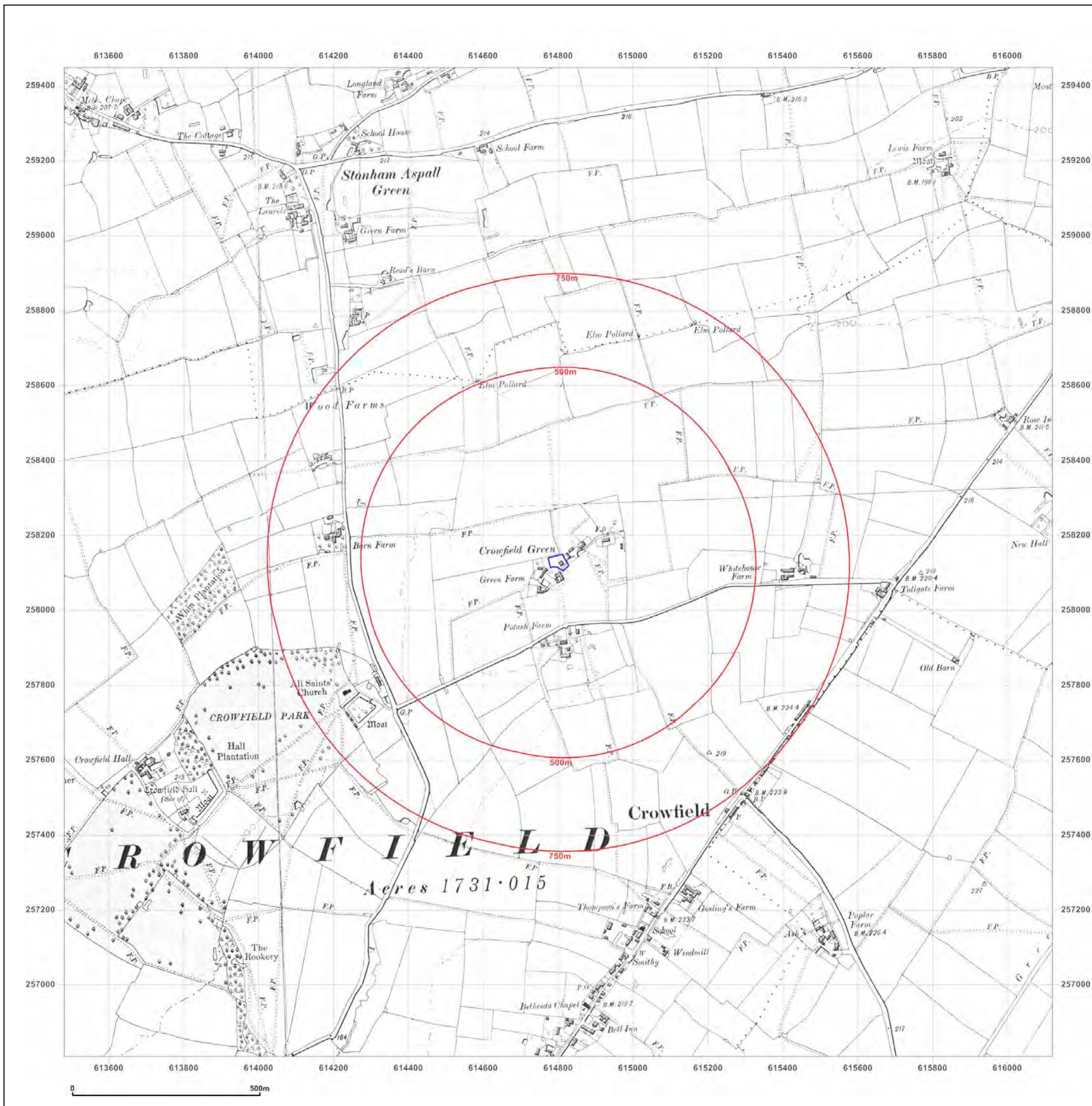


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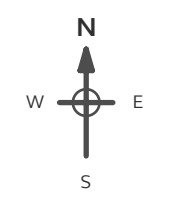
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Map Name: Provisional

Map date: 1953

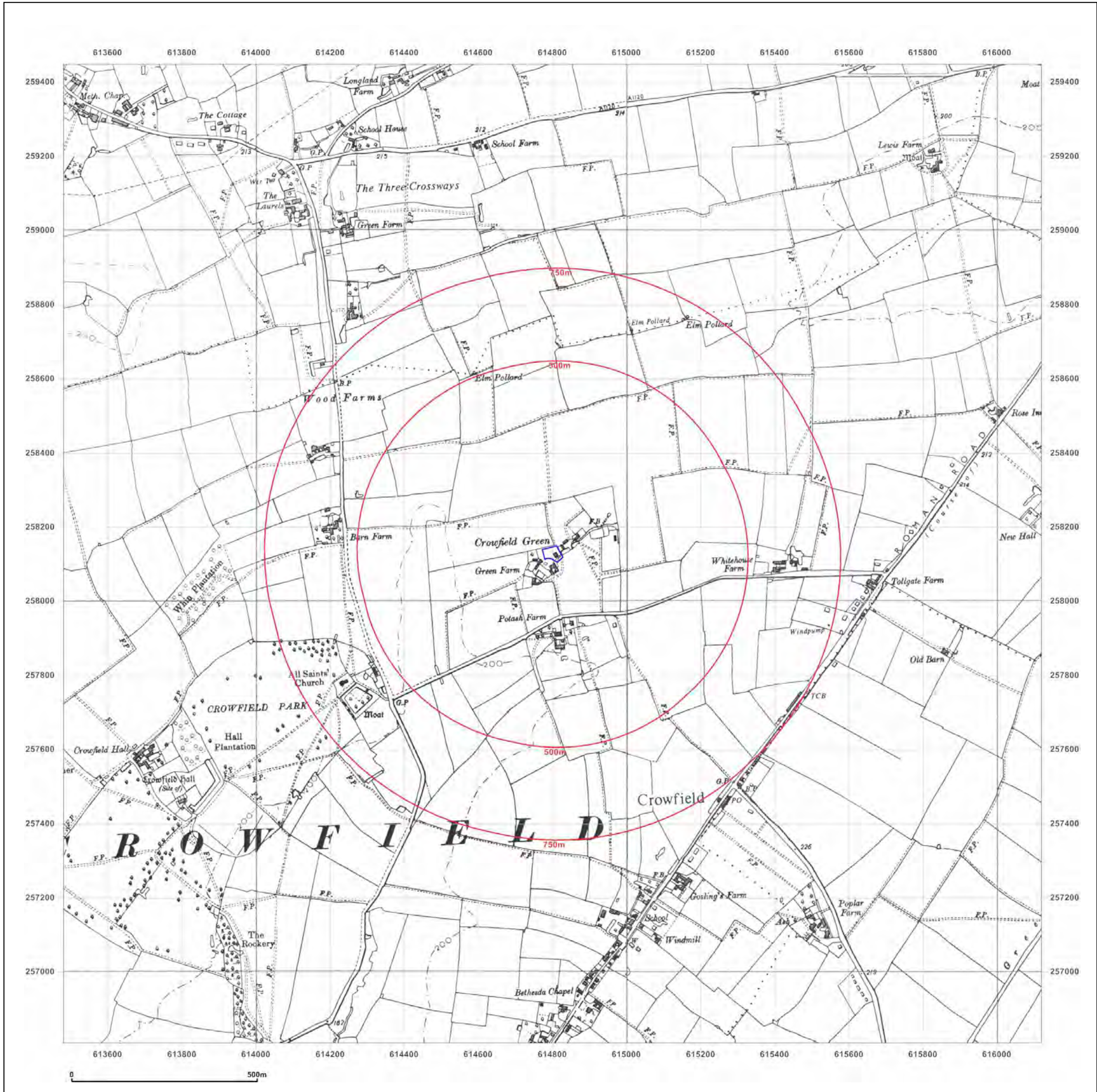
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Report Ref: GS-6784728
Grid Ref: 614800, 258127

Map Name: National Grid

Map date: 1977-1978

Scale: 1:10,000

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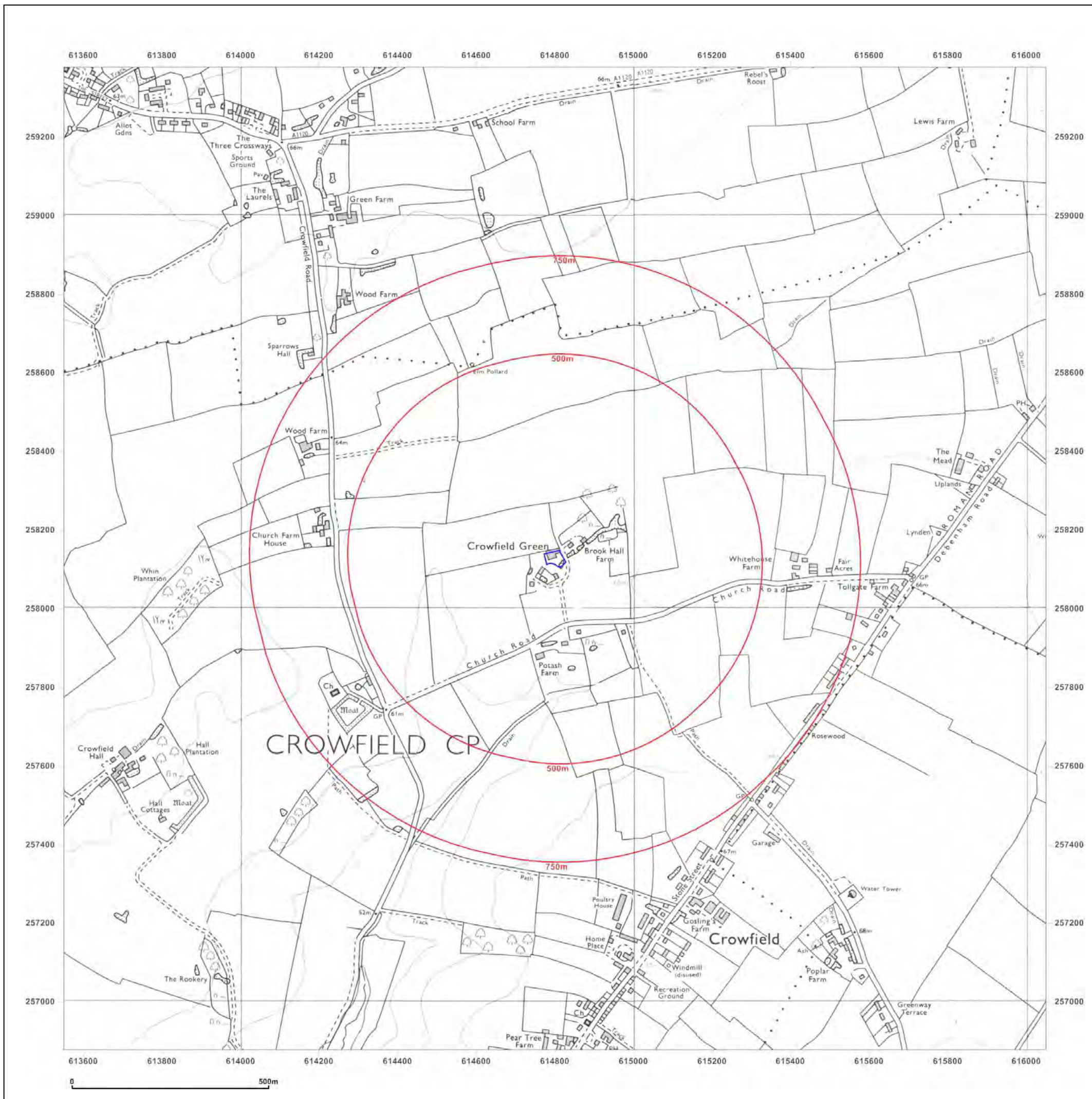


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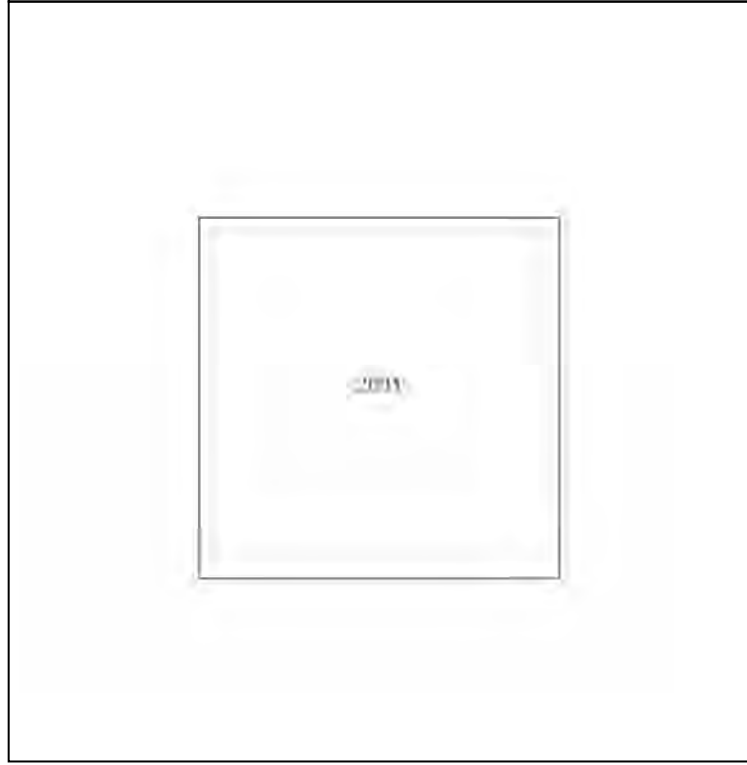
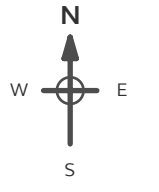
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Grid Ref: 614800, 258127

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000

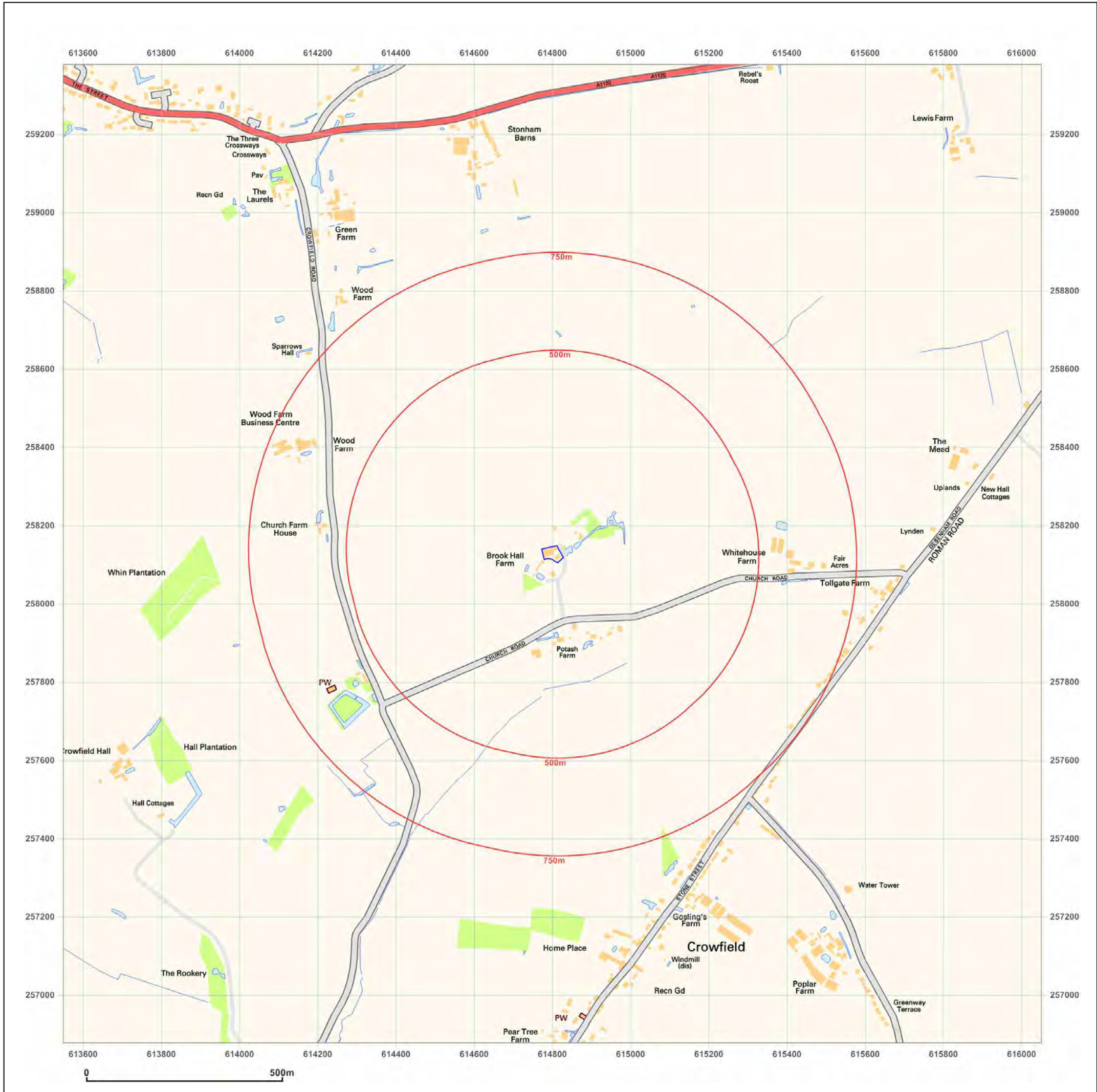


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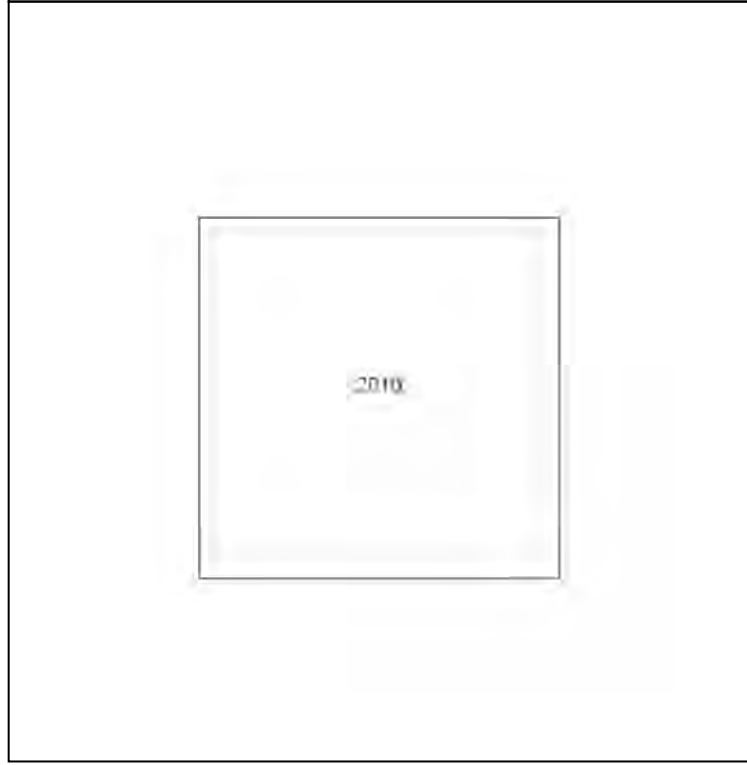
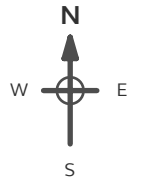
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Grid Ref: 614800, 258127

