MEC Consulting Group

GEO ENVIRONMENTAL

Chalk Road, Higham
Phase I Geo-Environmental Desk Study
August 2025

Report Ref: 29524-GEO-0401 Rev A

Chalk Road, Higham
Phase I Geo-Environmental Desk Study
August 2025

REPORT REF: 29524-GEO-0401 Rev A

CLIENT: Richborough

ENGINEER: MEC Consulting Group Ltd
The Old Chapel
Station Road
Hugglescote
Leicestershire
LE67 2GB

Tel: 01530 264 753
Email: group@m-ec.co.uk

REGISTRATION OF AMENDMENTS

Date	Rev	Comment	Prepared By	Checked By	Approved By
July 2025	-	First issue	**Jimesh Mistry** **MSci MSc FGS** Geo-Environmental Engineer	**Andrew Lamont** **BSc (Hons) FGS** Senior Geo-Environmental Engineer	**David Torrance** **BSc (Hons) CGeol FGS** Director
August 2025	A	Updated layout plan	**Alexander Bennett** BSc (Hons) MCIHT MTPS Managing Director		

CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 MEC Consulting Group Ltd (MEC), has been commissioned by Richborough (hereafter referred to as 'the Client') to undertake a Phase I geo-environmental desk study for a proposed residential development at Chalk Road, Higham (hereafter referred to as 'the Site'). A site location plan is provided in **Appendix A.**

Development Proposals

1.2 The development proposals comprise;

Outline application for the demolition of existing buildings and erection up to 40 residential dwellings, public open space and associated works. Approval is sought for the principal means of vehicular access from Chalk Road and all other matters are reserved.

1.3 An illustrative development framework plan is provided in **Appendix A**.

Objectives

1.4 The objectives of this investigation are:

- To establish historical activities, both on site and within the surrounding area, which may have impacted the site environment;
- To characterise the environmental setting of the site, identify migration pathways and receptors vulnerable to contamination;
- To summarise the risks relating to Unexploded Ordnance (UXO)
- To determine soil infiltration rates for soakaway design;
- To assess potential environmental liabilities associated with the site;
- To develop a preliminary Conceptual Site Model (CSM); and
- To determine preliminary geotechnical considerations.

1.5 This report has been commissioned to support a planning application for the proposed development.

1.6 This desk study has been completed according to the general principles of BS5930:2015 (+A1:2020) 'Code of Practice for Site Investigations', BS10175:2011 (+A2:2017) 'Investigation of Potentially Contaminated Sites, Code of Practice and Environment Agency 'Land Contamination: Risk Management (LC:RM). Soil infiltration rate testing has been undertaken in general accordance with BRE Digest 365.

Sources of Information

1.7 The following sources of information have been referenced to inform the contents of this report:

- Site walkover observations (Photographs provided in **Appendix B**):
- Historical Ordnance Survey Mapping (**Appendix C);**

- Environmental database report including but not restricted to the following data: environmental and hydrological, waste, hazardous substances register, geological, industrial and sensitive land uses and pollution incidents (**Appendix D**);
- British Geological Survey (BGS) online GeoIndex and borehole logs;
- Kent Minerals and Waste Local Plan 2024-2039,
- Environment Agency website (www.environment-agency.gov.uk);
- MAGIC maps (www.magic.defra.gov.uk);
- UXO Risk Mapping (https://zeticauxo.com);
- Preliminary UXO risk assessment Ref: PA21697-00 dated 21st March 2025 (**Appendix E**); and
- Soil infiltration calculations Ref: 29524-CALC-0401 (**Appendix F**).

1.8 Reference has also been made to a topographical survey drawing produced by MEC, Ref: 29524_06_170_01.

Limitations

1.9 MEC has completed this report for the benefit of the Client and any relevant statutory authority which may require reference in relation to approvals for the proposed development. Other third parties should not use or rely upon the contents of this report unless explicit written approval has been gained from MEC.

1.10 MEC cannot accept responsibility or liability for:

a) The consequence of this documentation being used for any purpose or project other than that for which it was commissioned; and
b) The issue of this document to any third party with whom approval for use has not been agreed.

1.11 This report should be read in its entirety, including all associated drawings and appendices. MEC cannot be held responsible for any misinterpretations arising from the use of extracts of this report that are taken out of context. The findings and opinions conveyed are based on information obtained from a variety of external sources, as detailed in Section 1.6 above, which MEC believes are reliable. All reasonable care and skill have been applied in examining the information obtained, nevertheless, MEC cannot and does not guarantee the authenticity or reliability of the information relied upon from external sources.

1.12 Should additional information become available which may affect the opinions expressed in this report, MEC reserves the right to review this information and, if warranted, to modify the opinions presented in the report accordingly.

1.13 It should be noted that the risks identified in this report are perceived based on the available information at the time of writing.

2.0 SITE SETTING AND DESCRIPTION

Site and Setting The following details are based on observations made at the time of the site walkover which was completed on 09th April 2025. Reference is made to the photographic record in **Appendix B**.	
Site Address	Chalk Road, Higham, ME3 7JY
National Grid Coordinates	571133, 173000
Site Description	The site comprises an irregular shaped parcel of land occupied by a farmyard and associated fields covering an approximate area of approximately 1.56 ha. The site is located to the north of Chalk Road (Photos 1 and 2), in the north-west of the village of Higham in Kent. Topographically, the site slopes gently down from south to north by approximately 3.50m. Three barn structures occupy the centre of the site (Photos 3 and 4). Suspected asbestos bound cement cladding and roofing tiles were observed on the central and western barns (Photo 5). Anecdotal information indicates that the barns are used for wooden staircase manufacturing and equestrian equipment storage. A smaller metal framed barn (Photo 6), a further small building, storage containers, canopied storage area, and an empty IBC (Photo 7) are located on the south-western boundary. The small building was noted to have suspected asbestos bound cement tiles within roofing material. Storage containers and waste skips were observed in the central yard and adjacent to the west of the central buildings (Photos 8, 9, and 10) The site is accessed via a private road located off Chalk Road (Photo 11). The access road crosses the farmyard to the east of the central buildings (Photos 12 and 13) and loops around the central barn structures (Photo 14). The north of site is accessible from a gravel track through a gated entrance (Photo 15) which continues from the eastern access road and leads to an area of gravel hardstanding (Photo 16). Anecdotal information indicates that this hardstanding was placed for use as a site compound for welfare and storage associated with construction works for a nearby road. Soil stockpiles and an area of burnt ground were observed in the northern area (Photos 17 and 18), and additional storage containers, a caravan and parked vehicles were noted in the north-east (Photo 19). The south-east, east, and north-east of site comprises several grassed fields, used by poultry, separated by low wooden fencing and hedgerows (Photos 20, 21, 22, and 23). A grassed area is located in the south-west, close to the site entrance (Photo 24). The

	north of the site comprises grassed fields which extend further off-site to the north (Photo 25). Telegraph poles are located in the centre, south, and south-east (Photo 26), connected by overhead telecommunications cables. A pond is located in the north-east (Photo 27). A stockpile of suspected asbestos bound cement roof tiles was observed adjacent to the building in the south-west (Photo 28). A possible borehole with a metal flange cover was noted in the east of the site. Residential properties are located beyond Chalk Road to the south, and additionally to the east. The surrounding area to the north, north-west, and west comprises open undeveloped land. A railway and the Thames and Medway Canal are present to the north-east. A residential property lies adjacent to the south-western boundary with open fields beyond.
Historical Review The site history has been assessed by reviewing 1:1,250, 1: 2,500, 1:10,560, and 1: 10,000 scale historical Ordnance Survey maps included in **Appendix C** and more recent aerial photography. A summary of the salient information relating to the history of the site and surroundings is provided below.	
On-site Historical Summary	The earliest available mapping reviewed dated 1862, indicates that the site comprised several plots of undeveloped land at this time, including an area of woodland in the north and agricultural fields in the east, south and west. Two footpaths were mapped crossing the site from south to north and north-west By the late 1880's, the woodland in the north was no longer recorded and had been replaced locally by an area of marsh. The footpath leading to the north was no longer mapped and the site was recorded as part of a single larger field extending further north-west and south-east. The marsh area in the north was no longer recorded by 1930. The site remained unchanged until the 1950's, by which time a building had been established in the south-west. An additional building was mapped in the centre-south by the 1960's. The site thereafter remained unchanged until the 1990's. Mapping from 1993 and aerial imagery from 1990 indicates that the three barn buildings had been established in the centre, and the site was labelled as Buckland Farm. Aerial imagery from 2003 records the canopied storage area in the west and storage containers were present in the centre and west. The eastern and north-eastern fields had been separated into parcels consistent with the present-day layout. The north of site was part a field that extended further off-site to the north and was used for agricultural purposes. Imagery from 2011 records an elongated structure in the north of site, potentially a greenhouse, which was absent by 2013 although metal framework remained at this time.

	A small stockpile of waste was shown on imagery in the north and the existing pond was evident near the north-eastern corner. The pond was no longer visible by 2014 and may be obscured by vegetation. Further stockpiles were evident directly to the south of the former greenhouse by 2015. From 2018, a graveled compound area with containers and stored materials was evident in the north-east. A manège was located in the area of the former greenhouse and boats were stored in the west. Imagery from 2020 records ground disturbance in the north and additional containers in the north-east. A small building, possibly a stable, had been established adjacent to the manège by 2022 and the compound and the containers in the north-east had been removed. Imagery from 2024 records that the area in the north was used as a compound, including a cabin office, and parking for vehicles. Potential waste materials and stock piles were also shown within this area. The compound, and the building adjacent to the manège, had been removed by 2024.
Off-site Historical Summary	The earliest available mapping reviewed from 1862, indicates that the area surrounding the site predominantly comprised undeveloped open land at this time, with the South Eastern Railway line adjacent to the north-eastern boundary running north-west to south-east, and the Thames and Medway Canal and an associated wharf located beyond. The railway line was located on an embankment near the north-eastern corner of the site. Residential buildings of Haselden Cottages were located beyond Chalk Road to the south. An area of spoil was mapped 105m east and a saw pit was recorded 300m south-east; however, both of these features were no longer mapped by the late 1880's. The surrounding area remained relatively unchanged until the development of additional residential properties to the south and south-east by the 1950's. From the early 1960's, the canal was labelled as disused and mapped as marshland. A nursery had been established 200m east and a building had been constructed adjacent to the railway line to the north-east. A residential dwelling had also been established to the south-east by this time. A petrol filling station was recorded 200m south-east by the late 1970's and this was mapped as a garage by the 1990's. The surrounding area remained relatively unchanged throughout the 1980's. By the early 1990's the nursery to the east was no longer recorded. Progressive residential development had occurred to the south-east, establishing the village of Higham.