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

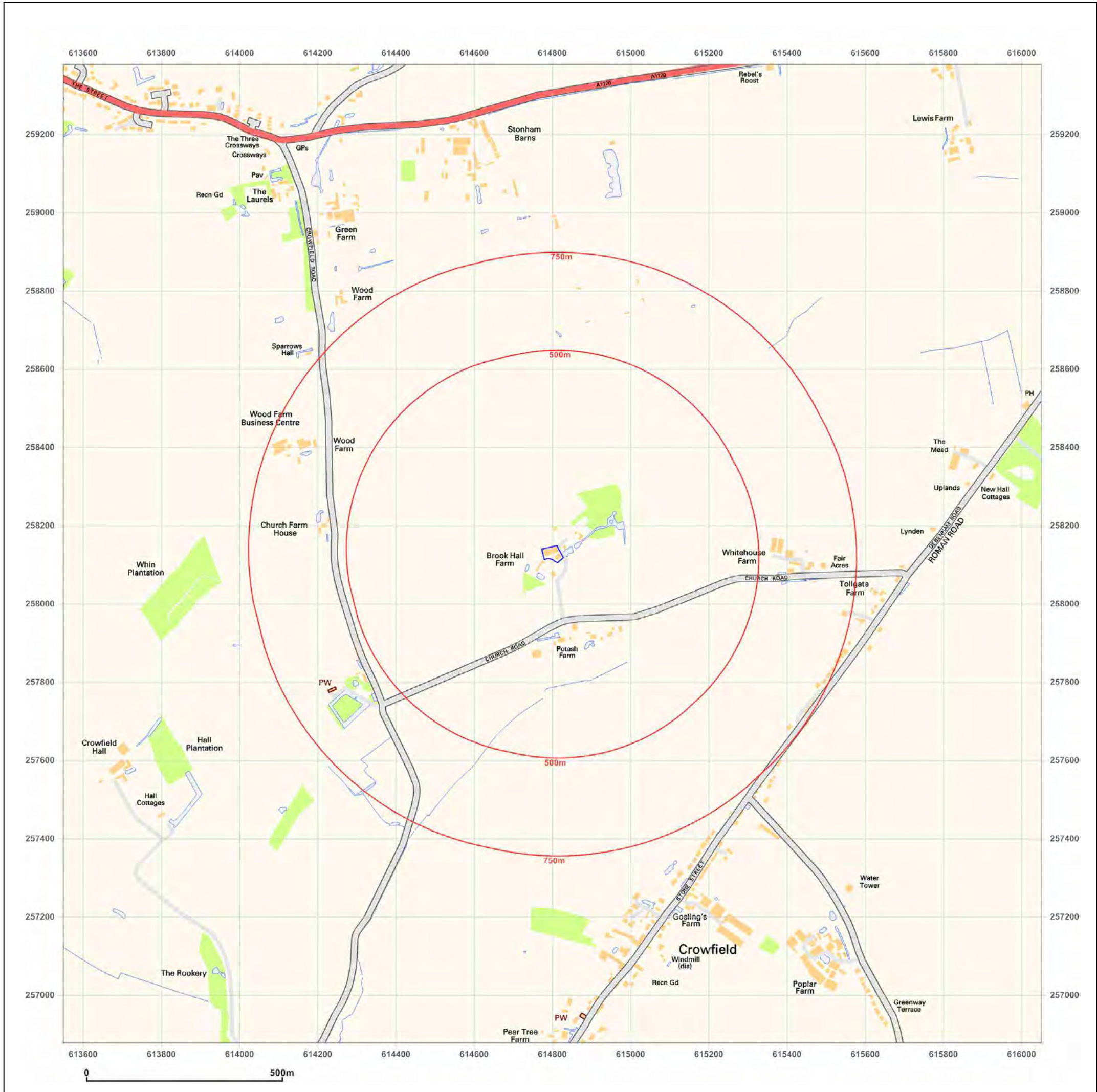


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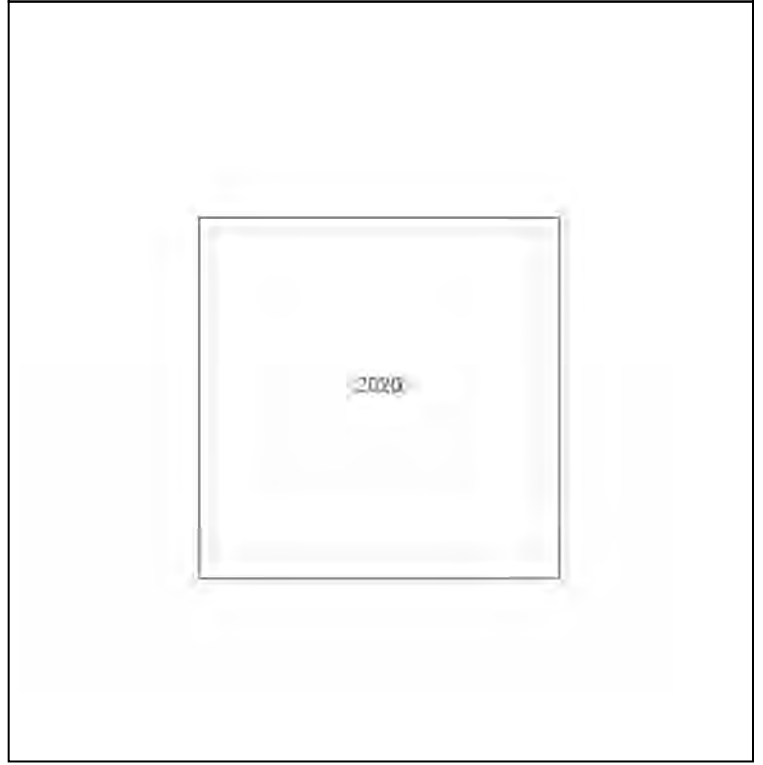
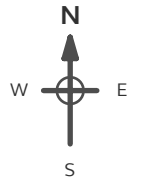
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Report Ref: GS-6784728
Grid Ref: 614800, 258127

Map Name: National Grid
Map date: 2020
Scale: 1:10,000
Printed at: 1:10,000



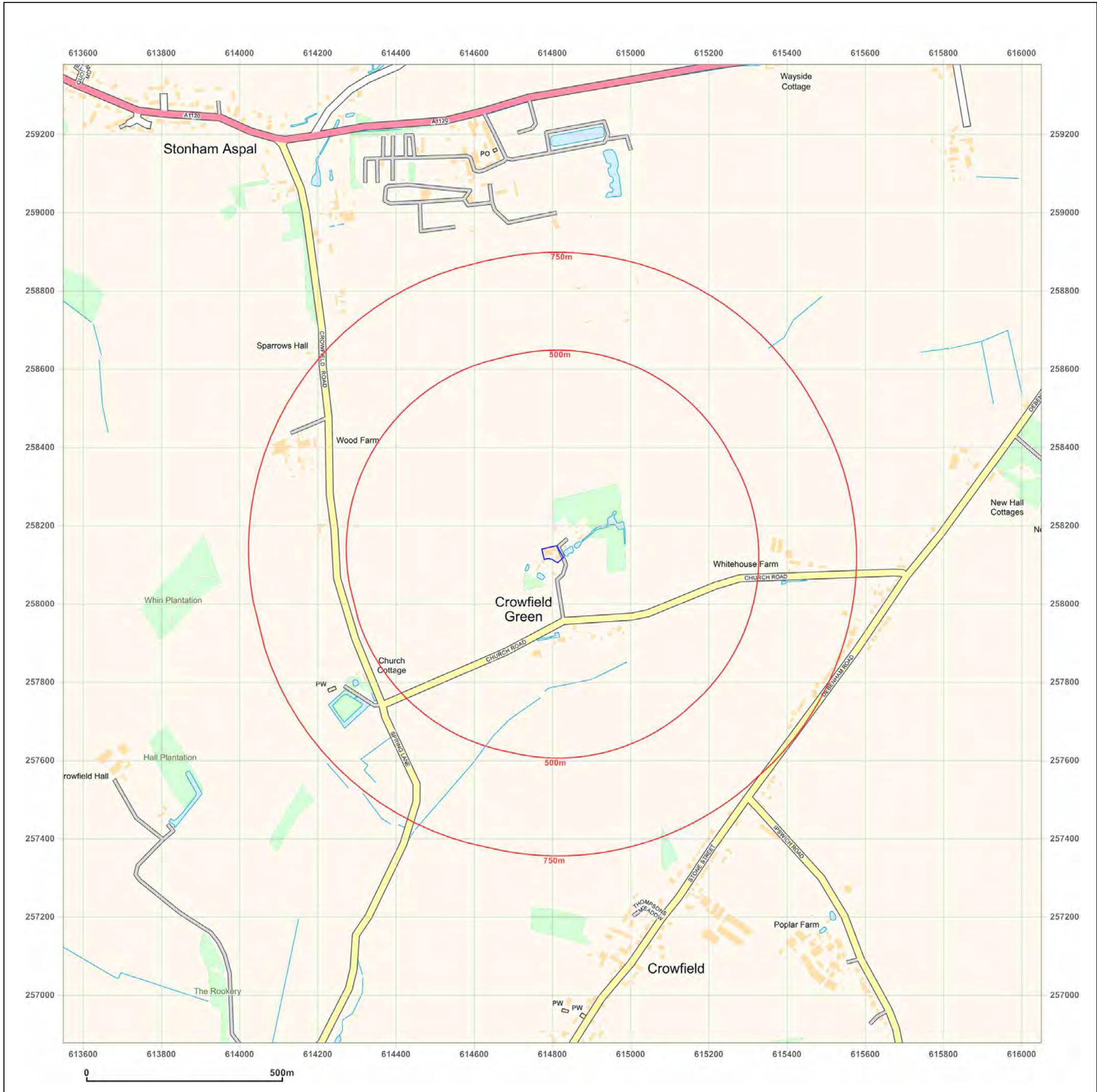
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Order Details

Date: 08/06/2020
Your ref: 60742
Our Ref: GS-6784729
Client: Richard Jackson Ltd

Site Details

Location: 614797 258123
Area: 0.15 ha
Authority: [Mid Suffolk District Council](#)



Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

p.13

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Summary of findings

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



21	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
22	4.7	Regulated explosive sites	0	0	0	0	-
22	4.8	Hazardous substance storage/usage	0	0	0	0	-
22	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
22	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
22	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
23	4.12	Radioactive Substance Authorisations	0	0	0	0	-
23	4.13	<u>Licensed Discharges to controlled waters</u>	0	0	4	0	-
24	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
24	4.15	Pollutant release to public sewer	0	0	0	0	-
24	4.16	List 1 Dangerous Substances	0	0	0	0	-
24	4.17	List 2 Dangerous Substances	0	0	0	0	-
24	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
25	4.19	Pollution inventory substances	0	0	0	0	-
25	4.20	Pollution inventory waste transfers	0	0	0	0	-
25	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
26	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
28	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
30	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
31	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
31	5.5	Groundwater vulnerability- local information	None (within 0m)				
32	5.6	<u>Groundwater abstractions</u>	0	0	0	0	5
34	5.7	Surface water abstractions	0	0	0	0	0
34	5.8	Potable abstractions	0	0	0	0	0
34	5.9	<u>Source Protection Zones</u>	1	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	0	-	-



35	6.2	<u>Surface water features</u>	0	4	3	-	-
36	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
36	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
37	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-

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 Sea (RoFRaS)	None (within 50m)				
38	7.2	Historical Flood Events	0	0	0	-	-
38	7.3	Flood Defences	0	0	0	-	-
38	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	Negligible (within 50m)				

Page	Section	Groundwater flooding					
42	9.1	<u>Groundwater flooding</u>	Moderate (within 50m)				

Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
43	10.1	<u>Sites of Special Scientific Interest (SSSI)</u>	0	0	0	0	1
44	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
44	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
44	10.4	Special Protection Areas (SPA)	0	0	0	0	0
44	10.5	National Nature Reserves (NNR)	0	0	0	0	0
45	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
45	10.7	<u>Designated Ancient Woodland</u>	0	0	0	0	2
45	10.8	Biosphere Reserves	0	0	0	0	0
45	10.9	Forest Parks	0	0	0	0	0
46	10.10	Marine Conservation Zones	0	0	0	0	0
46	10.11	Green Belt	0	0	0	0	0
46	10.12	Proposed Ramsar sites	0	0	0	0	0



46	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
46	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
47	10.15	Nitrate Sensitive Areas	0	0	0	0	0
47	10.16	<u>Nitrate Vulnerable Zones</u>	2	0	0	1	2
48	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
49	10.18	<u>SSSI Units</u>	0	0	0	0	1
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
50	11.1	World Heritage Sites	0	0	0	-	-
51	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
51	11.3	National Parks	0	0	0	-	-
51	11.4	<u>Listed Buildings</u>	0	1	0	-	-
52	11.5	Conservation Areas	0	0	0	-	-
52	11.6	Scheduled Ancient Monuments	0	0	0	-	-
52	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
53	12.1	<u>Agricultural Land Classification</u>	Grade 3 (within 250m)				
54	12.2	Open Access Land	0	0	0	-	-
54	12.3	Tree Felling Licences	0	0	0	-	-
54	12.4	Environmental Stewardship Schemes	0	0	0	-	-
55	12.5	<u>Countryside Stewardship Schemes</u>	0	2	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
56	13.1	<u>Priority Habitat Inventory</u>	0	0	3	-	-
57	13.2	Habitat Networks	0	0	0	-	-
57	13.3	Open Mosaic Habitat	0	0	0	-	-
57	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
58	14.1	<u>10k Availability</u>	Identified (within 500m)				
59	14.2	Artificial and made ground (10k)	0	0	0	0	-
60	14.3	Superficial geology (10k)	0	0	0	0	-

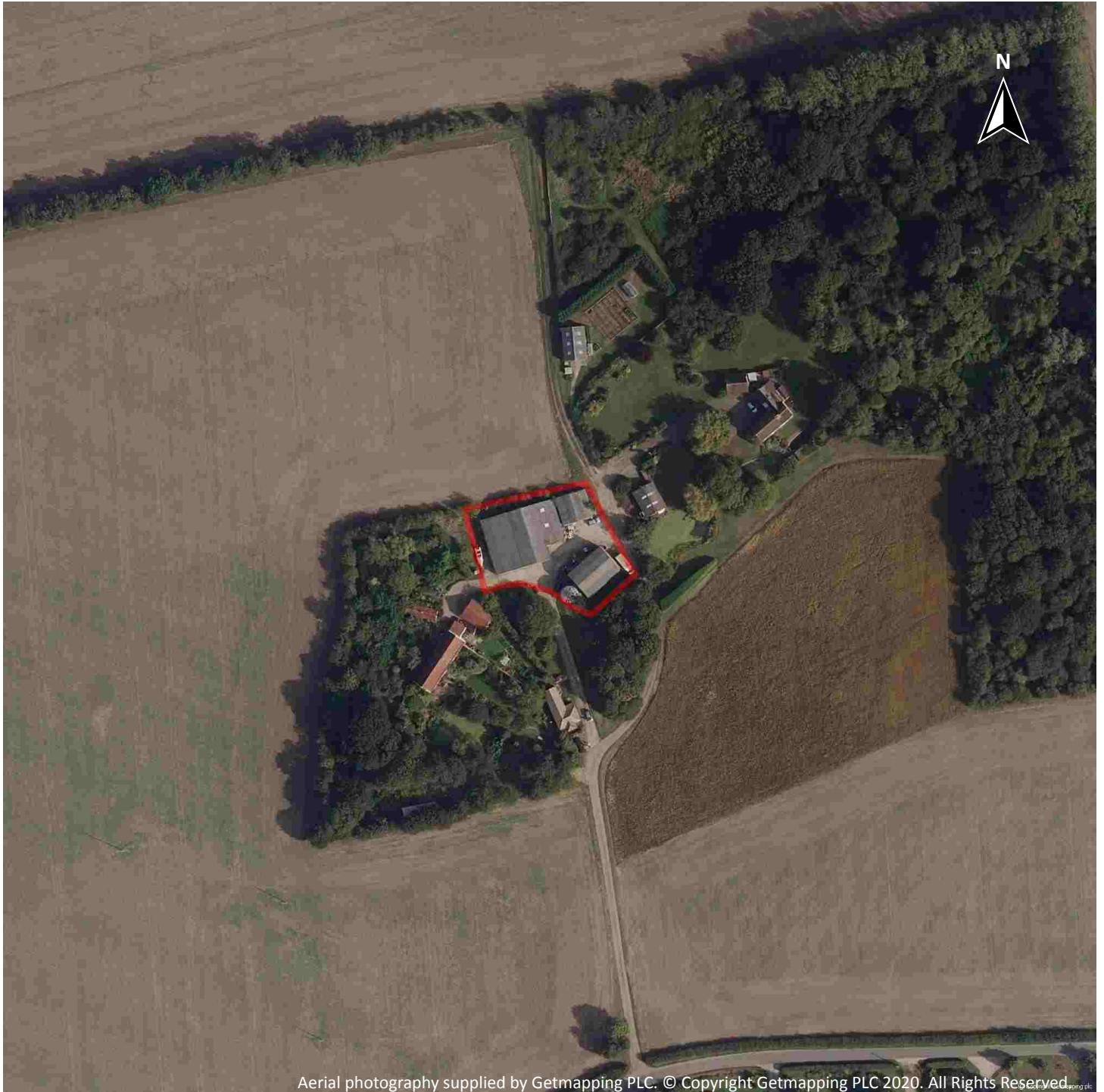


60	14.4	Landslip (10k)	0	0	0	0	-
61	14.5	Bedrock geology (10k)	0	0	0	0	-
61	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
62	15.1	<u>50k Availability</u>	Identified (within 500m)				
63	15.2	Artificial and made ground (50k)	0	0	0	0	-
63	15.3	Artificial ground permeability (50k)	0	0	-	-	-
64	15.4	<u>Superficial geology (50k)</u>	1	0	0	0	-
65	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
65	15.6	Landslip (50k)	0	0	0	0	-
65	15.7	Landslip permeability (50k)	None (within 50m)				
66	15.8	<u>Bedrock geology (50k)</u>	1	0	0	0	-
67	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
67	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
68	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
69	17.1	<u>Shrink swell clays</u>	Low (within 50m)				
70	17.2	<u>Running sands</u>	Very low (within 50m)				
71	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
72	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
73	17.5	<u>Landslides</u>	Very low (within 50m)				
74	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
75	18.1	Natural cavities	0	0	0	0	-
76	18.2	BritPits	0	0	0	0	-
76	18.3	<u>Surface ground workings</u>	3	0	1	-	-
76	18.4	Underground workings	0	0	0	0	0
76	18.5	Historical Mineral Planning Areas	0	0	0	0	-



77	18.6	<u>Non-coal mining</u>		1	0	1	0	0
77	18.7	Mining cavities		0	0	0	0	0
77	18.8	JPB mining areas		None (within 0m)				
78	18.9	Coal mining		None (within 0m)				
78	18.10	Brine areas		None (within 0m)				
78	18.11	Gypsum areas		None (within 0m)				
78	18.12	Tin mining		None (within 0m)				
78	18.13	Clay mining		None (within 0m)				
Page	Section	Radon						
79	19.1	<u>Radon</u>		Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m	
80	20.1	<u>BGS Estimated Background Soil Chemistry</u>	1	0	-	-	-	
80	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-	
80	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	
81	21.1	Underground railways (London)	0	0	0	-	-	
81	21.2	Underground railways (Non-London)	0	0	0	-	-	
81	21.3	Railway tunnels	0	0	0	-	-	
81	21.4	Historical railway and tunnel features	0	0	0	-	-	
81	21.5	Royal Mail tunnels	0	0	0	-	-	
82	21.6	Historical railways	0	0	0	-	-	
82	21.7	Railways	0	0	0	-	-	
82	21.8	Crossrail 1	0	0	0	0	-	
82	21.9	Crossrail 2	0	0	0	0	-	
82	21.10	HS2	0	0	0	0	-	

Recent aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2020. All Rights Reserved.

Capture Date: 23/08/2019

Site Area: 0.15ha



Recent site history - 2016 aerial photograph



Capture Date: 04/05/2016

Site Area: 0.15ha



Recent site history - 2014 aerial photograph

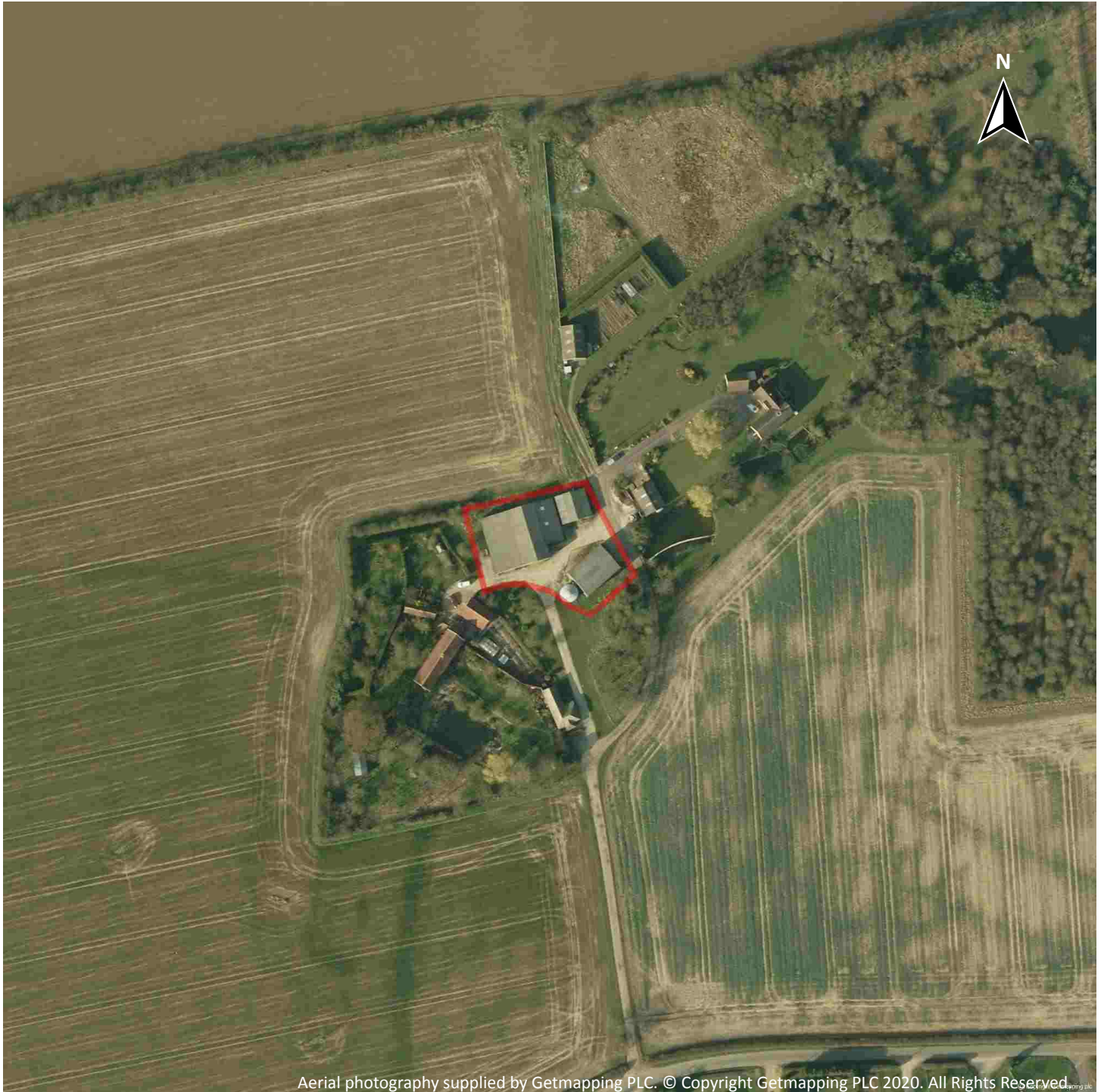


Capture Date: 15/05/2014

Site Area: 0.15ha



Recent site history - 2007 aerial photograph

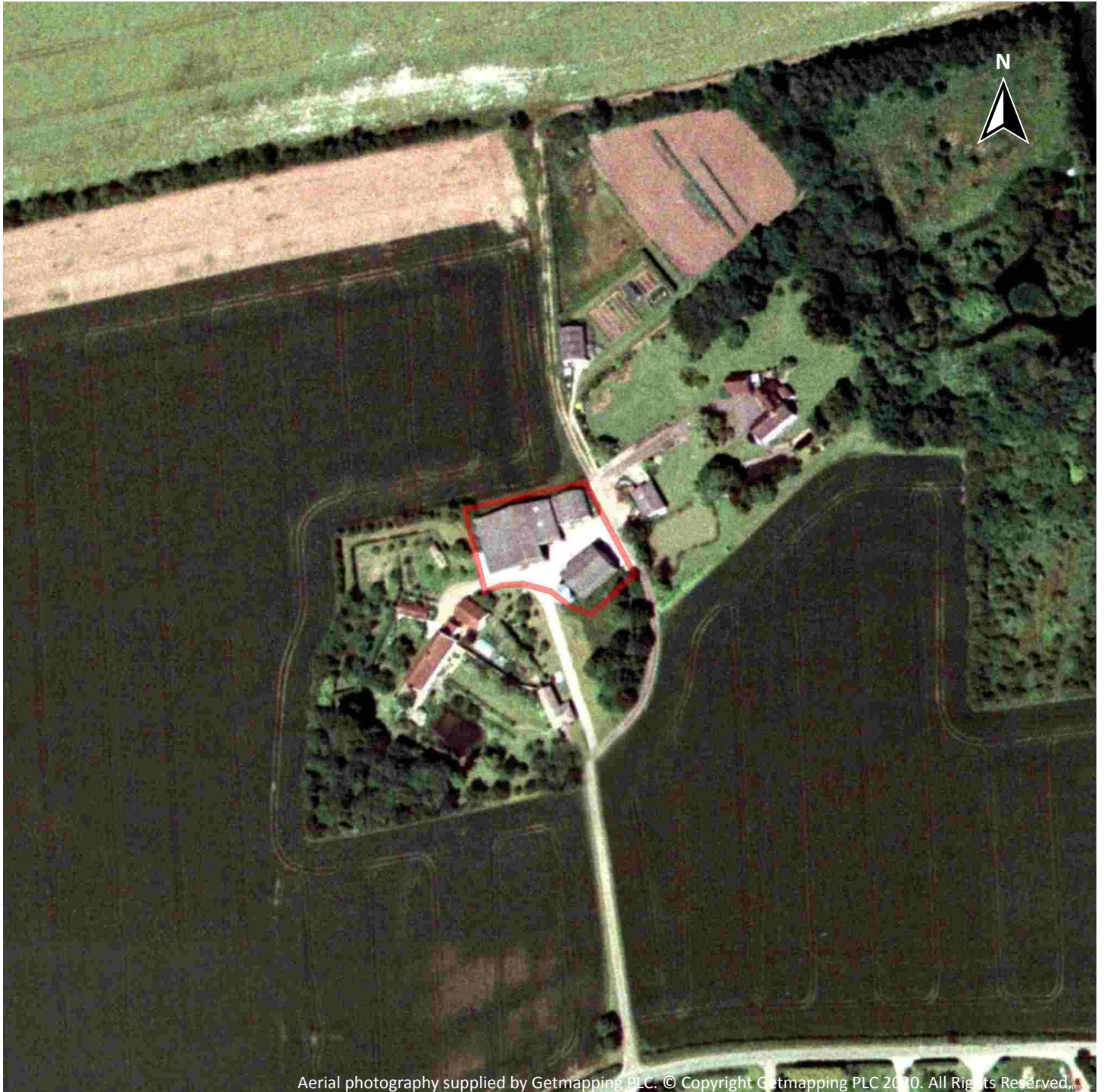


Capture Date: 26/03/2007

Site Area: 0.15ha



Recent site history - 1999 aerial photograph

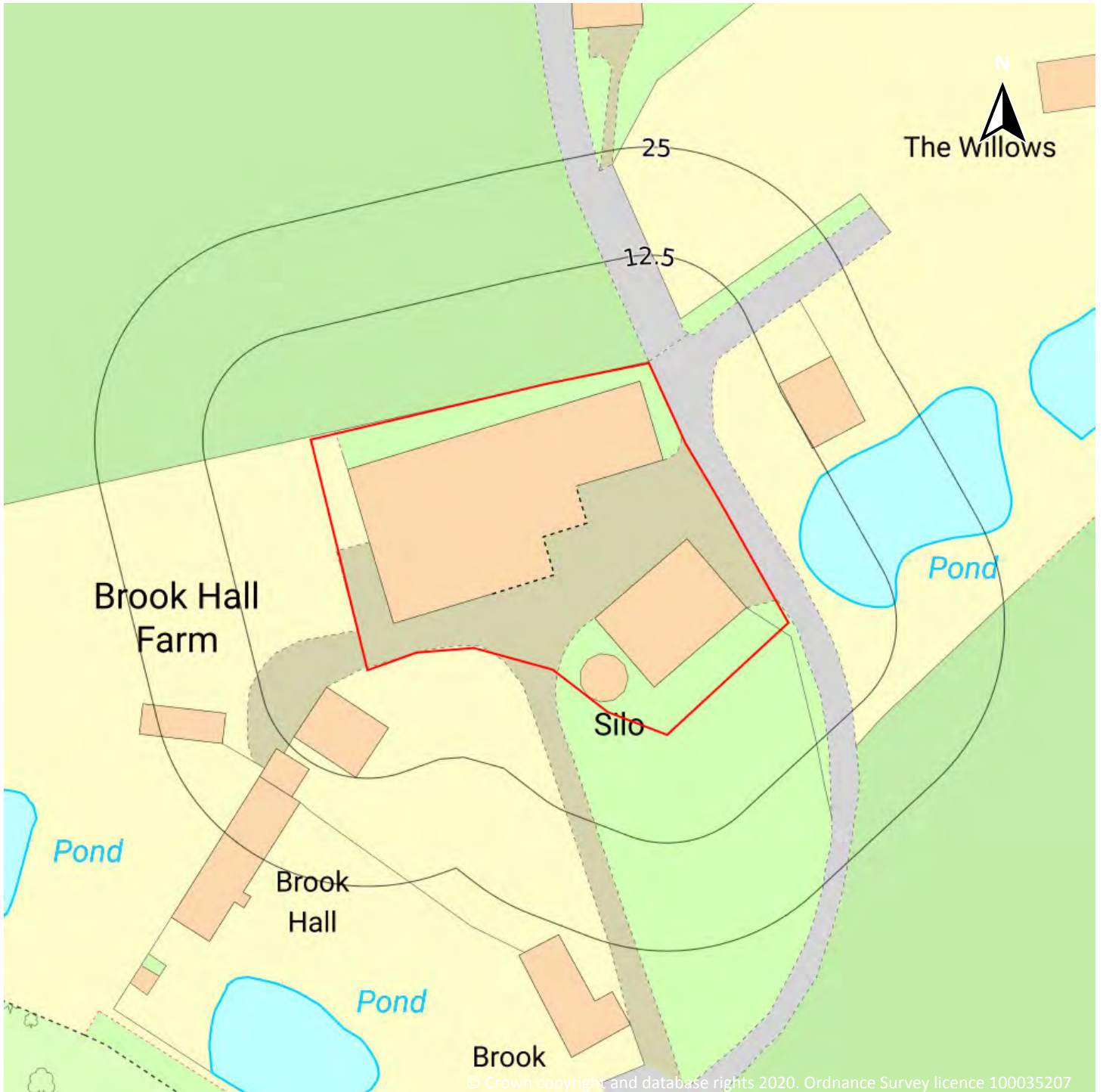


Capture Date: 26/06/1999

Site Area: 0.15ha



OS MasterMap site plan



Site Area: 0.15ha



1 Past land use

1.1 Historical industrial land uses

Records within 500m

0

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'.

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

0

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

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



2 Past land use - un-grouped

2.1 Historical industrial land uses

Records within 500m

0

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'.

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

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

3.1 Active or recent landfill

Records within 500m 0

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

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

3.2 Historical landfill (BGS records)

Records within 500m 0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m 0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m 0

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

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

3.5 Historical waste sites

Records within 500m 0

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

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



3.6 Licensed waste sites

Records within 500m

0

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

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

3.7 Waste exemptions

Records within 500m

0

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.