3.0 GEOLOGICAL, GEO-ENVIRONMENTAL AND MINING SETTING

Geo-environmental Setting The geological, geo-environmental and mining setting of the site described in the following table is summarised based on information derived from various database and on-line information sources.	
Geology	British Geological Survey (BGS) mapping indicates that superficial Head Deposits encroach into the north-western boundary, but are absent across most of the site. Bedrock of the Thanet Formation, comprising sand, silt, and clay, outcrops across the site and underlies the superficial deposits where present. Thicknesses of topsoil and Made Ground are expected associated with historical agricultural and development activity respectively. A BGS well borehole log is recorded associated with the site. There is some uncertainty regarding the location of this well although it is considered likely to be associated with the borehole noted in the east of the site during the site walkover. The well borehole recorded 1m of Made Ground underlain by 27.7m of the Thanet Formation, comprising grey and green sand, in turn overlying chalk bedrock. A copy of the well borehole log from 1982 is presented in **Appendix D**. This well borehole location is not recorded by historical mapping. MEC completed soil infiltration rate testing in April 2025 at four locations in the north of the site. The results are presented in **Appendix F**. The recorded ground conditions comprised natural and reworked Topsoil, including anthropogenic fragments, overlying brown, orangish brown, and yellowish brown, slightly sandy, slightly gravelly, silty clay of the Thanet Formation to 2.10m bgl. A greyish black clay was recorded at 2.00m bgl in the north-west of the site (SA01).
Natural Ground Subsidence Risk	The natural ground subsidence risk at the site, as identified within the environmental database, is generally negligible to low. The highest risk identified is associated with volume change potential within the clays of the Thanet Formation, although the BGS log suggests the presence of sands within this formation.
Hydrogeology	The Environment Agency (EA) classifies the Head deposits and Thanet Formation as Secondary Aquifers. The deeper lying Chalk bedrock is classified as a Principal Aquifer. The site is not located in a groundwater Source Protection Zone (SPZ) and groundwater abstractions are not recorded within 500m. The site is recorded to be at moderate to high risk of groundwater flooding. The highest risk is in the north, near the pond and lower lying areas. The borehole in the east of the site recorded water levels over an 18-month period at depths ranging between 0.40m and 1.35m below datum. This borehole has a

	screened section within the Chalk bedrock, and groundwater was encountered during drilling at 37.5m and 53.0m below ground level. During formation of the soil infiltration testing pits by MEC in 2025, groundwater seepages were encountered in the north-east, at depths of 1.80m and 2.00m bgl. Based on the above information, it is likely that there is shallow groundwater perched within the Thanet Formation and a deeper confined aquifer in the Chalk bedrock. The site is noted to be at moderate to high risk of groundwater flooding w9ith the highest risk recorded in the north.
Hydrology	A pond is present in the north-east of the site. The nearest off-site surface water feature is the Thames and Medway Canal, located 29m to the north-east. A series of land drains are also recorded beyond the canal. An active surface water abstraction is recorded within 500m, located approximately 110m to the north-west at Kings Farm in Higham, for spray irrigation. The centre, west, and north of the site are recorded to be at variable low to high risk of surface water flooding, with a modelled maximum risk of a 1 in 30-year rainfall event resulting in 0.3m-1.0m of flooding. The south-east is not indicated to be at risk of surface water flooding. Flood Zones 2 and 3 are located in the north of site, associated with the canal. The centre and south are within Flood Zone 1.
Surface Working, Mining and Mineral Extraction	Areas of surface working identified include the raised ground and saw pit recorded by historical mapping, the canal and associated wharf, and cuttings associated with the railway to the south-east. The site is not located within a coal mining reporting area as defined by the Mining Remediation Authority. Mineral extraction is not recorded directly beneath the site or within 250m.
Mineral Safeguarding	The site is not located within a Mineral Safeguarding Area as defined within the Kent Minerals and Waste Local Plan 2024-2039.
Radon	The site is within an area where less than 1% of properties are estimated to be at or above the Radon Action Level. Radon protection measures will therefore not be required for the proposed development.

4.0 REGULATORY INFORMATION

Regulatory Information A summary of pertinent information from the environmental data report relating to permits, consents, authorisations, and landfilling is provided below.	
Current and Historical Industrial Uses	Three records of current industrial land use are referenced within 250m, relating to engineering services operating from one of the buildings on-site, an electrical substation adjacent to the north-eastern boundary, and a vehicle repair, testing, and servicing (garage) 237m south-east. An additional record relates to construction services 211m south-east; however, this is registered to a private residential address and is not considered to represent construction activity. Six records of historical industrial land use are recorded within 250m ranging from north to south-east, relating to the canal, wharf, raised ground, nursery, railway cuttings, and saw pit identified by historical mapping.
Historical Tanks	Historical above ground tanks are not recorded within 250m.
Fuel Stations and Historical Garages	Reference is made to the historical petrol station located 202m to the south-east. Underground fuel storage tanks may remain in situ associated with this facility.
Part 2A EPA 1990	Sites determined as Contaminated Land under section 78R of the Environmental Protection Act are not recorded within 250m.
National Grid	A National Grid high-pressure gas transmission pipelines is recorded 180m to the north. High-voltage underground electricity transmission cables are not recorded within 250m.
Industrial Licenses and Authorisations	The following licenses or authorisations are not recorded within 250m: • COMAH, NIHHS and dangerous substance; • Regulated explosive sites; • Hazardous substance storage and usage; • Historical IPC authorisations; • Licensed industrial activities (Part A (1)); • Licensed pollutant release (Part A(2)/B); • Radioactive substation authorisations; • Licensed discharge to controlled waters; • Red list discharge consents; • Pollutant release to public sewer; • List 1 and 2 dangerous substances; and • Pollution inventory substances, waste transfers and radioactive waste.

Pollution Incidents	Pollution incidents have not been recorded within 250m.
Landfill and Waste	Waste management facilities and landfill sites are not recorded within 250m. Thirty-two waste exemption records are referenced within 250m. Nineteen relate to activities associated with Buckland Farm on-site although notably are recorded 17-18m to the south. These include treating, usage, storing, and disposing of waste, including treatment of waste wood and plant matter, burning waste, use of mulch, aerobic composting, and storage of waste in secure containers. One record relates to the use of waste in construction on a farm, 104m to the north. The remaining records are located 213m to the south-east at The Old Barn Farm and relate to activities including the use and disposal of agricultural waste and depositing of dredged waste from rivers.
Unexploded Ordnance (UXO)	The Zetica interactive mapping site indicates that the subject site lies within an area at moderate risk of UXO encounter. The preliminary UXO risk assessment indicates that the site was not used for military purposes and that bomb damage was not observed on available post-war aerial imagery. On this basis, the risk from UXO contamination is assessed to not be above the background risk for this region, and further works are not required in this regard.

5.0 PRELIMINARY GEOTECHNICAL ASSESSMENT

5.1 The information sources noted in Section 1.0 have been reviewed to provide a summary of potential geotechnical considerations for the proposed development presented in the following table. The comments and recommendations provided are based on the qualitative findings of this Geo-environmental Desk Study and may not be representative of actual engineering properties of on-site soils which can only be confirmed by intrusive investigation.

Made Ground	Based on site observations and the recorded history, it is likely that Made Ground will be encountered near surface across the developed areas and former construction compounds. Made Ground was recorded to be 1.3m bgl in the east within the BGS well borehole log and this thickness is likely to vary across the site.
Topsoil	Topsoil is likely to be present near surface across the east, north-east, and north. Subject to appropriate testing, this may be suitable for re-use within proposed garden and landscaped areas.
Foundation and Floor Slab Design	An intrusive ground investigation will be required to determine if the underlying geology will provide competent bearing strata for foundation design. Based on available information, it is considered that a traditional shallow foundation solution will be appropriate for the proposed development, founding within the Thanet Formation. Suspended ground floor slabs are likely to be required for the proposed development given the presence of Made Ground and buried construction and potential influence of trees.
Earthworks and Retaining Walls	Given the noted topography, significant earthworks and retaining structures are unlikely to be required for the proposed development. Such requirements should be reviewed once development proposals and in particular slab levels have been finalised.
Buried Obstructions	Buried anthropogenic obstructions, such as foundations or drainage, are likely to be encountered following demolition of the barns and other buildings in the centre and south-west.
Trees	Mature trees and hedgerows are present within the site and immediate surrounding area, and therefore consideration will need to be given to the adjustment of foundation and floor slab designs in accordance with NHBC Standards Chapter 4.2. Such requirements will depend on the relative distribution of cohesive and granular soils within the Thanet Formation although the existing information suggests that non-shrinkable soils prevail beneath the site.
Pyritic Geology	Pyritic deposits are not anticipated beneath the site. The concrete classification should be determined through appropriate testing.

Drainage and Soakaways	The results of in situ testing indicate that insufficient soakage was recorded to derive an infiltration rate and a conventional shallow soakaway drainage solution will not be feasible for the proposed development. An alternative drainage strategy will be required.
Roads and Pavements	The anticipated near surface cohesive natural soils will likely provide a CBR Design value of the order of 2-4%. Where Made Ground is encountered, the materials will need to be excavated to a depth of at least 500mm below formation, sorted, supplemented as necessary and re-compacted to provide a CBR Design value within the range 2-5%

6.0 PRELIMINARY ENVIRONMENTAL RISK ASSESSMENT

Background

6.1 This section assesses the significance of the environmental issues that have been identified on site or in the surrounding area in previous sections of this report by developing a preliminary Conceptual Site Model (CSM). The objective of the CSM is to identify contaminant sources, pathways and receptors relating to the site and surrounding area to evaluate the potential for a pollution event to occur using a risk classification tool. The level of risk is assessed by comparing the likelihood of a pollution event to occur, versus the consequence of a pollution occurrence. The consequence is essentially a measurement of the severity of a hazard (or source) and sensitivity of the receptor (controlled waters and human health).

6.2 The risk assessment methodology detailing the classes of significance is detailed after the preliminary CSM below.

Preliminary Contamination Risk Assessment

6.3 Based on the reported history of the site, the following potential sources of contamination have been identified:

- Made Ground associated with commercial/industrial activities on-site, stockpiles, waste, historical construction activities/compound, and adjacent railway;
- Hydrocarbon spills or leaks from vehicles parked on site;
- Waste exemptions on-site;
- Electricity substation adjacent to the north-eastern boundary;
- Asbestos containing materials within the existing buildings and stockpiled on site; and
- Ground gas generated from decaying organic matter in the pond in the north-east.

6.4 Off-site records relating to the saw pit, nursery, petrol filling station, garage, dairy farm, raised ground, and historical wharf are at sufficient distance such that the subject site would be unlikely to be impacted.

6.5 It is therefore considered that the following potential contaminants may impact the site:

- Heavy metals;
- Asbestos;
- Polycyclic-Aromatic Hydrocarbons;
- Total Petroleum Hydrocarbons;
- PCB’s; and
- Ground gases including carbon dioxide and methane.

Preliminary Conceptual Site Model

6.6 The pollutant linkages pertaining to the site and the assessed significance are summarised in the CSM table overleaf:

Source	Pathway	Receptor	Pollutant Linkage Risk
Potential contamination in shallow soils on site.	Direct contact and accidental ingestion/inhalation of contaminated soils and dust.	Construction/Demolition Workers.	**Low to Moderate:** Potential contamination sources have been identified across the site and an intrusive investigation will confirm if contaminant concentrations within the shallow soils pose a risk to human health receptors.
		Future Site Users.	
	Vertical and lateral migration through shallow soils or via surface and groundwater.	Nearby Surface Waters.	**Low to Moderate:** There is likely a shallow perched water table beneath the site within the Thanet Formation. Granular fractions within with the bedrock may provide potential preferential pathways for contaminant migration. Further investigation is required to confirm the risk to controlled waters and third-party property.
		Underlying Primary and Secondary Aquifers.	
		Third-party property.	
	Direct contact/soil leaching.	Buried utilities.	**Low to Moderate:** Hydrocarbons may be encountered within the near surface soils, associated with historical activities and parked vehicles on-site. Further investigation is required to confirm the risk to buried utilities and whether appropriate designs will be required to protect service corridors.
	Direct contact/soil leaching.	Buried concrete.	**Low:** The underlying Thanet Formation is not considered to be pyritic, however, chemical testing will be required confirm the risk to buried concrete.
Off-site contamination sources.	Lateral migration onto site via shallow soils and groundwater.	Construction/Demolition workers.	**Low to Moderate:** Limited sources of contamination have been identified in the surrounding area. A targeted investigation will confirm if contamination has migrated on to site from off-site sources.
		Future Site Users.	
		Buried utilities and concrete structures.	

Source	Pathway	Receptor	Pollutant Linkage Risk
Asbestos containing materials (ACM's).	Incidental inhalation of asbestos fibres.	Construction/Demolition workers.	**Moderate:** Suspected ACM's have been observed during the site walkover. An asbestos survey should be carried out by a suitably qualified professional and arrangements will need to be made for the removal of any identified ACM's prior to undertaking demolition on-site. Fragments and loose fibres may also be present within the underlying soils.
Ground gas and vapour generation on-site.	Migration through porous soils and accumulation in confined spaces.	Construction Workers.	**Low, locally Low to Moderate:** Significant ground gas sources have generally not been identified either on site or within the immediate surrounding area. There is a potential risk of ground gas generation from decaying organic matter within the pond in the north-east, and a targeted investigation will determine whether gas protection measures are required for the proposed development in this area. The site lies in an area where less than 1% of properties exceed the Radon action level. Radon protection measures will not be required.
		Future Site Users.	

Preliminary CSM and Environmental Risk Assessment

6.7 The significance of the potential source-pathway-receptor linkages identified in the conceptual site model should be assessed using the following criteria:

- **Very High** – There is a high probability that severe harm could arise to a designated receptor from an identified hazard, or there is evidence that severe harm to a designated receptor is currently happening. Investigation and remedial measures are required.
- **High** – Harm is likely to arise to a designated receptor from an identified hazard. Investigation and remedial measures are required.
- **Moderate** – It is possible that harm could arise to a designated receptor from an identified hazard. Investigation and remedial measures may be required.
- **Low** – It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild. Remedial measures are not normally required.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Summary

7.1 Based on the findings of this desk study and the initial conceptual site model, it is considered that the environmental risk at the site is low to moderate with the principal risk drivers relating to the Made Ground, waste exemptions, electricity substation adjacent to the north-eastern boundary, asbestos containing materials, and ground gas generation.

7.2 It is not anticipated at this stage, subject to confirmation, that extensive remediation will be required for the proposed development although there may be a requirement for the localised removal and/or capping of contaminated Made Ground.

7.3 It is not considered at this stage that the site will be extensively impacted by ground gases. Localised ground gas protection measures may however be required in the north-east, in the vicinity of the pond, if gas generation is identified via targeted investigation.

7.4 It is considered that a shallow foundation design solution will be appropriate for the proposed development, bearing on the anticipated Thanet Formation, assuming full penetration of any localised Made Ground.

7.5 It is considered that the site will be affected by groundwater, river, and surface water flooding, particularly in the low-lying areas in the north.

Recommendations

7.6 Given the findings of this Desk Study, it is recommended that a Phase II Intrusive Investigation is undertaken to confirm; the underlying geology and the extent of any contamination, the completion of a ground gas risk assessment, and clarification of civil engineering design requirements. The investigation should be designed considering detailed development proposals and required performance criteria, and enable an assessment of groundwater levels to determine the risk from flooding.

7.7 It is recommended that a copy of this report is submitted to the Local Planning Authority to support the planning application for the site. Review of this report will enable the contaminated land or environmental health officer to comment as consultee to the Local Planning Officer. Future ground investigation will likely be conditioned as part of a planning permission.

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APPENDICES

APPENDIX A

NORTH

NOTES

No dimensions should be scaled during construction and any missing dimensions required should be requested and confirmed before proceeding. All dimensions must be checked on site and agreed with the client prior to construction.

The scale bar provided is for use so that the drawings can be Scaled during the planning application process.

0 50

Scale bar 50mm at 1:1

SITE BOUNDARY

A 18.07.2025 RLB UPDATED TO INCL VIS SPLAYS. KB

Project

LAND OFF CHALK ROAD
LOWER HIGHAM
GRAVESHAM

Title

LOCATION PLAN

Scale	Date
1:1250 @A3	APRIL 2025
Drawn	Checked
JT	MB
Drawing Number	Revision
8990/P100	A

Saunders
Architecture + Urban Design
saundersarchitects.com | 01707 385300 | London | Welwyn Garden City

NORTH

SP

MP 28.25

Atlantis

7.3m

Cuckold's Corner

Michele Cottages

Avonlea

8.5m

Haselden Cottages

Orchard View

Whitebread House

Cherrydene

The Hedgerows

16

9

NOTES

This drawing to be read in accordance with the specification/Bills of Quantities and related drawings. No Dimensions to be scaled from this drawing. All stated dimensions to be verified on site and the Architect notified of any discrepancies.

0 50

Scale bar 50mm at 1:1

KEY

- Site Boundary
- Railway line
- Proposed access/egress for all modes (subject to detailed design)
- Proposed location of SuDs/Attenuation features
- Proposed Green Amenity Space (including existing pond, children's play provision, footpaths, community orchard and drainage)
- Proposed Residential Development
- Proposed area for unallocated parking
- Focal space
- Recreational footpath
- Existing Trees
- Indicative proposed trees
- Proposed location for community orchard
- Proposed location for children's play

A 22.07.2025 MINOR AMENDMENTS FOLLOWING CLIENT COMMENTS. KB

Project

LAND OFF CHALK ROAD
LOWER HIGHAM
GRAVESHAM

Title

ILLUSTRATIVE DEVELOPMENT FRAMEWORK PLAN

Scale	Date
1:1000 @A3	JULY 2025
Drawn	Checked
KB	MB

Drawing Number	Revision
8990/P103	A

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APPENDICES

APPENDIX B

Appendix B – Photographic Record

<table>
<tr>
<td>  </td>
<td>  </td>
<td rowspan="3"><u>Site Name</u>
Chalk Road, Higham

<u>Project No.:</u>
29524

<u>Client:</u>
Richborough

<u>Site Walkover Date:</u>
9th April 2025</td>
</tr>
<tr>
<td>Photo 1: View west along Chalk Road from the site entrance.</td>
<td>Photo 2: View east along Chalk Road from the site entrance.</td>
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<tr>
<td>Photo 3: View north at the southern face of one of the three barns in the centre.</td>
<td>Photo 4: View north at the southern face of one of the three barns in the centre.</td>
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</table>

Appendix B – Photographic Record

		**Site Name** Chalk Road, Higham **Project No.:** 29524 **Client:** Richborough **Site Walkover Date:** 9th April 2025
Photo 5: View south at two of the barns in the centre, with potential Asbestos bound cement cladding and roof tiles.	Photo 6: View west at the metal framed barn in the south-west.	
		
Photo 7: View south at buildings in the south-west, and storage containers, IBC, and canopied storage area.	Photo 8: View south-east of storage containers and waste skips adjacent to the central barns.	

		**Site Name** Chalk Road, Higham **Project No.:** 29524 **Client:** Richborough **Site Walkover Date:** 9th April 2025
Photo 9: Storage containers and waste skips adjacent to west of the central barns.	Photo 10: Entrance to the westernmost barn in the centre, and adjacent waste skip.	
		
Photo 11: Access to site from Chalk Road.	Photo 12: View north of along access road to the east of the central barns.	

Appendix B – Photographic Record

<table>
<tr><td>  </td><td>  </td><td rowspan="5"><u>Site Name</u>
Chalk Road, Higham

<u>Project No.:</u>
29524

<u>Client:</u>
Richborough

<u>Site Walkover Date:</u>
9th April 2025</td></tr>
<tr><td>Photo 13: View north of along access road to the east of the central barns.</td><td>Photo 14: Access road to the north of the central building.</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Photo 15: View south at the gated entrance into the north from the end of the eastern access road.</td><td>Photo 16: View west at the area of gravel hardstanding in the north.</td></tr>
</table>

Appendix B – Photographic Record

		**Site Name** Chalk Road, Higham **Project No.:** 29524 **Client:** Richborough **Site Walkover Date:** 9th April 2025
Photo 17: Soil stockpile in the north, near the area of gravel hardstanding.	Photo 18: Area of burnt ground and soil stockpiles in the north, near the area of gravel hardstanding.	
		