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

4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m

1

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 20**

ID	Location	Company	Address	Activity	Category
1	On site	Silo	Suffolk, IP6	Hoppers and Silos	Farming

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

4

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 20**

ID	Location	Address	Details	
2	69m W	BROOK HALL, CROWFIELD, IPSWICH, SUFFOLK	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRENF01203 Permit Version: 1 Receiving Water: Trib River Gipping	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 18/07/1989 Effective Date: 18/07/1989 Revocation Date: 22/01/1992
3	160m S	GREENACRE, CHURCH ROAD, CROWFIELD, IPSWICH, SUFFOLK, IP6 9TG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRENF15568 Permit Version: 1 Receiving Water: A TRIBUTARY OF RIVER GIPPING	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 04/06/2003 Effective Date: 04/06/2003 Revocation Date: -
4	223m SE	PLOT AT CHURCH ROAD, CROWFIELD, IPSWICH	Effluent Type: UNSPECIFIED Permit Number: PR4LF361 Permit Version: 1 Receiving Water: soakaway	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 23/12/1985 Effective Date: 23/12/1985 Revocation Date: 01/10/1996
5	242m SE	PARK VIEW, CHURCH ROAD, CROWFIELD, IPSWICH, SUFFOLK, IP6 9JT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRENF15710 Permit Version: 1 Receiving Water: DITCH TRIB. OF R.GIPPING	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/06/2003 Effective Date: 23/06/2003 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

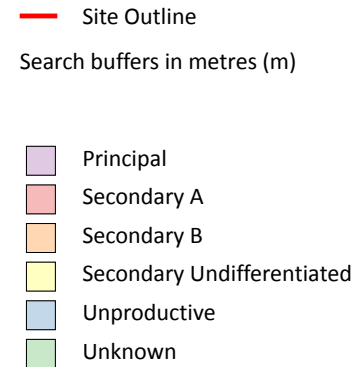
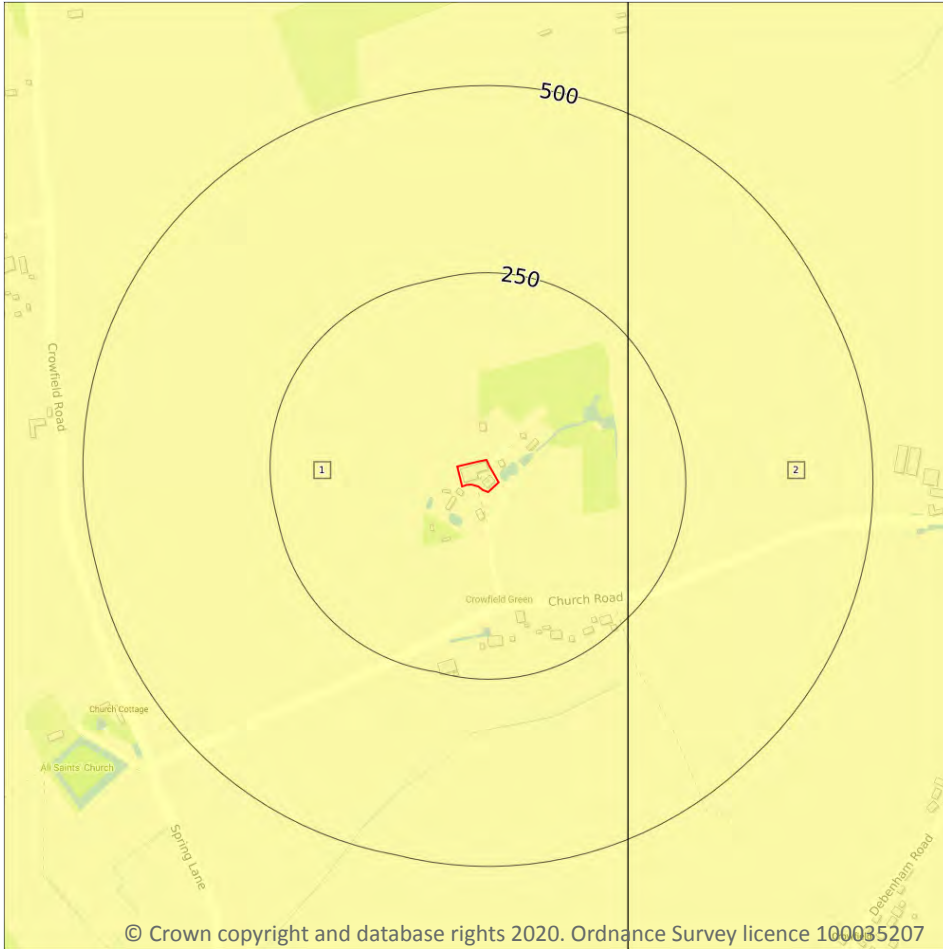
Records within 500m

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

2

Aquifer status of groundwater held within superficial geology.

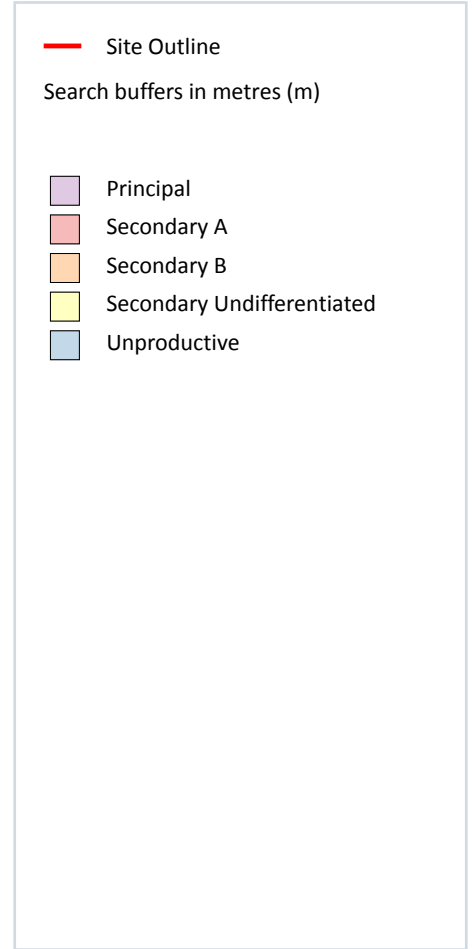
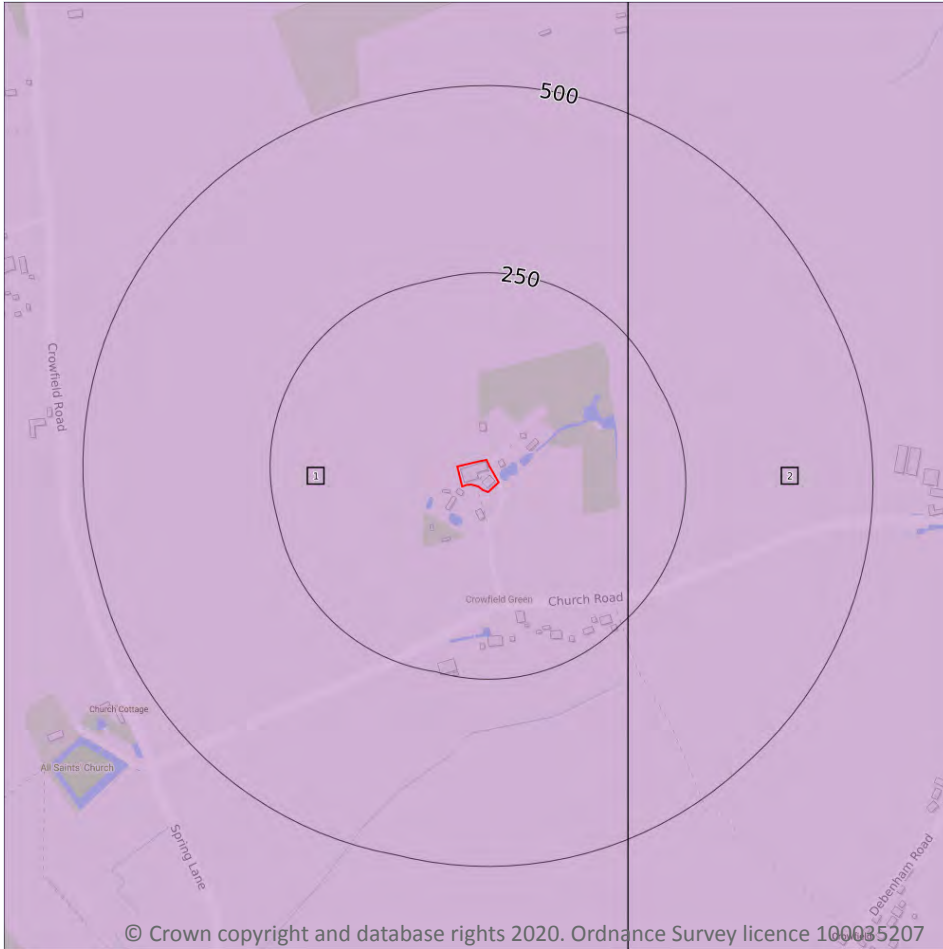
Features are displayed on the Hydrogeology map on **page 26**

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	173m E	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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



Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

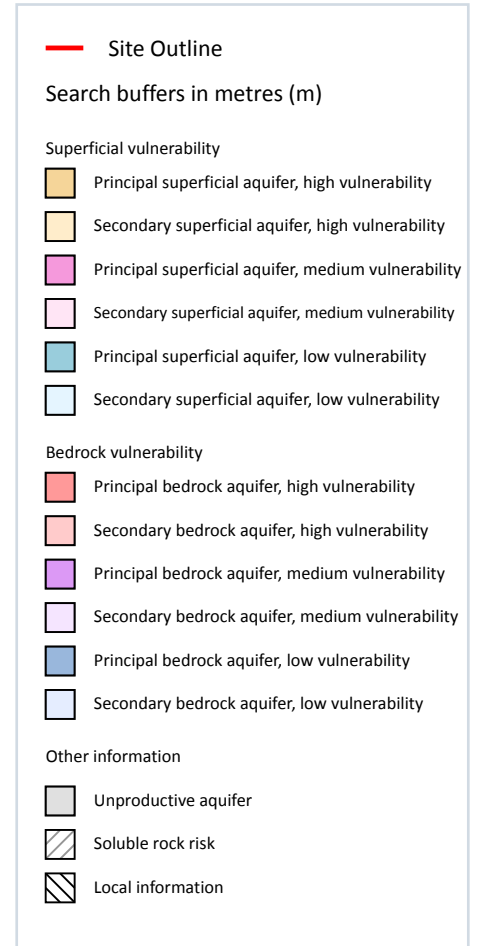
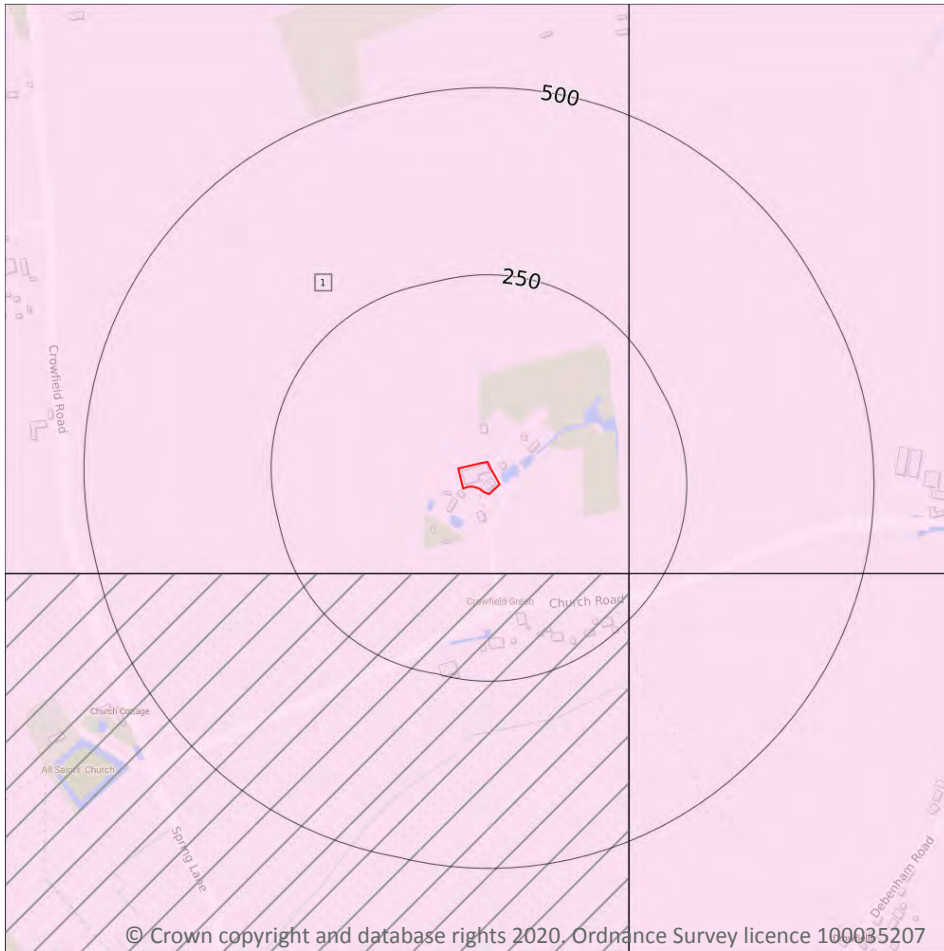
Features are displayed on the Bedrock aquifer map on **page 28**

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	173m E	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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



Groundwater vulnerability



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 30**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	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.

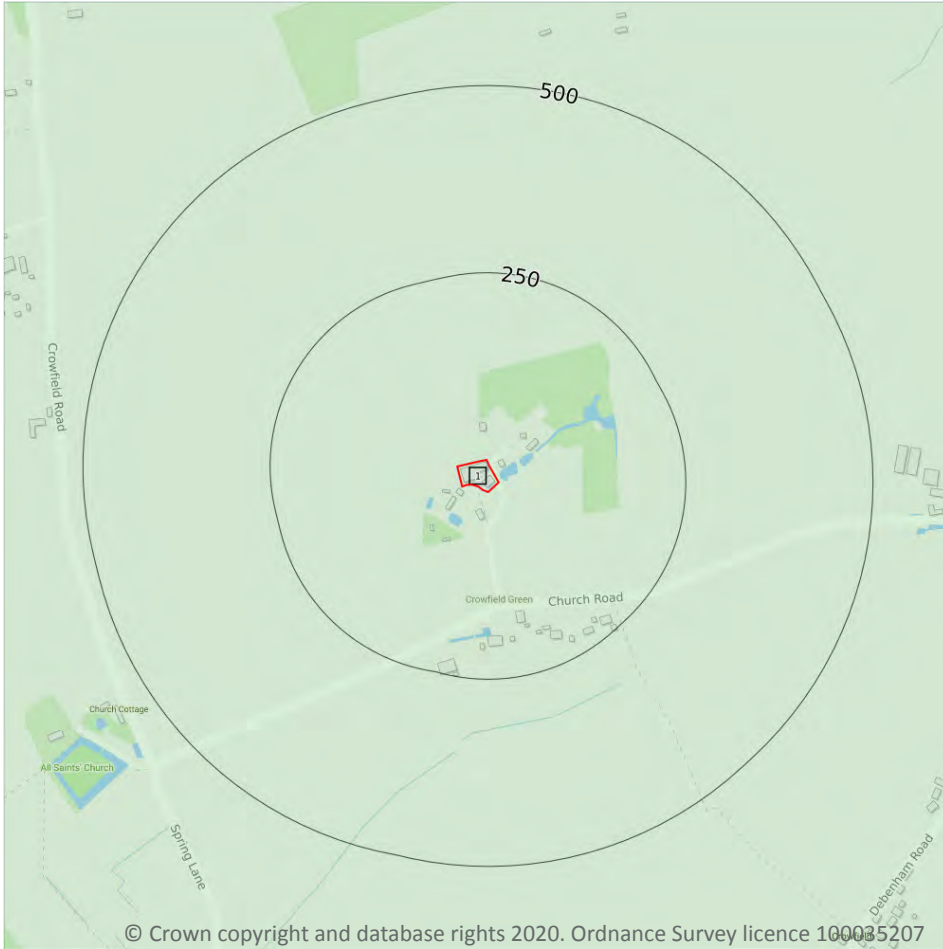
5.5 Groundwater vulnerability- local information

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

5

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 32**

ID	Location	Details	
-	1047m NW	Status: Historical Licence No: 7/35/08/*G/0228 Details: Make-Up Or Top Up Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT GREEN FARM STONHAM ASPAL Data Type: Point Name: Starglade Suffolk Limited Easting: 614270 Northing: 259060	Annual Volume (m ³): 20000 Max Daily Volume (m ³): 340 Original Application No: - Original Start Date: 17/12/2003 Expiry Date: 31/03/2014 Issue No: 4 Version Start Date: 17/01/2012 Version End Date: -
-	1047m NW	Status: Active Licence No: 7/35/08/*G/0228/R01 Details: Make-Up Or Top Up Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT GREEN FARM STONHAM ASPAL Data Type: Point Name: Starglade Suffolk Limited Easting: 614270 Northing: 259060	Annual Volume (m ³): 20,000 Max Daily Volume (m ³): 340 Original Application No: - Original Start Date: 01/04/2014 Expiry Date: 31/03/2026 Issue No: 1 Version Start Date: 01/04/2014 Version End Date: -
-	1208m SW	Status: Historical Licence No: 7/35/08/*G/0061 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT CROWFIELD HALL,CROWF'D Data Type: Point Name: WILLIAMSON Easting: 613710 Northing: 257550	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1966 Version End Date: -
-	1924m N	Status: Historical Licence No: 7/35/06/*G/0102 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT STONHAM ASPAL Data Type: Point Name: HEMINGSTONE FRUIT FARMS Easting: 615300 Northing: 260010	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/01/1992 Expiry Date: 30/09/2001 Issue No: 101 Version Start Date: 01/08/2000 Version End Date: -
-	1924m N	Status: Historical Licence No: 7/35/06/*G/0126 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT STONHAM ASPAL Data Type: Point Name: TURNBULL Easting: 615300 Northing: 260010	Annual Volume (m ³): 5000 Max Daily Volume (m ³): 60 Original Application No: - Original Start Date: 18/01/2002 Expiry Date: 30/09/2014 Issue No: 4 Version Start Date: 01/04/2008 Version End Date: -

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



5.7 Surface water abstractions

Records within 2000m **0**

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

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

5.8 Potable abstractions

Records within 2000m **0**

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

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

5.9 Source Protection Zones

Records within 500m **1**

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on **page 32**

ID	Location	Type	Description
1	On site	3	Total catchment

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

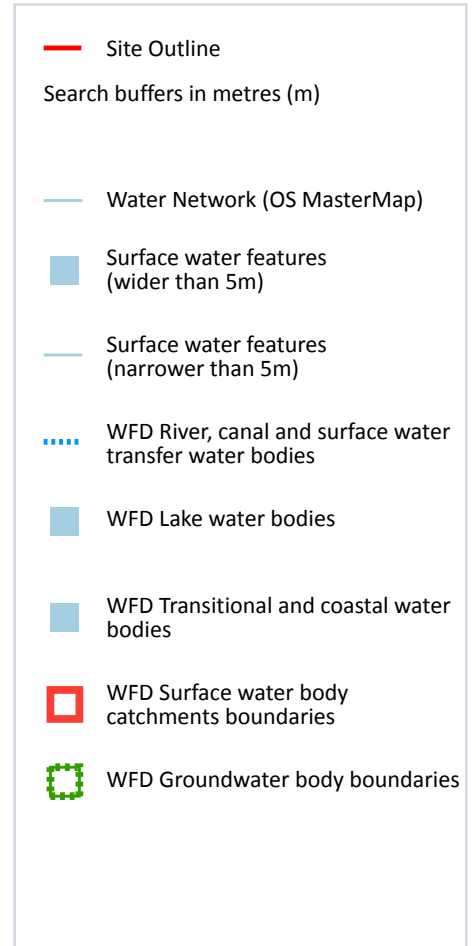
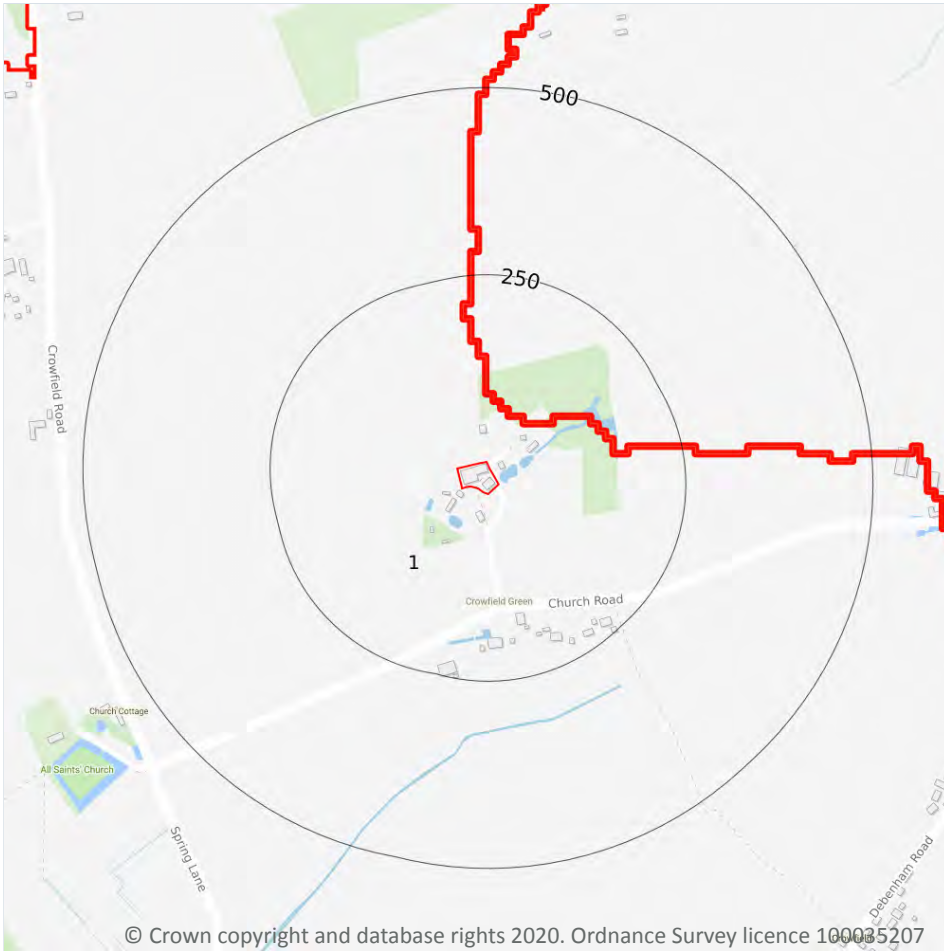
5.10 Source Protection Zones (confined aquifer)

Records within 500m **0**

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

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

6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m

0

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

7

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 WB catchment	Coddenham Watercourse	GB105035046100	Gipping	East Suffolk

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
-	3890m S	River	Coddenham Watercourse	GB105035046100	Moderate	Good	Moderate	2016

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

6.5 WFD Groundwater bodies

Records on site	1
------------------------	----------

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

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

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Waveney and East Suffolk Chalk & Crag	<u>GB40501G400600</u>	Poor	Poor	Poor	2015

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 Sea (RoFRaS)

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

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

7.2 Historical Flood Events

Records within 250m

0

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

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

7.3 Flood Defences

Records within 250m

0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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



7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

0

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

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



8 Surface water flooding

8.1 Surface water flooding

Highest risk on site

Negligible

Highest risk within 50m

Negligible

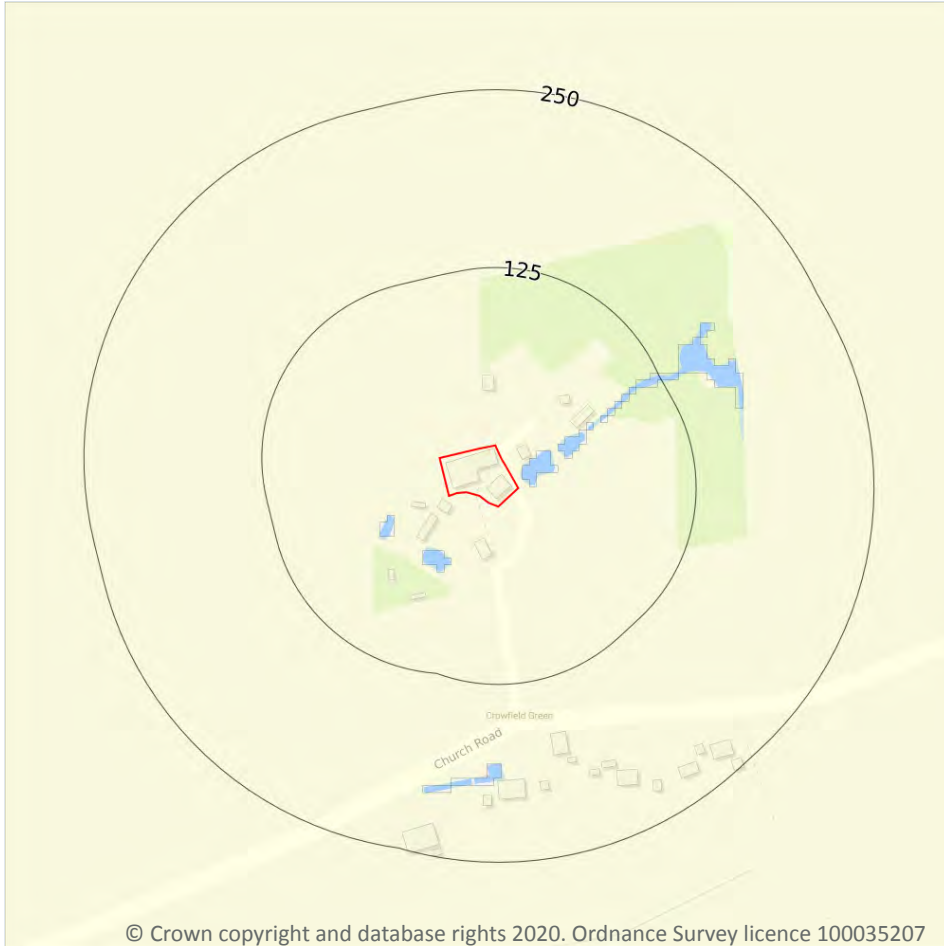
Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year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

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Moderate

Highest risk within 50m

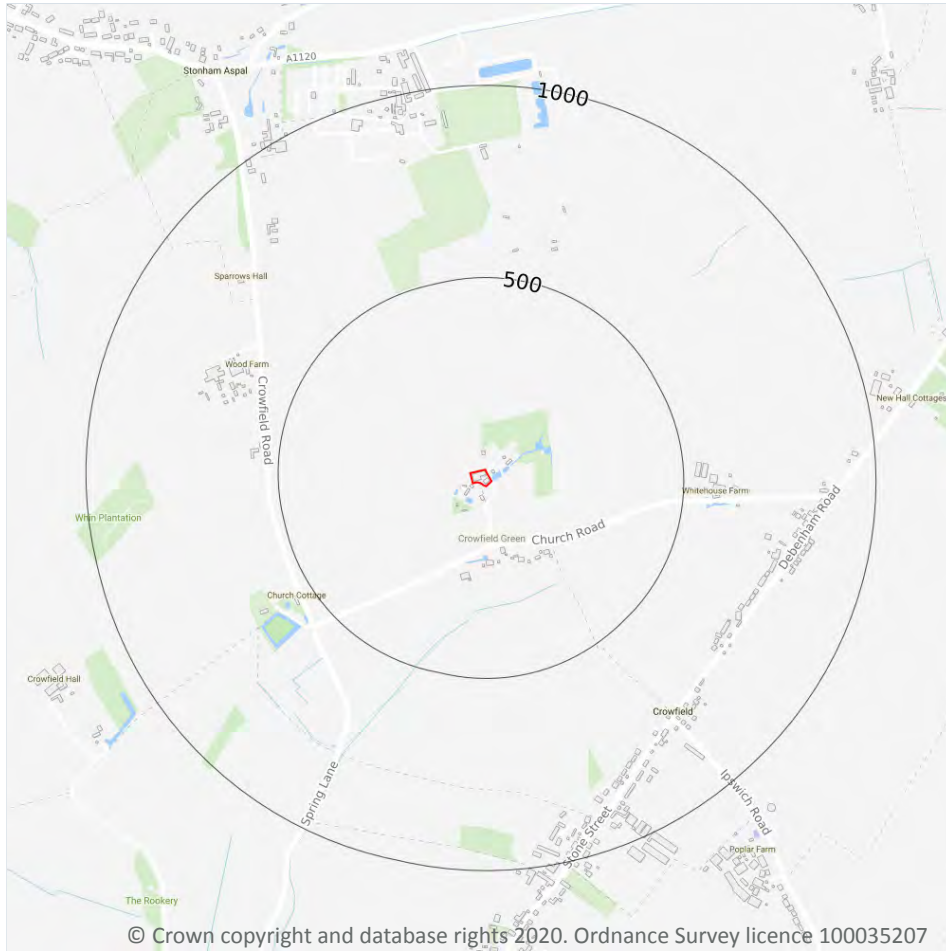
Moderate

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 42**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

1

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

Features are displayed on the Environmental designations map on **page 43**

ID	Location	Name	Data source
-	1935m S	Gosbeck Wood	Natural England



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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m

0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m

0

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

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



10.6 Local Nature Reserves (LNR)

Records within 2000m

0

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

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

10.7 Designated Ancient Woodland

Records within 2000m

2

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 43**

ID	Location	Name	Woodland Type
-	1614m SW	CROWFIELD WOOD	Ancient & Semi-Natural Woodland
-	1935m S	GOSBECK WOOD	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

0

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

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.



10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

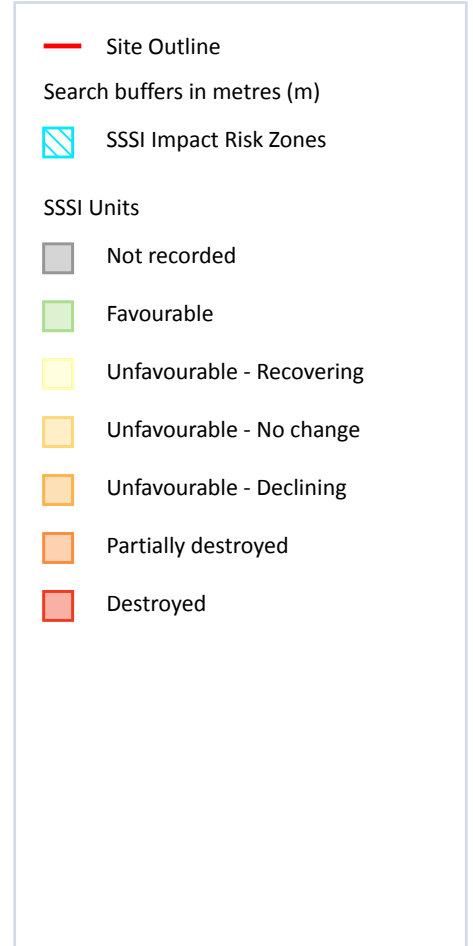
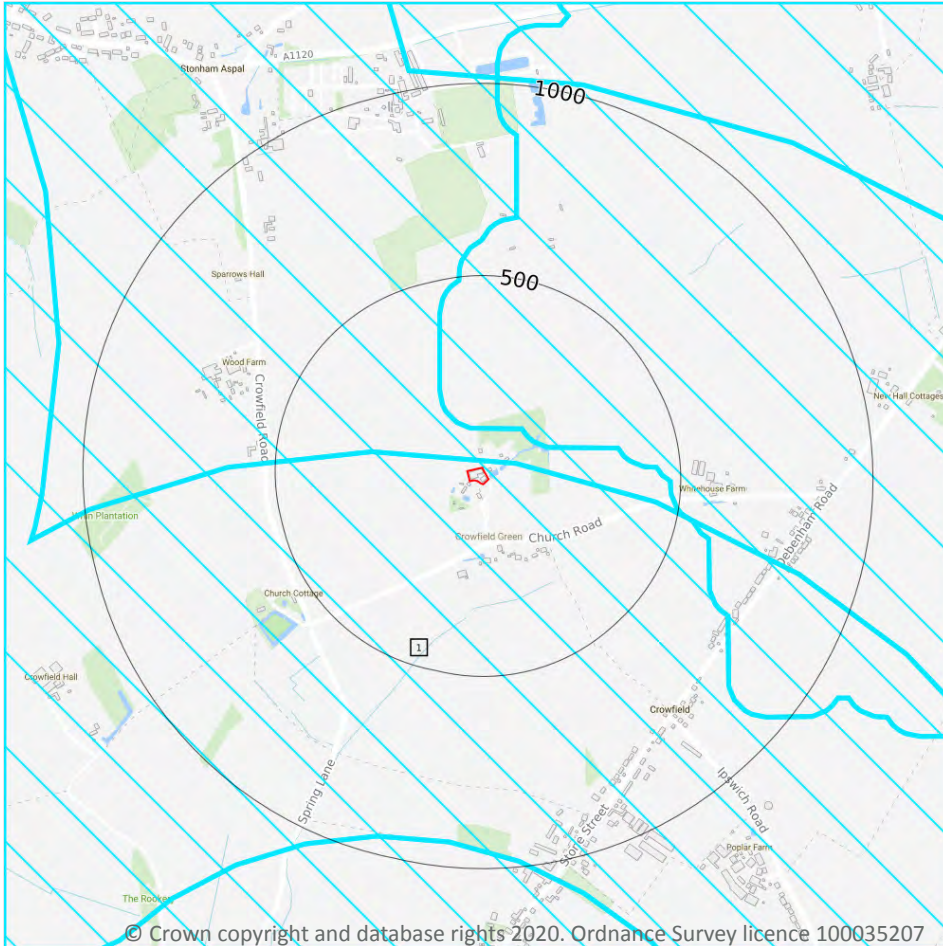
5

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

Location	Name	Type	NVZ ID	Status
On site	River Gipping NVZ	Surface Water	S416	Existing
On site	Sandlings and Chelmsford	Groundwater	G78	Existing
492m NE	Deben NVZ	Surface Water	S419	Existing
680m W	Sandlings and Chelmsford	Groundwater	G78	Existing
680m W	River Gipping NVZ	Surface Water	S416	Existing

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

SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site

1

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

Features are displayed on the SSSI Impact Zones and Units map on **page 48**

ID	Location	Type of developments requiring consultation
1	On site	<p>Infrastructure - Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.</p> <p>Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.</p> <p>Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 200m² & manure stores > 250t).</p> <p>Combustion - General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.</p> <p>Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.</p> <p>Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.</p>

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	1
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Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on **page 48**

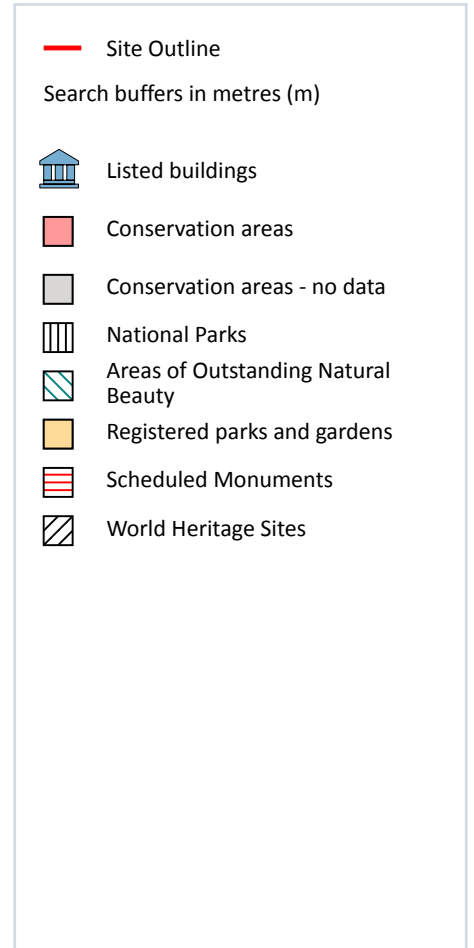
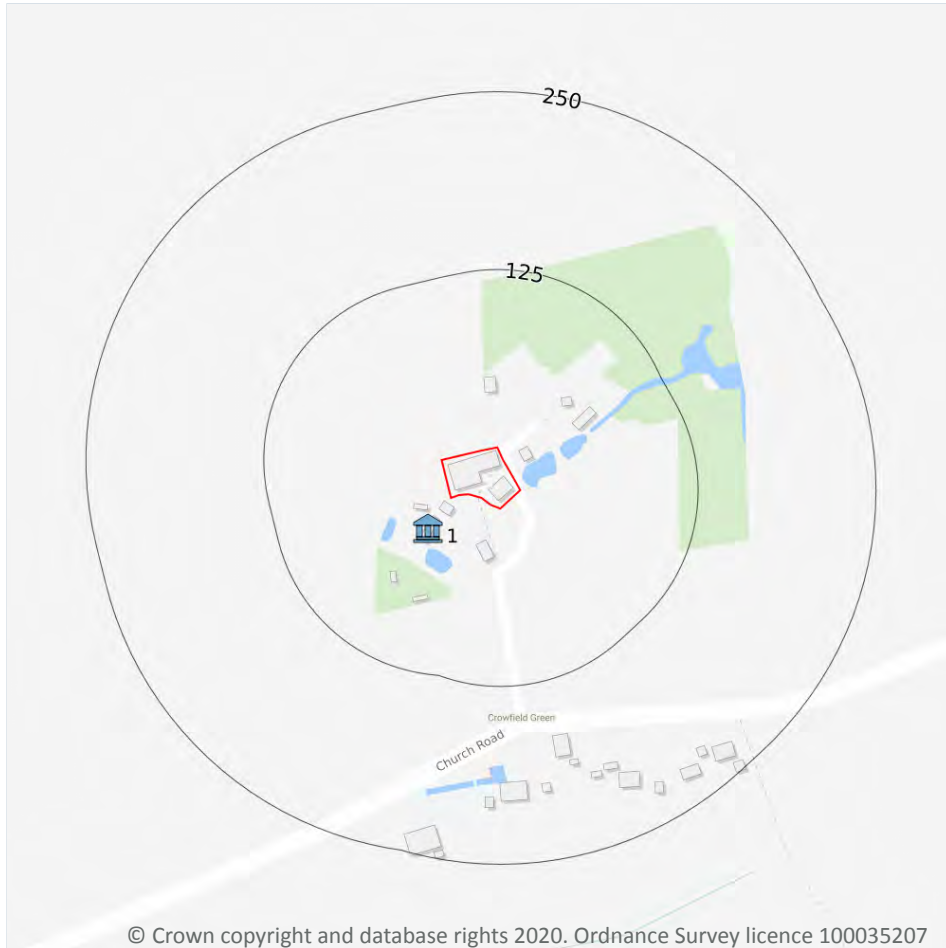
ID: -
 Location: 1935m S
 SSSI name: Gosbeck Wood
 Unit name: Gosbeck Wood
 Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
 Condition: Unfavourable - Declining
 Reportable features:

Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Unfavourable - Declining	22/12/2009

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



11 Visual and cultural designations



11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

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

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

11.3 National Parks

Records within 250m

0

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

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

11.4 Listed Buildings

Records within 250m

1

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

Features are displayed on the Visual and cultural designations map on **page 50**

ID	Location	Name	Grade	Reference Number	Listed date
1	27m SW	Brook Hall, Crowfield, Mid Suffolk, Suffolk, IP6	II	1033085	22/09/1987

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

11.7 Registered Parks and Gardens

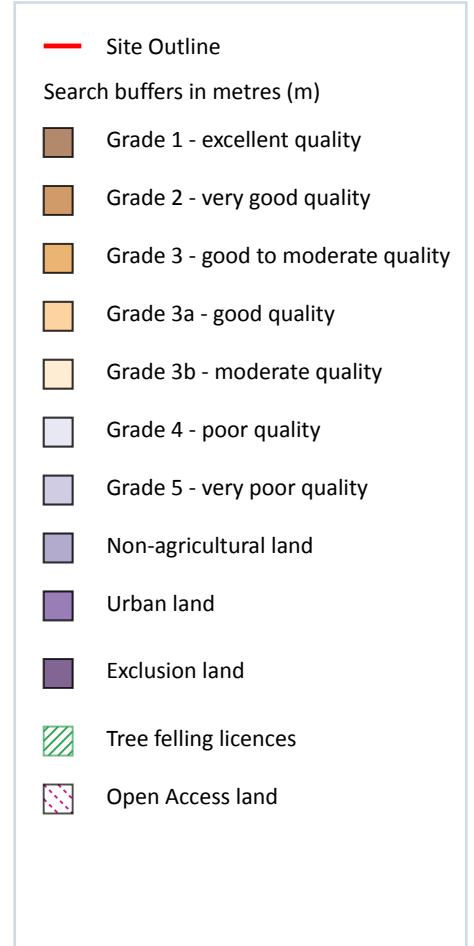
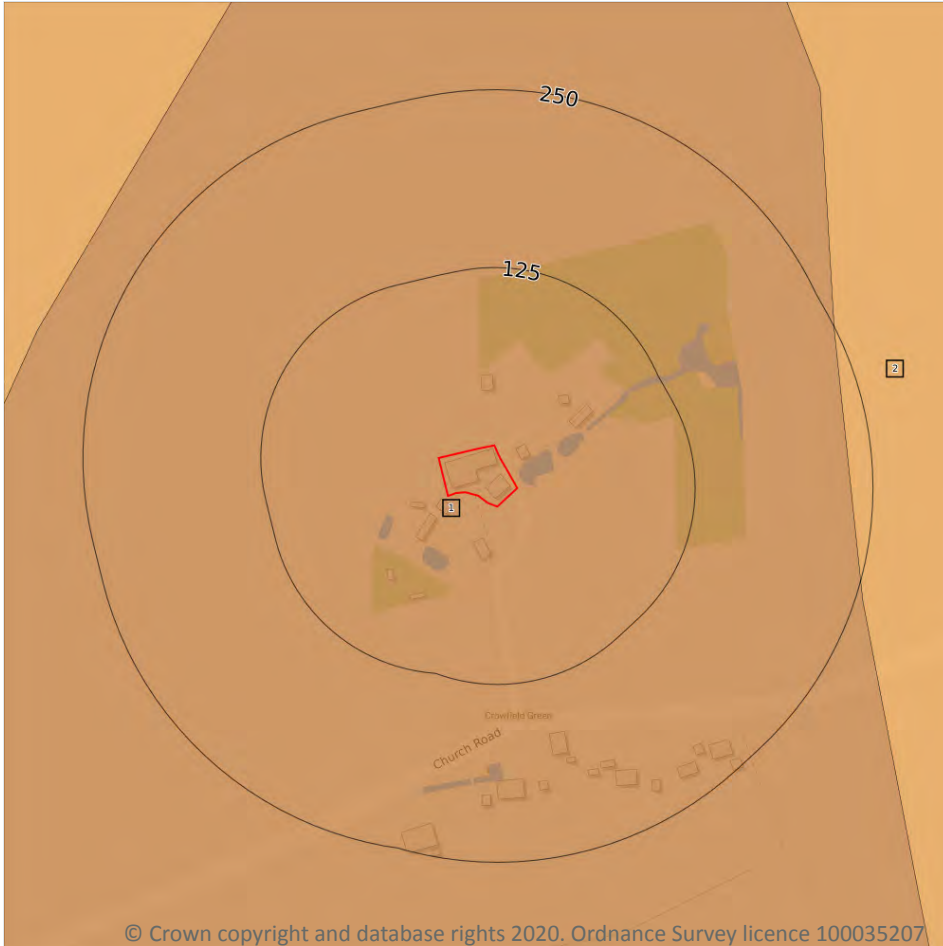
Records within 250m

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 English Heritage, Cadw and Historic Environment Scotland.

12 Agricultural designations



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 53**

ID	Location	Classification	Description
1	On site	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
2	233m E	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

0

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

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

12.3 Tree Felling Licences

Records within 250m

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.

This data is sourced from Natural England.



12.5 Countryside Stewardship Schemes

Records within 250m**2**

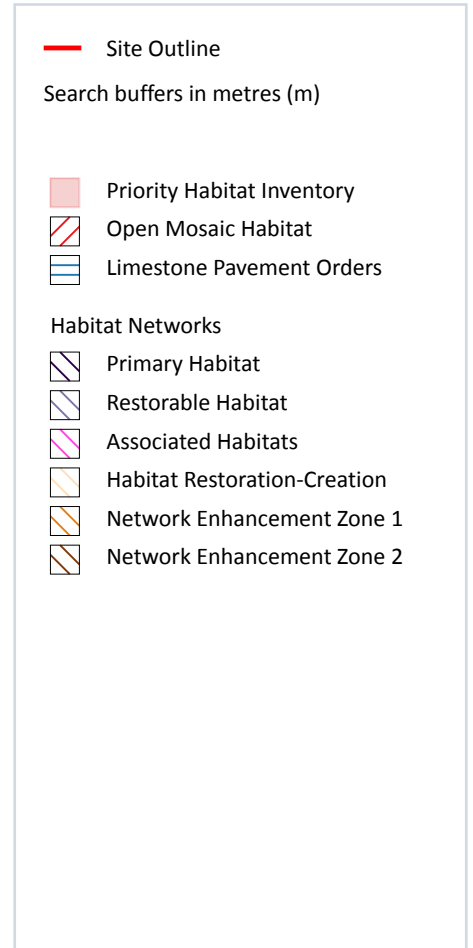
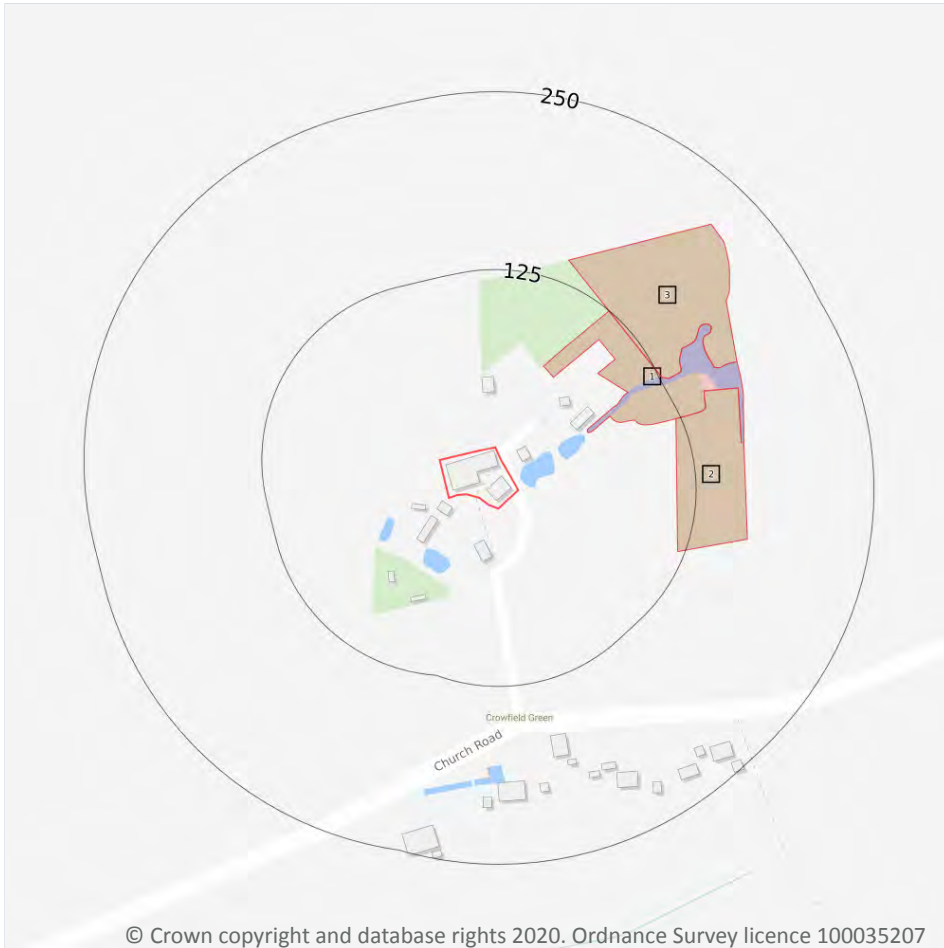
Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
17m NE	632778	Countryside Stewardship (Middle Tier)	01/01/2017	31/12/2021
17m NE	330231	Countryside Stewardship (Middle Tier)	01/01/2017	31/12/2021

This data is sourced from Natural England.



13 Habitat designations



13.1 Priority Habitat Inventory

Records within 250m

3

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

Features are displayed on the Habitat designations map on **page 56**

ID	Location	Main Habitat	Other habitats
1	63m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	111m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	122m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

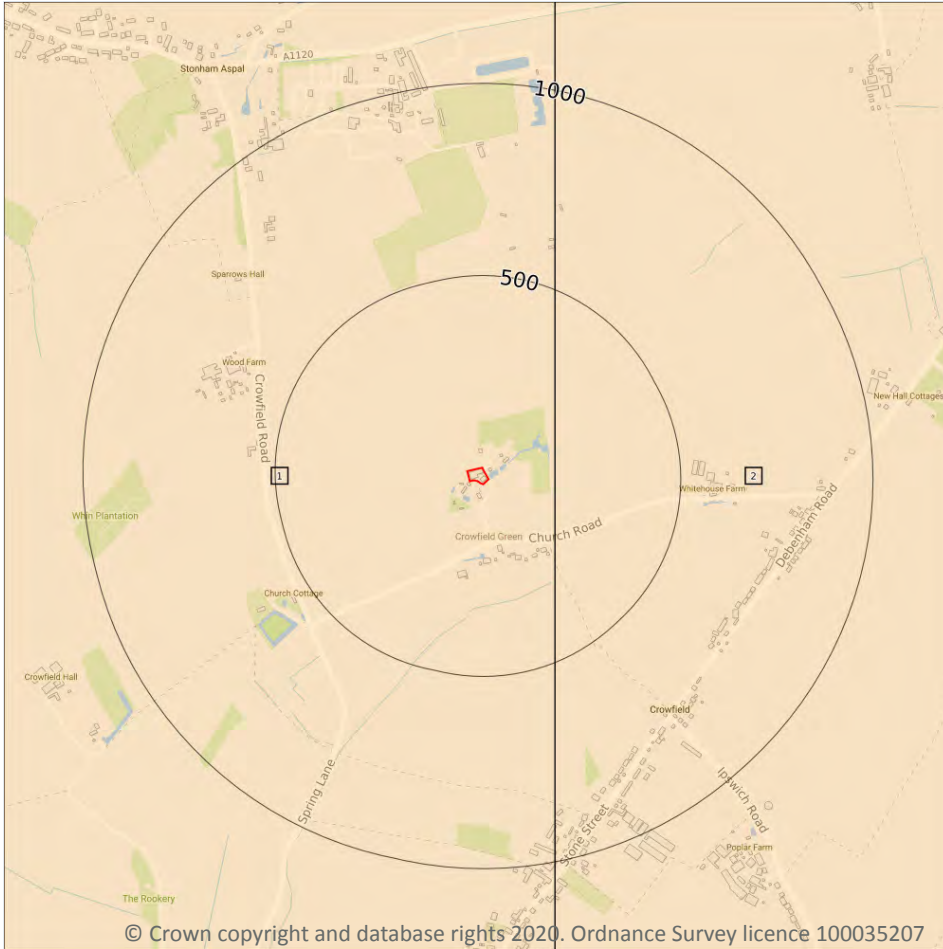
0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
 Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

2

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

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 58**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Partial	Partial	No coverage	TM15NW
2	173m E	No coverage	Partial	Partial	No coverage	TM15NE

This data is sourced from the British Geological Survey.



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

14.2 Artificial and made ground (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

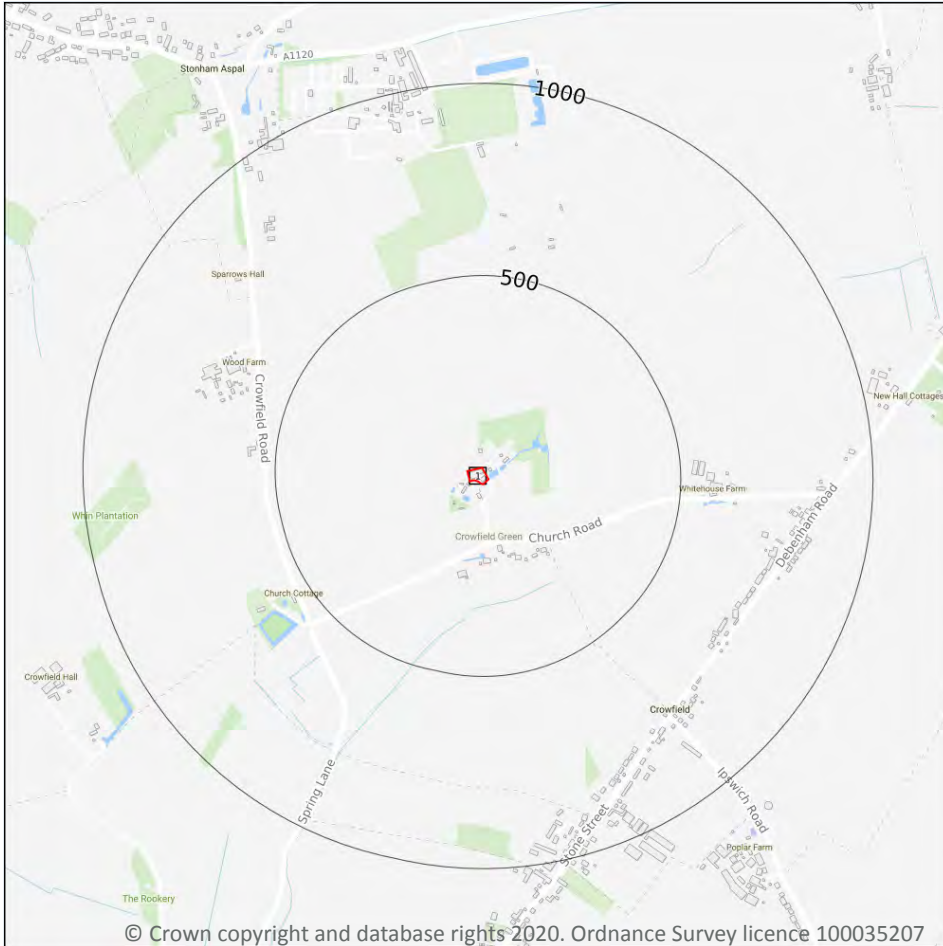
0

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

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



- Site Outline
- Search buffers in metres (m)
- Geological map tile

15.1 50k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 62**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	EW190_eye_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