Photo 19: View north of storage containers, parked vehicles and caravan in the north-east.	Photo 20: View east of grassed field in the south-east.	

Appendix B – Photographic Record

<table>
<tr><td>  </td><td>  </td><td rowspan="5"><u>Site Name</u>
Chalk Road, Higham

<u>Project No.:</u>
29524

<u>Client:</u>
Richborough

<u>Site Walkover Date:</u>
9th April 2025</td></tr>
<tr><td>Photo 21: View north-east of grassed field in the east.</td><td>Photo 22: View east of grassed field in the east.</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Photo 23: View north-east of grassed field in the north-east.</td><td>Photo 24: View south of the grassed area in the south-west, near to the site access.</td></tr>
</table>

Appendix B – Photographic Record

		**Site Name** Chalk Road, Higham **Project No.:** 29524 **Client:** Richborough **Site Walkover Date:** 9th April 2025
Photo 25: View north of grassed field in the north, adjacent to the area of gravel hardstanding.	Photo 26: Telegraph pole adjacent to the eastern barn in the centre.	

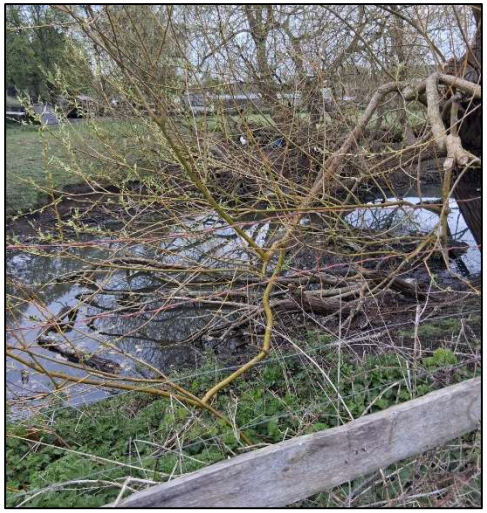
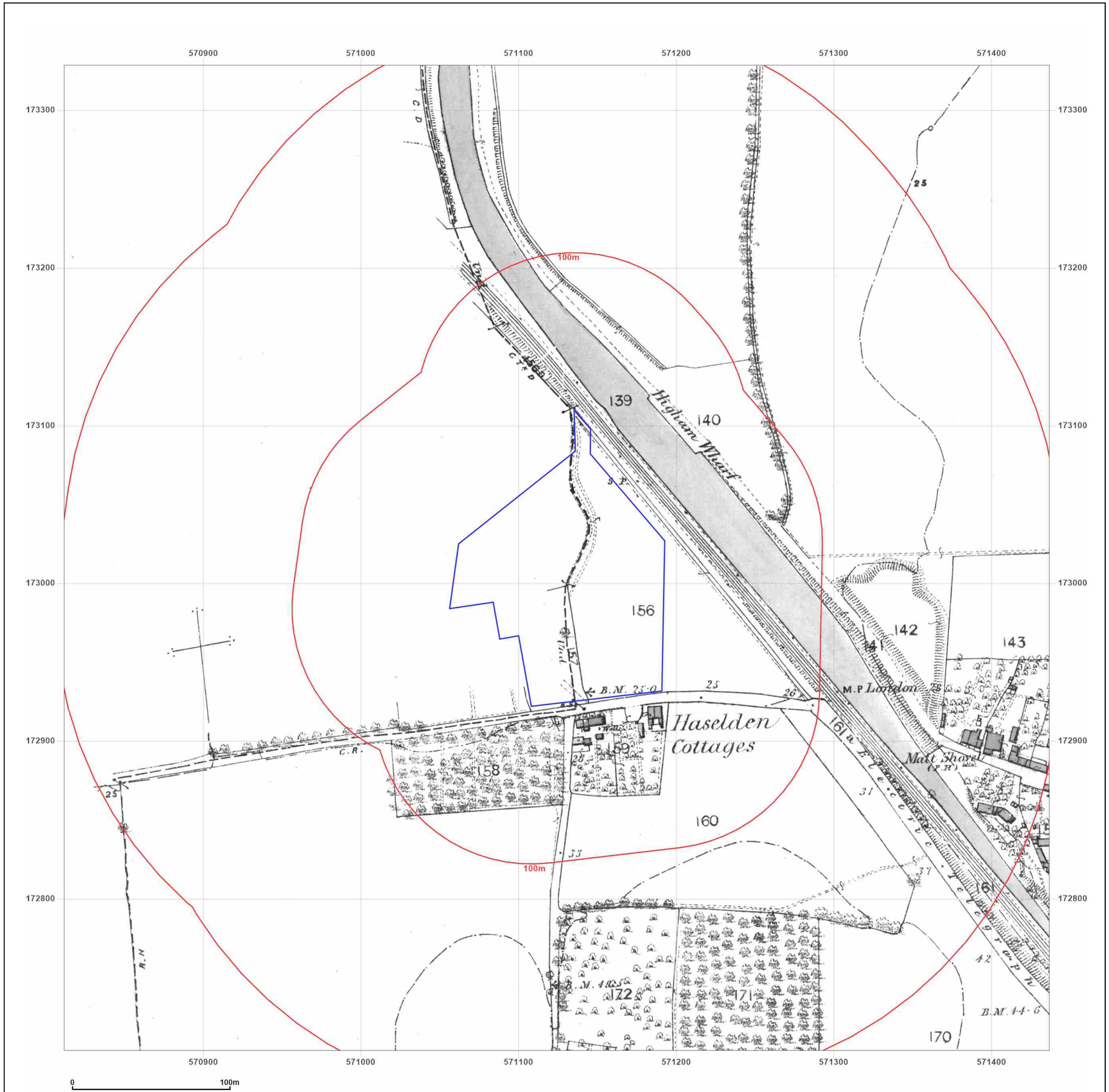



Photo 27: Pond in the north-east.	Photo 28: Pile of suspected Asbestos bound cement roof tiles in the south-west.	

MEC
Consulting Group

APPENDICES

APPENDIX C



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Chalk Road, Higham

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Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1864**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1864
Revised 1864
Edition N/A
Copyright N/A
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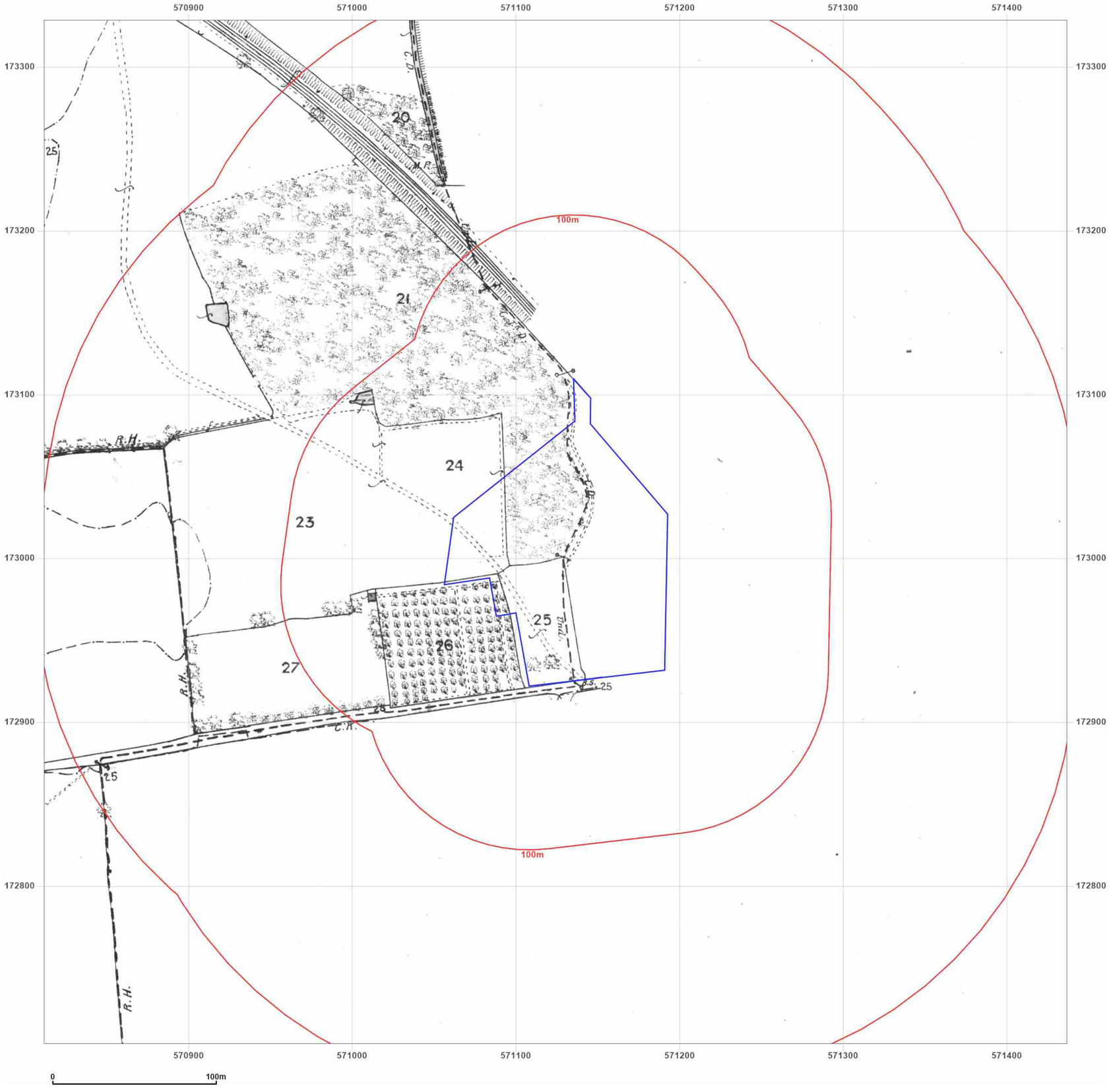

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Site Details:

Chalk Road, Higham

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Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1864**

Scale: 1:2,500

Printed at: 1:2,500

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Revised 1864
Edition N/A
Copyright N/A
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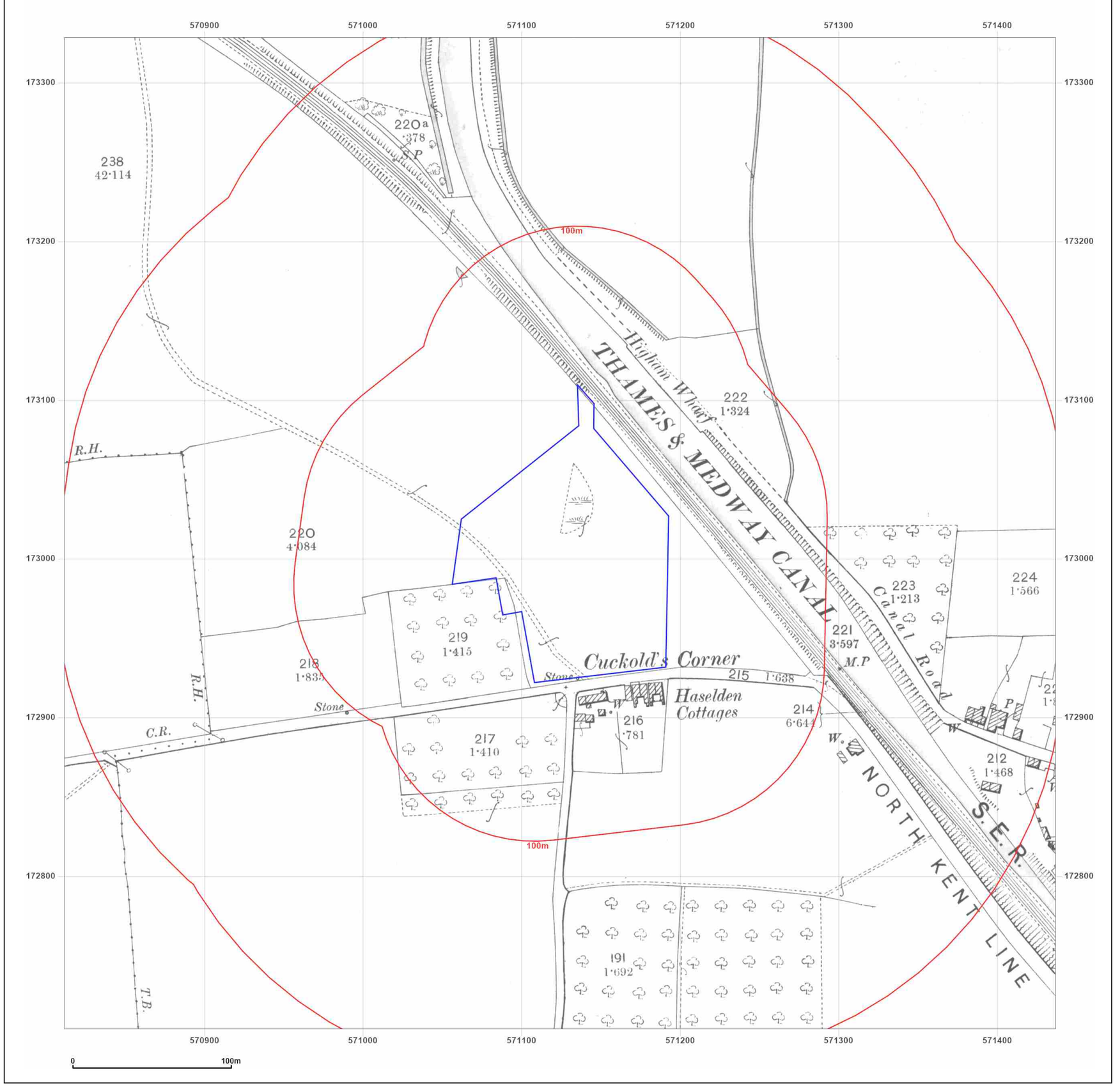

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Chalk Road, Higham

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Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1897**

Scale: 1:2,500

Printed at: 1:2,500

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

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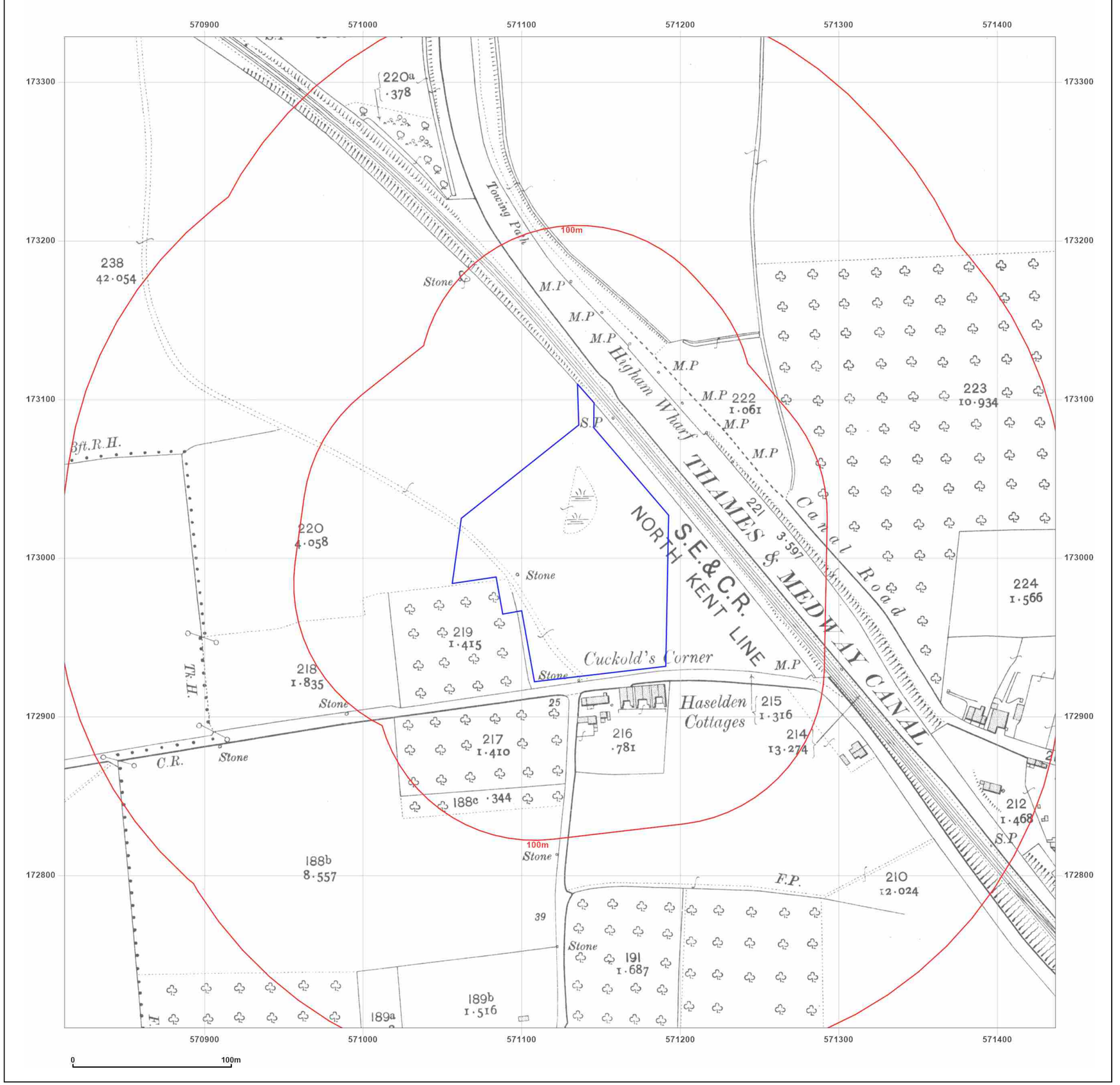

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

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Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1908**

Scale: 1:2,500

Printed at: 1:2,500

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Revised 1908
Edition N/A
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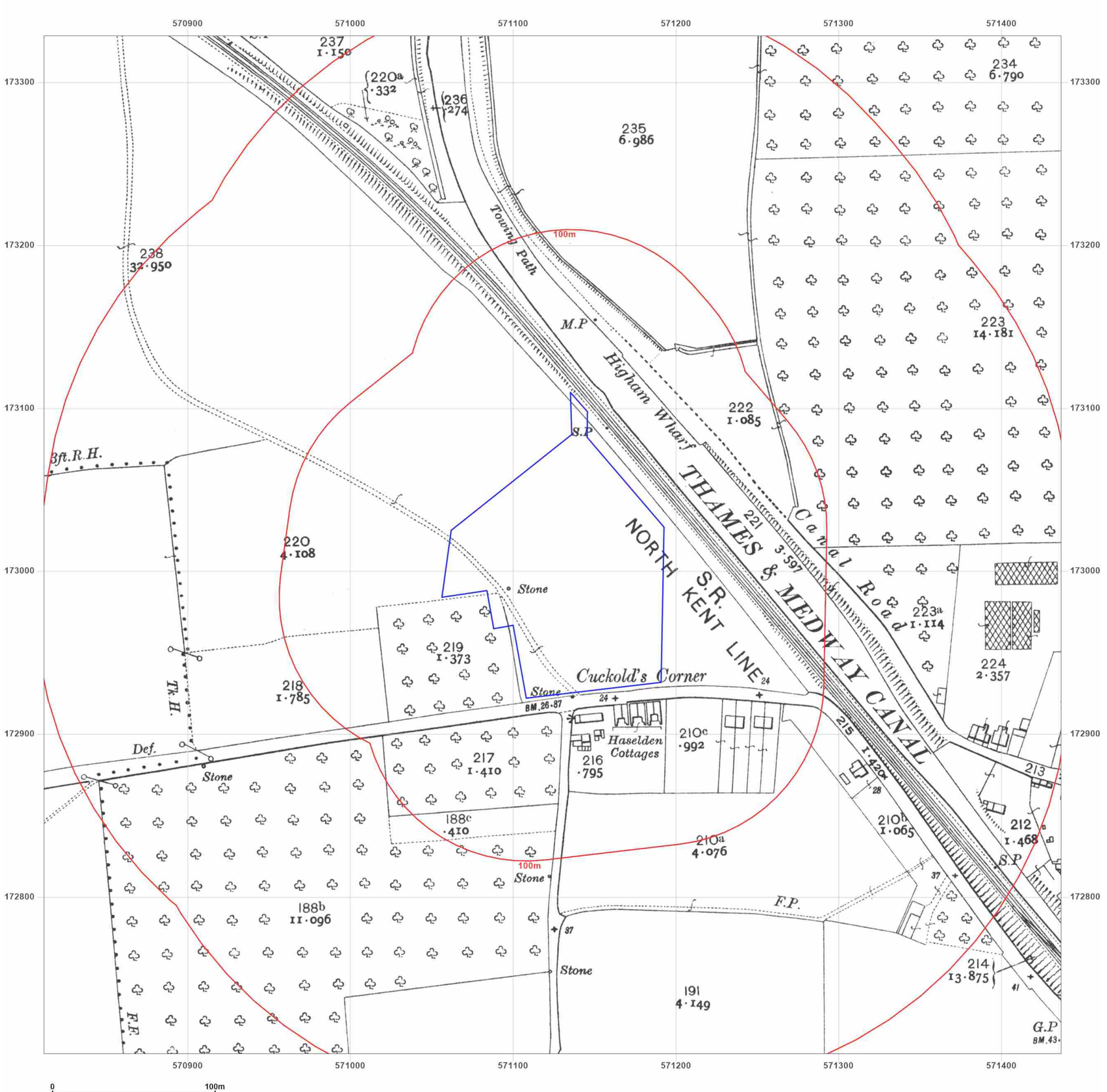