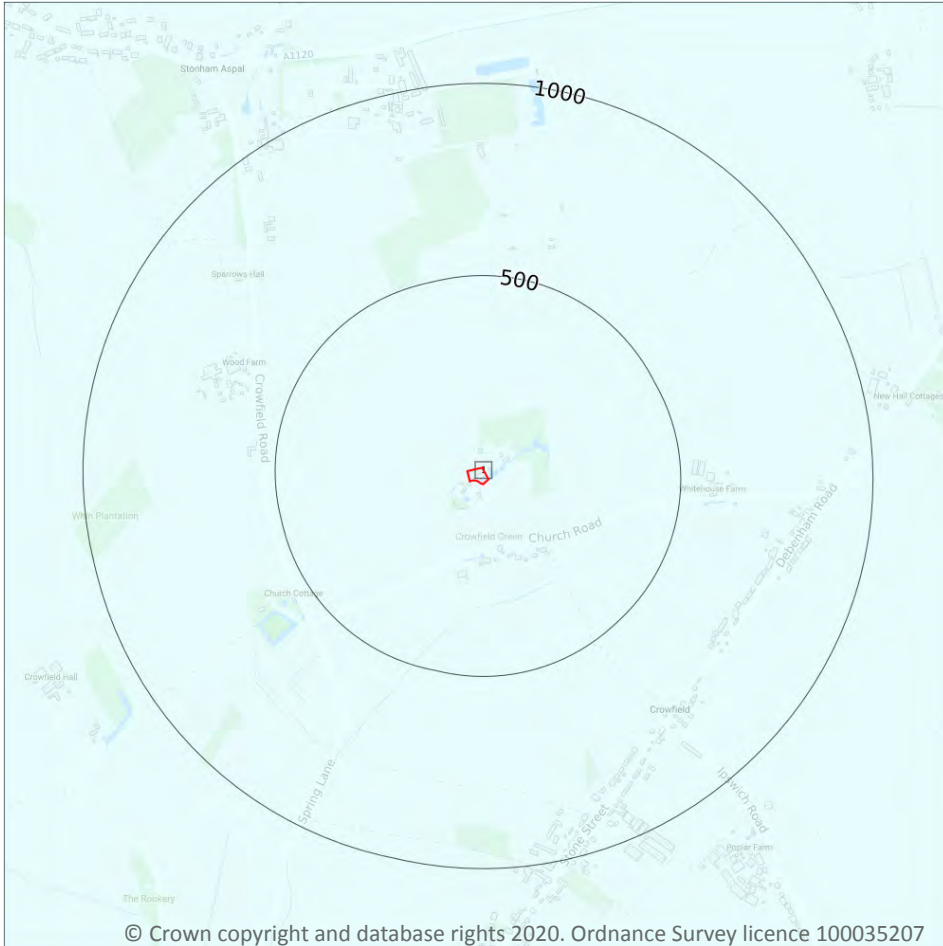
Records within 50m

0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



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

15.4 Superficial geology (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 64**

ID	Location	LEX Code	Description	Rock description
1	On site	LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m **1**

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

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m **0**

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

This data is sourced from the British Geological Survey.

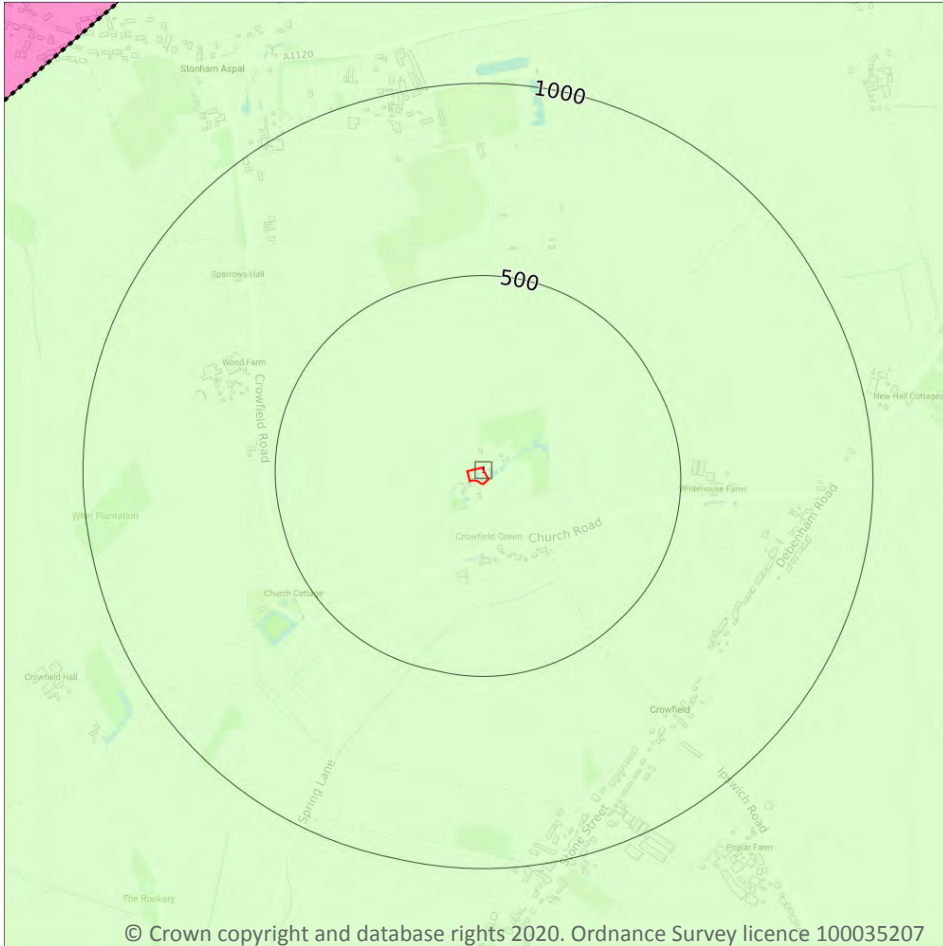
15.7 Landslip permeability (50k)

Records within 50m **0**

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (50k)
- Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

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 66**

ID	Location	LEX Code	Description	Rock age
1	On site	LCCK-CHLK	LEWES NODULAR CHALK FORMATION, SEAFORD CHALK FORMATION, NEWHAVEN CHALK FORMATION AND CULVER CHALK FORMATION (UNDIFFERENTIATED) - CHALK	TURONIAN

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	Very High	Very High

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

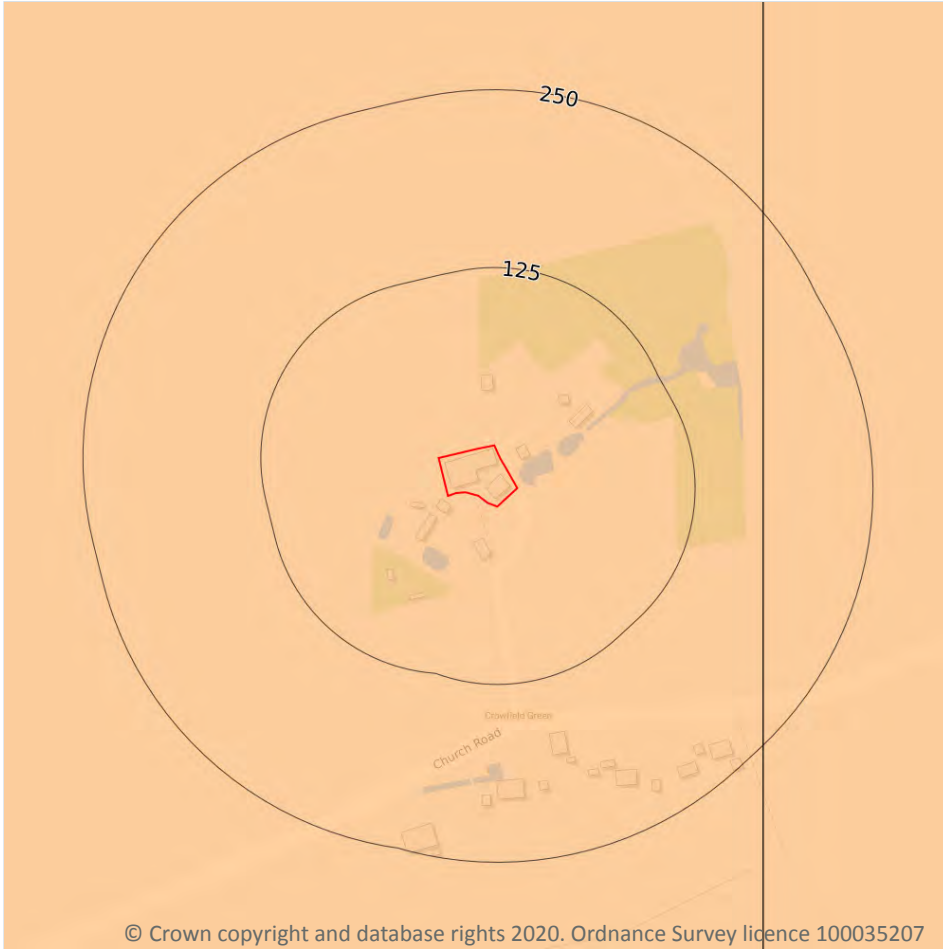
0

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



17.1 Shrink swell clays

Records within 50m

1

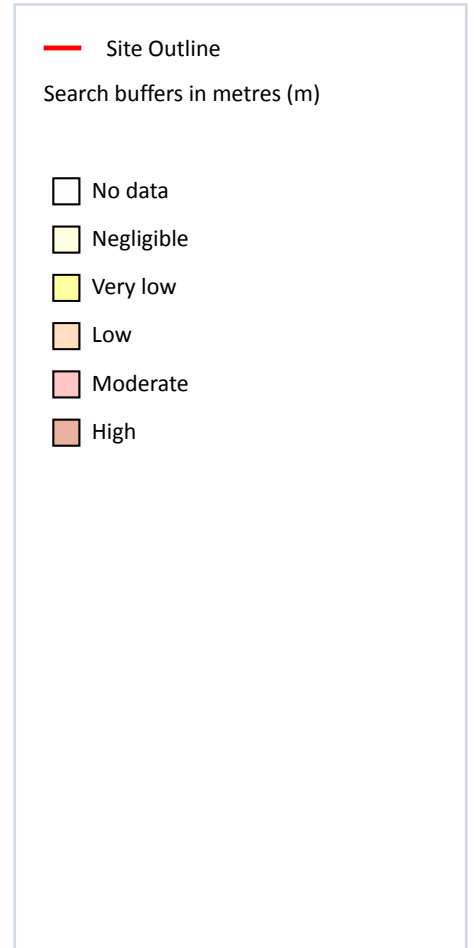
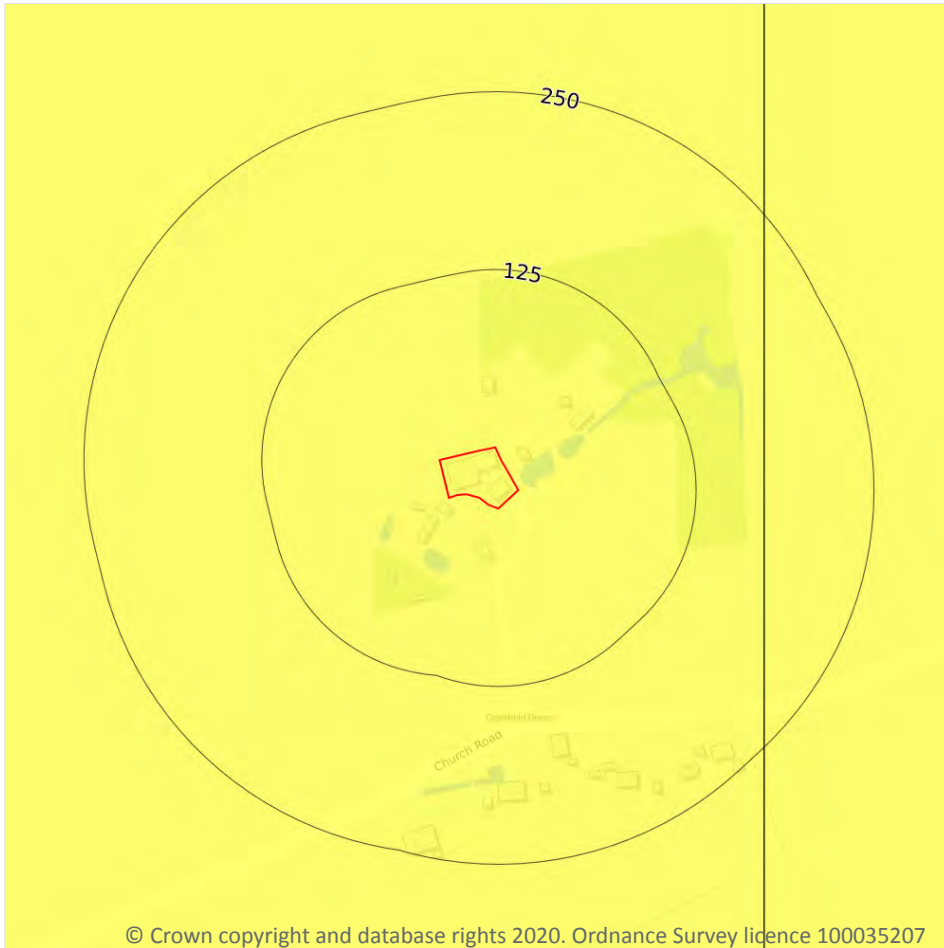
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 69**

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



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17.2 Running sands

Records within 50m

1

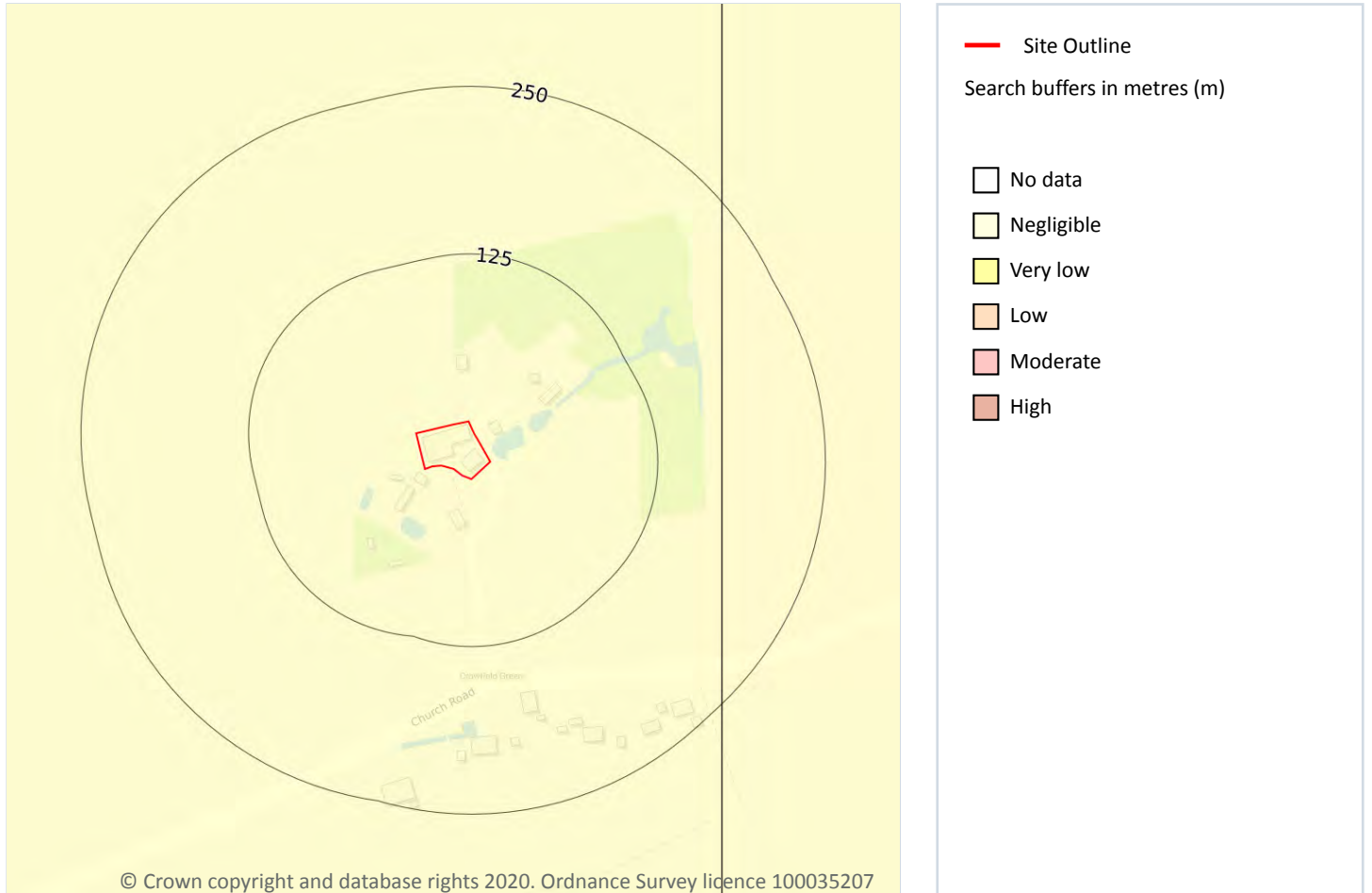
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 70**

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

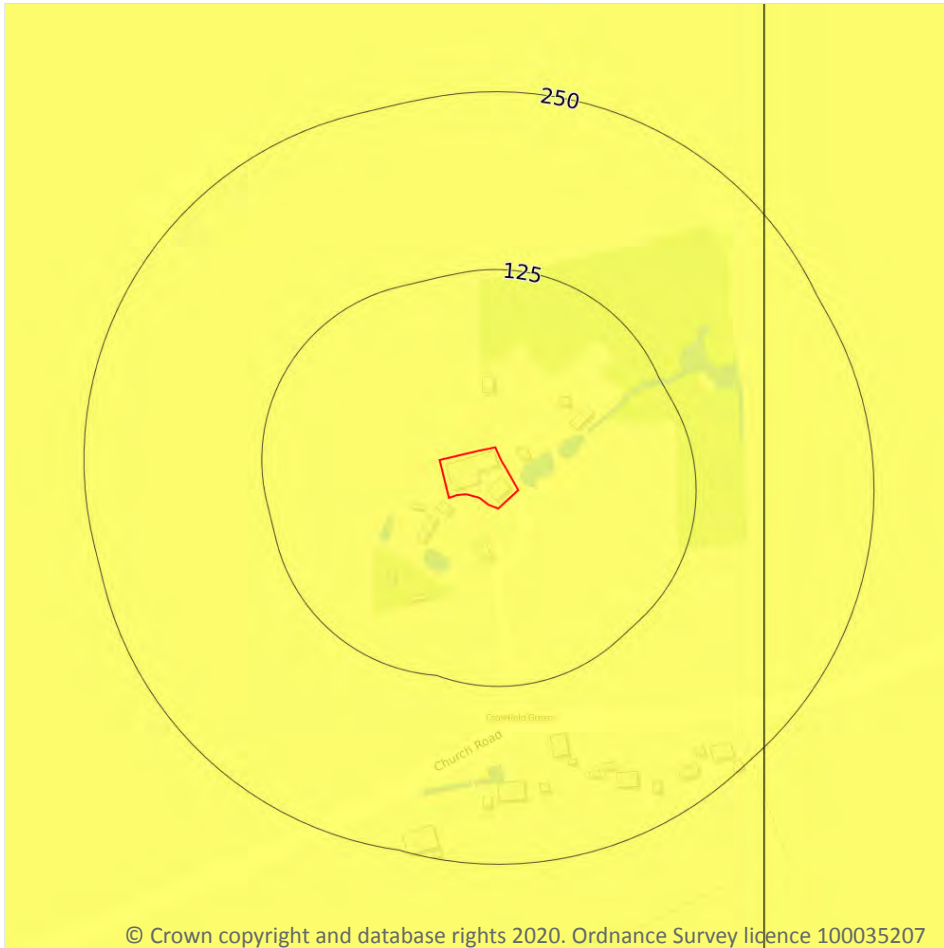
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 71**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

1

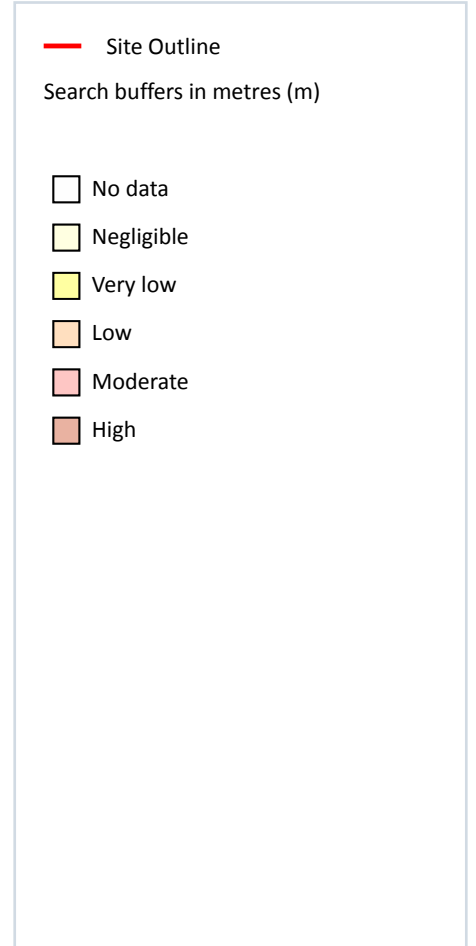
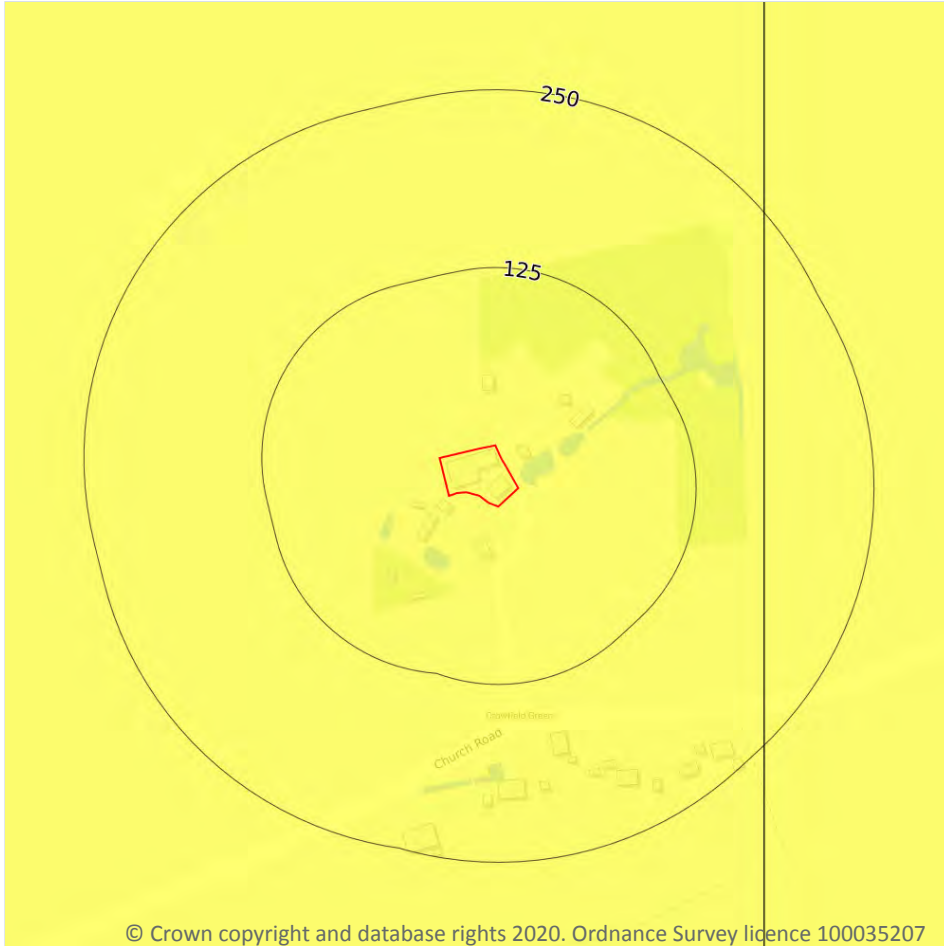
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 72**

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

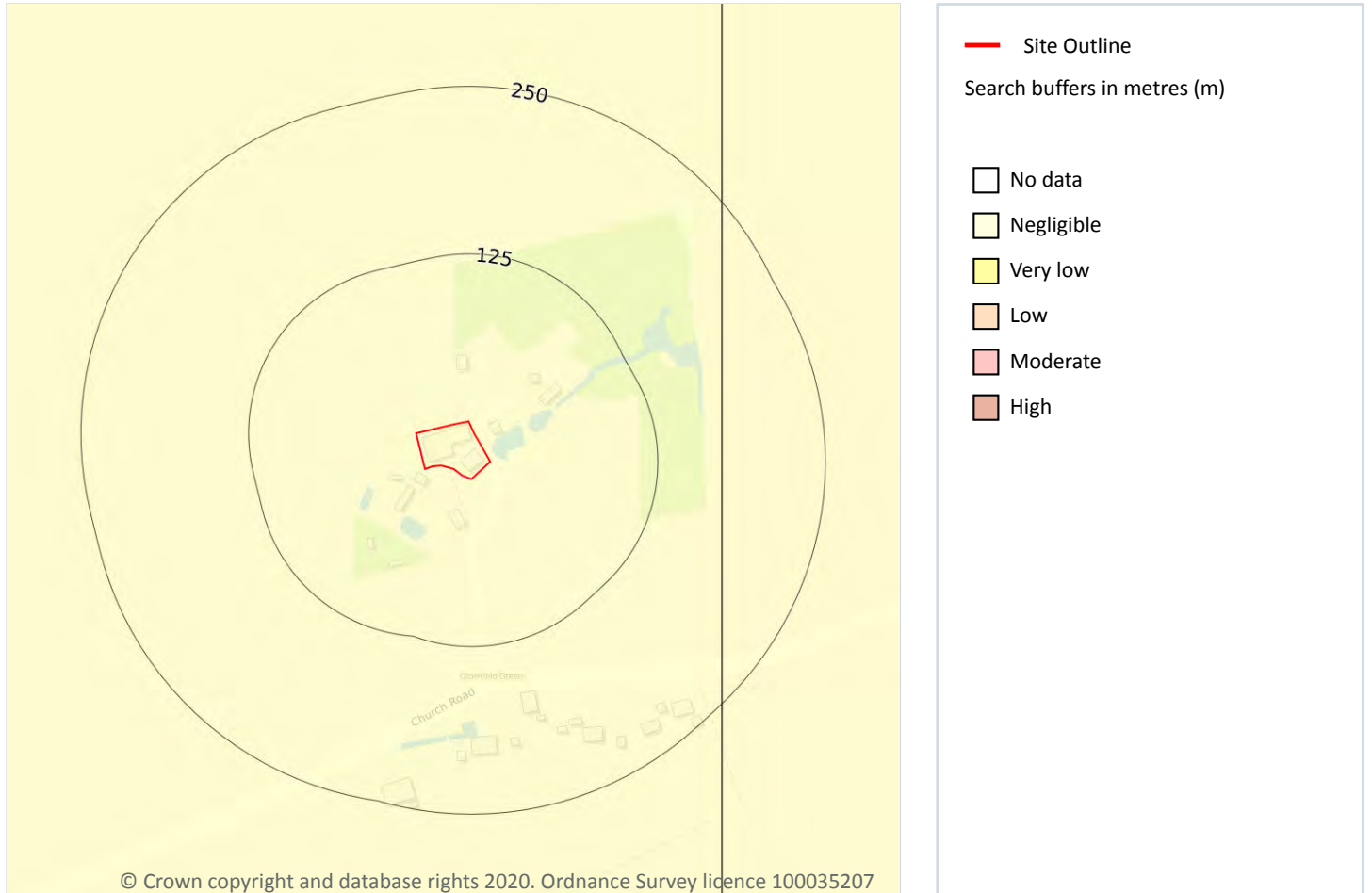
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

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

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

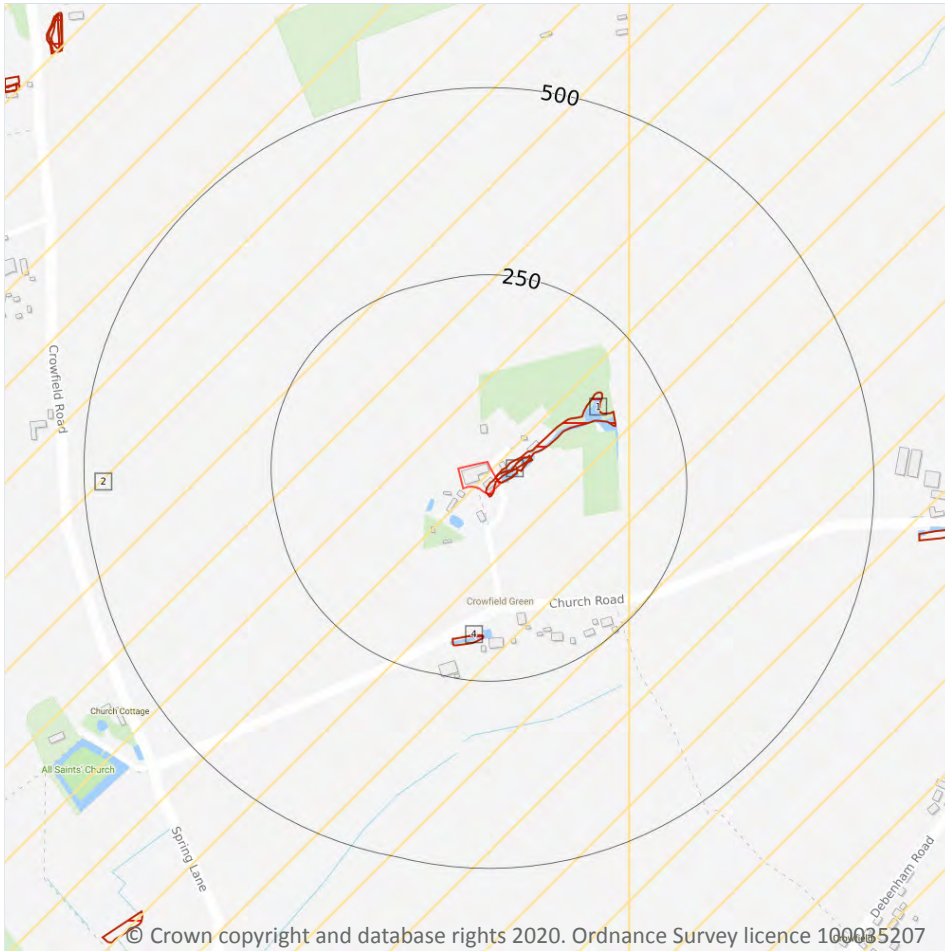
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 74**

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



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 Peter Brett Associates (PBA).

18.2 BritPits

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

4

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 75**

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Ponds	1977	1:10000
A	On site	Ponds	1905	1:10560
A	On site	Ponds	1883	1:10560
4	189m S	Pond	1977	1:10000

This 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 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

2

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 75**

ID	Location	Name	Commodity	Class	Likelihood
2	On site	Not available	Chalk	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
3	173m E	Not available	Chalk	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and 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 Peter Brett Associates (PBA).

18.8 JPB mining areas

Records on site

0

Areas which could be affected by former coal 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
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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
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Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

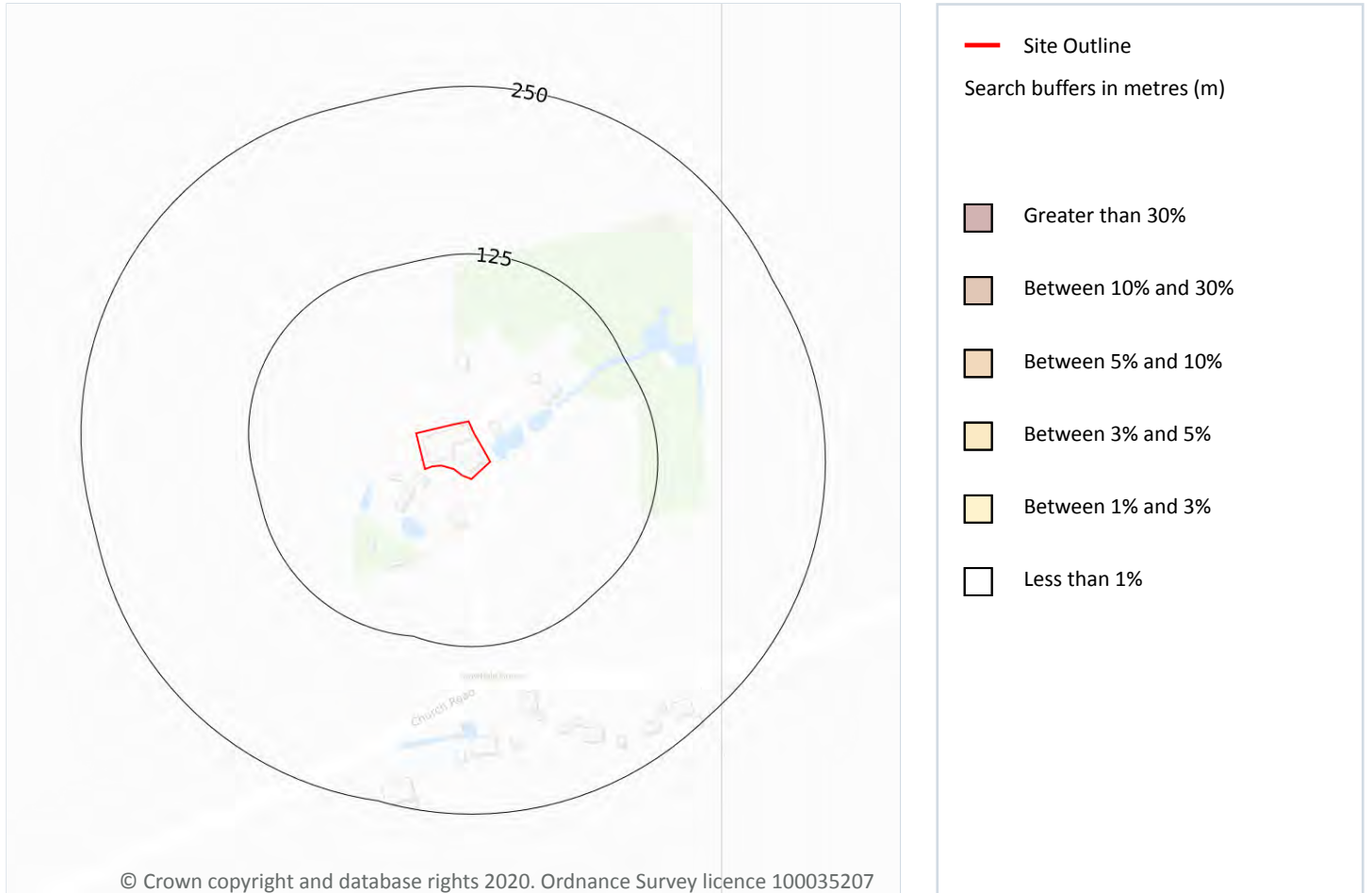
18.13 Clay mining

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



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 79**

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

1

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	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 km²).

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 km².

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
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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
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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
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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
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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
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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>.

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