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Chalk Road, Higham

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Grid Ref: 571124, 173016

Map Name: County Series
Map date: **1933**
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Printed at: 1:2,500

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Surveyed 1933
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A

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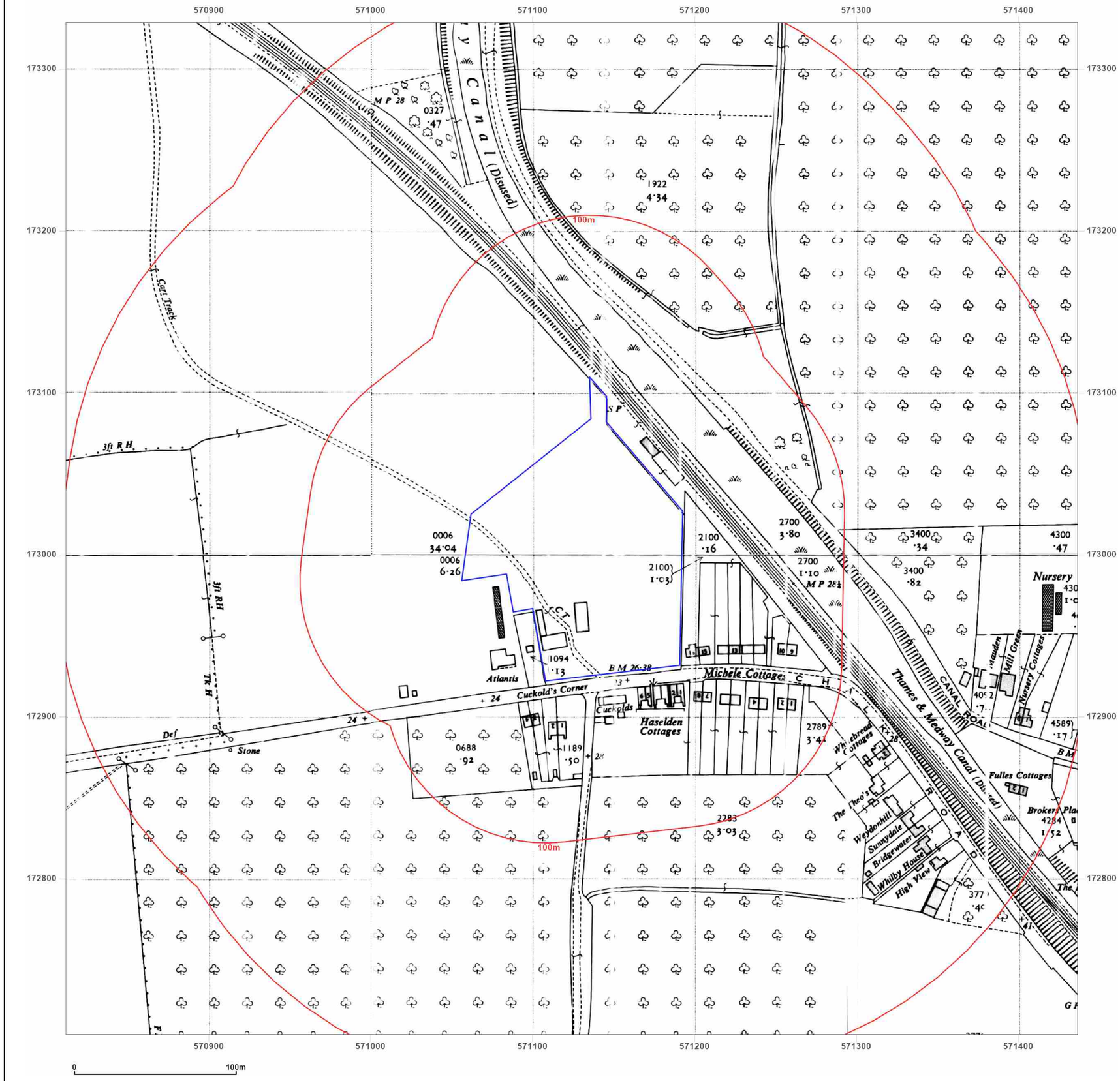

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

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Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **1960-1963**

Scale: 1:2,500

Printed at: 1:2,500

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

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Copyright N/A
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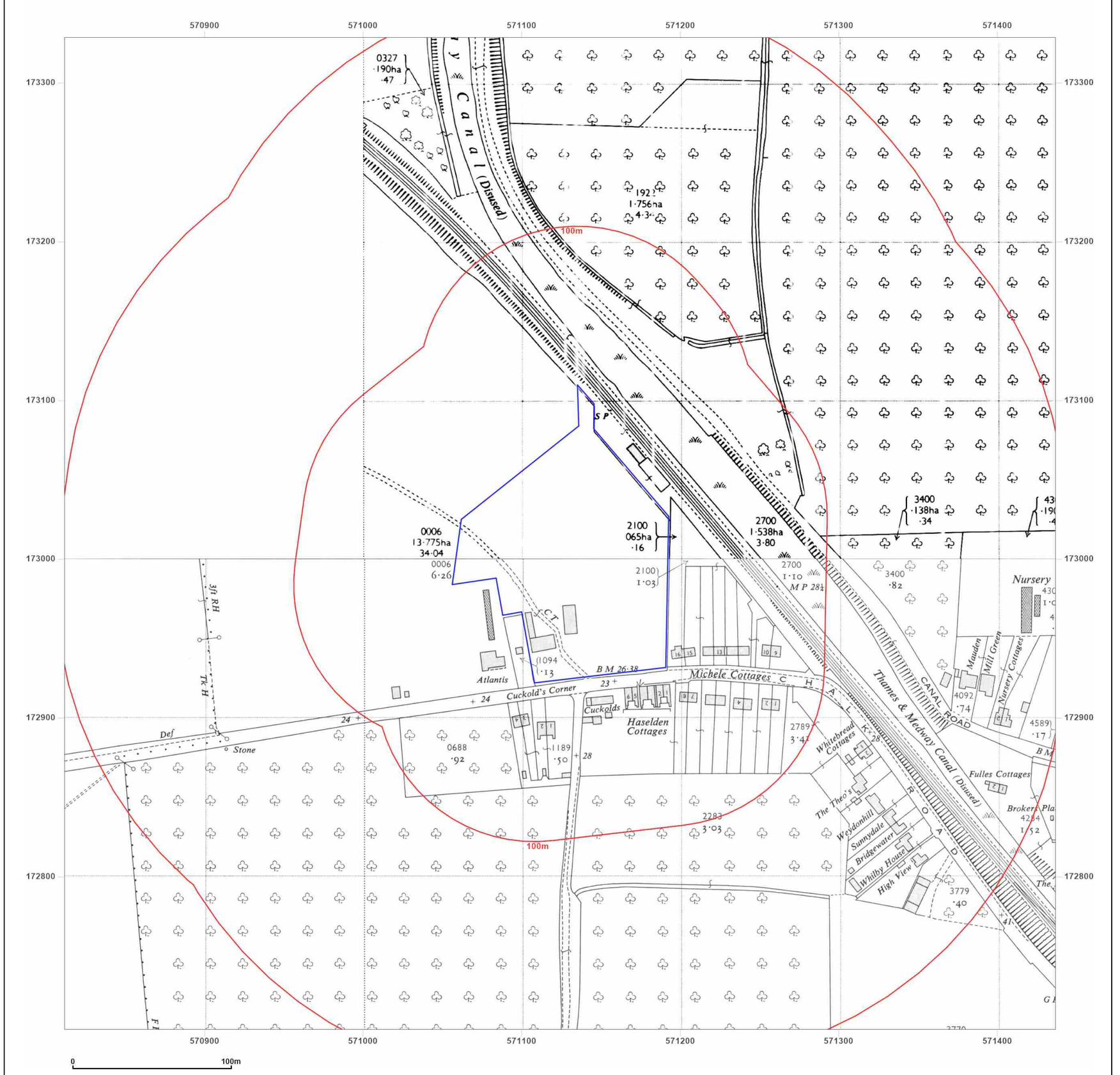

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **1960-1963**

Scale: 1:2,500

Printed at: 1:2,500

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

Surveyed 1960
Revised 1960
Edition N/A
Copyright 1960
Levelled 1952

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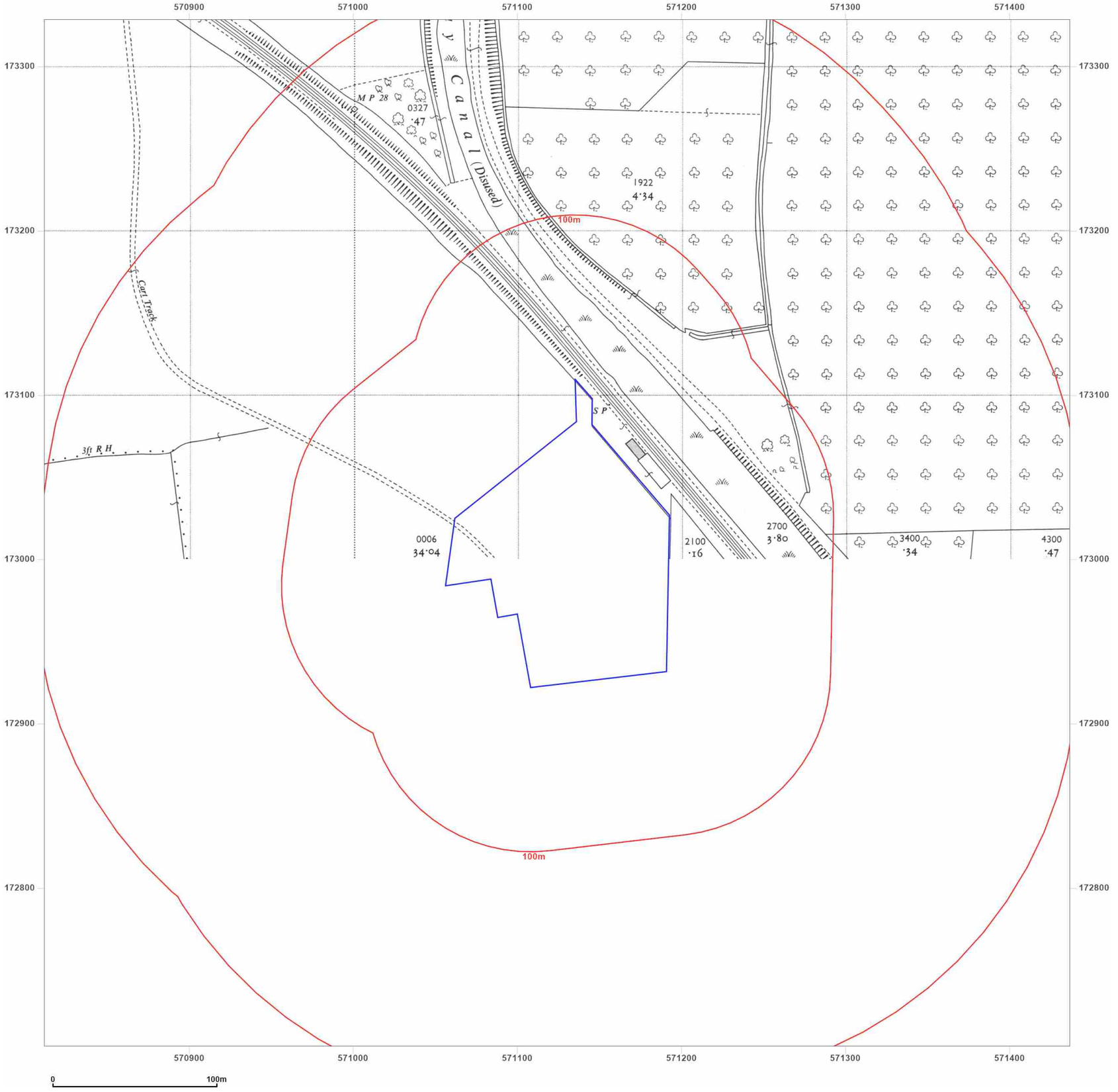

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Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **1963**

Scale: 1:2,500

Printed at: 1:2,500

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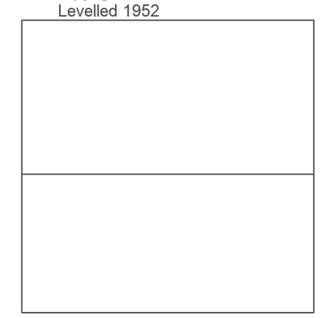
Surveyed 1961
Revised 1961
Edition N/A
Copyright 1963
Levelled 1952



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Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid
Map date: **1977-1978**
Scale: 1:2,500
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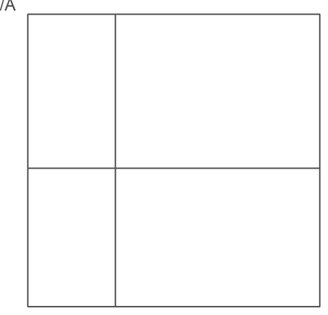
Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A



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Revised N/A
Edition N/A
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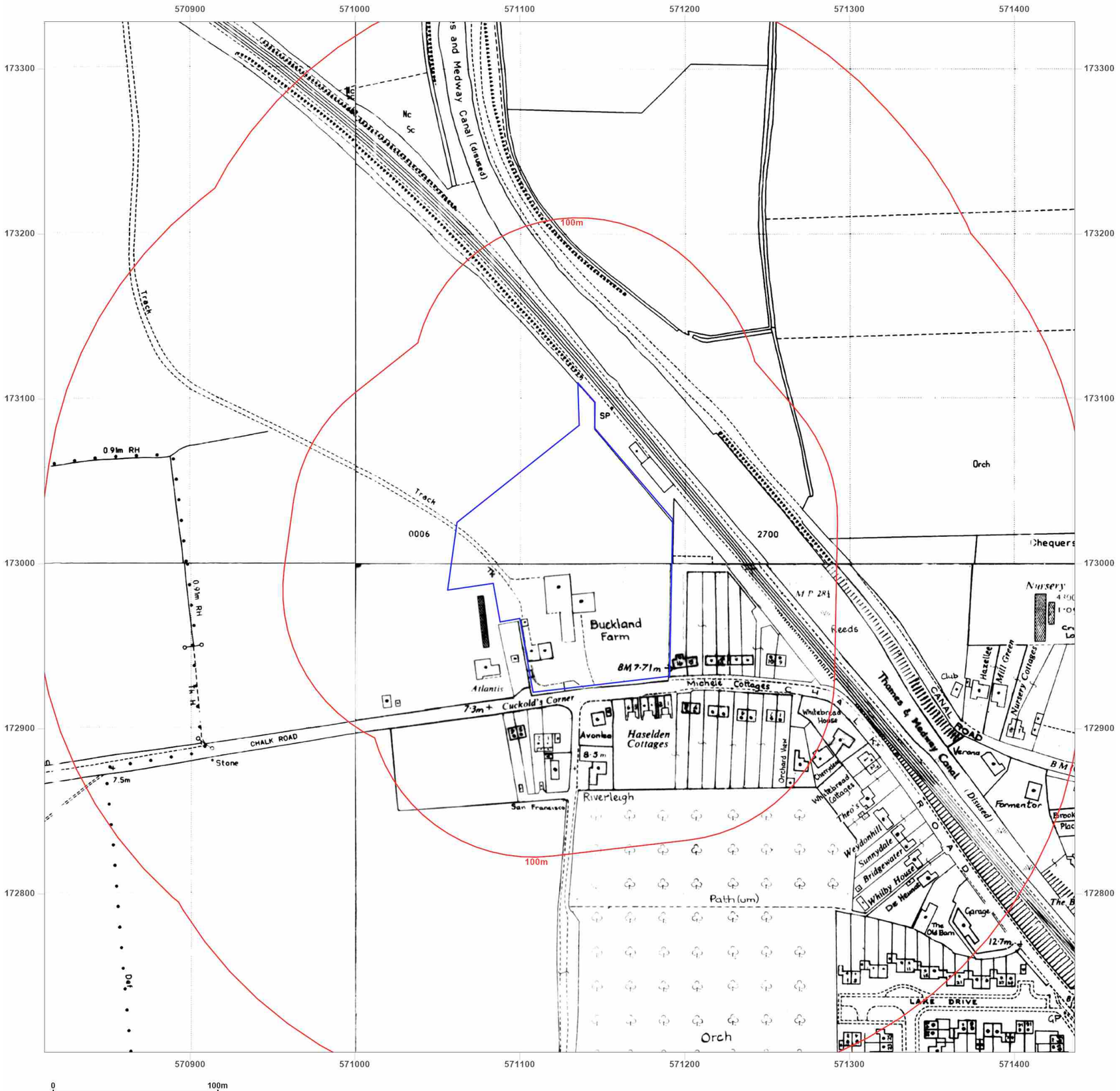

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **1989-1993**

Scale: 1:2,500

Printed at: 1:2,500

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

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

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
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Surveyed 1980
Revised 1989
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Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **1993**

Scale: 1:2,500

Printed at: 1:2,500

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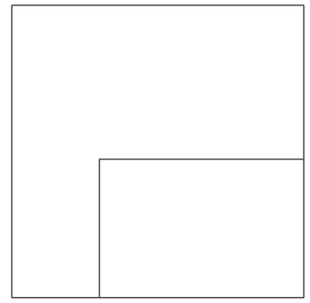

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Edition N/A
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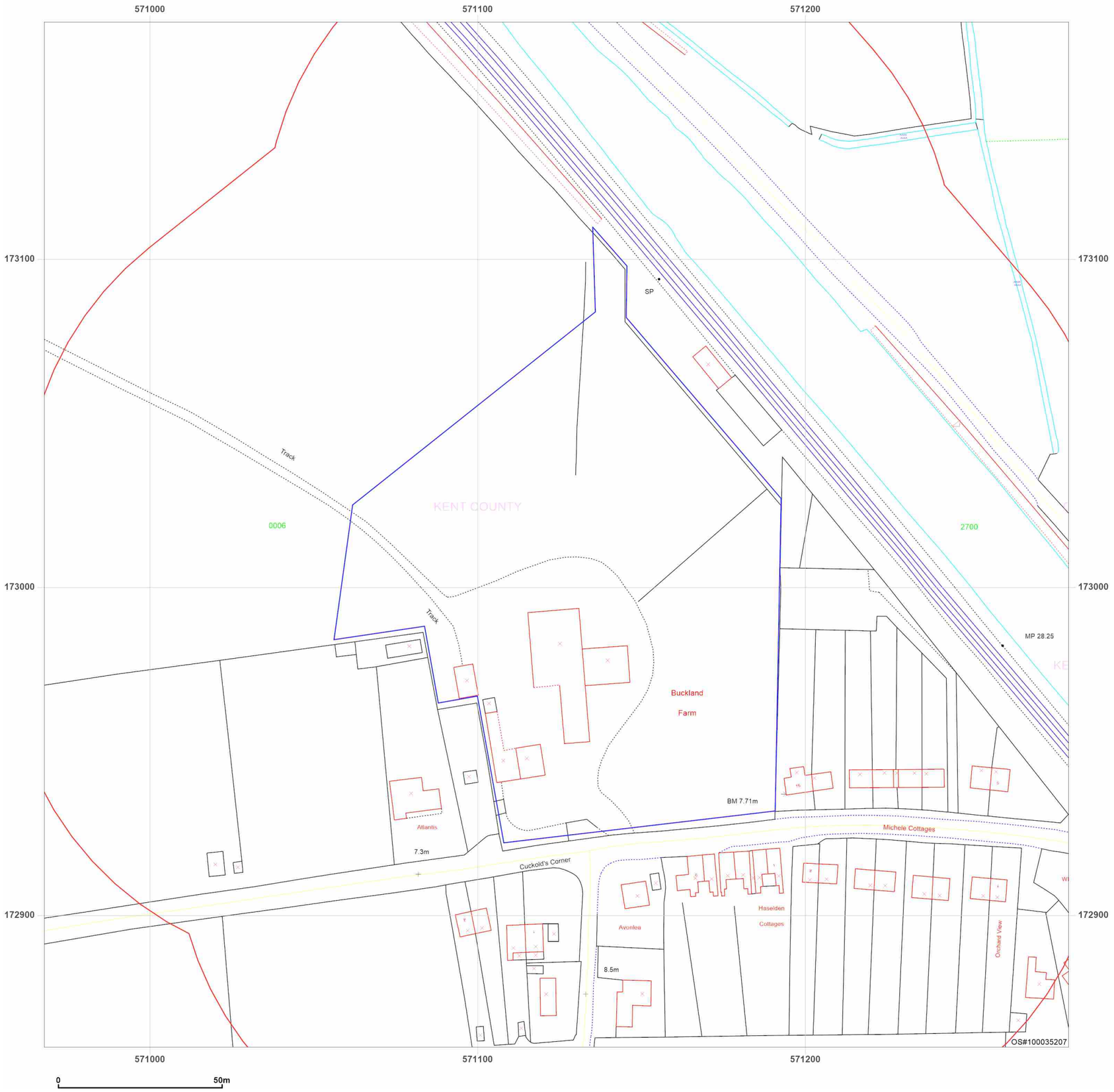

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Chalk Road, Higham

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Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

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

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2003

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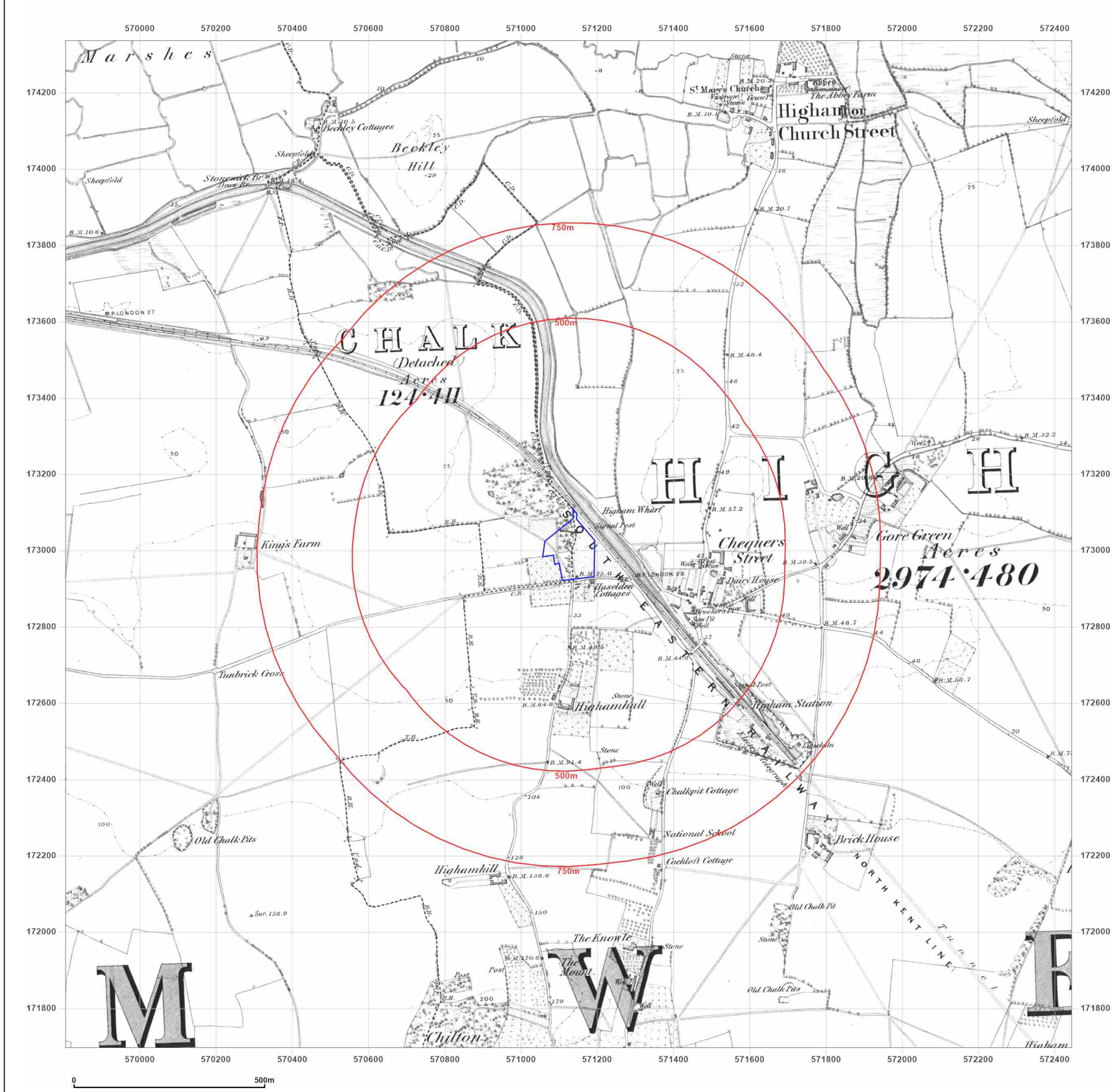

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1862**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1862
Revised 1862
Edition N/A
Copyright N/A
Levelled N/A

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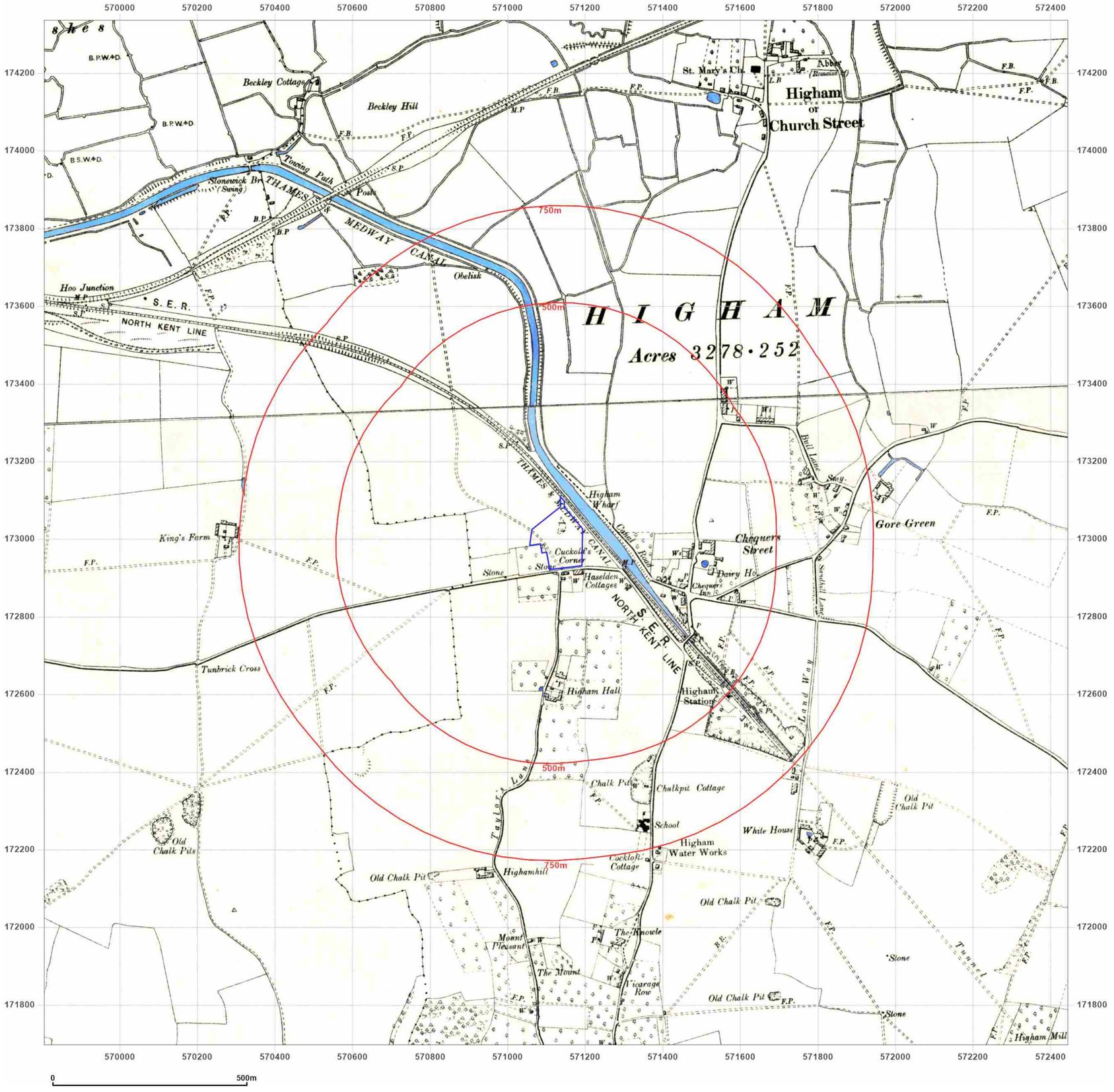

Groundsure INSIGHTS

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Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1888**

Scale: 1:10,560

Printed at: 1:10,560

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

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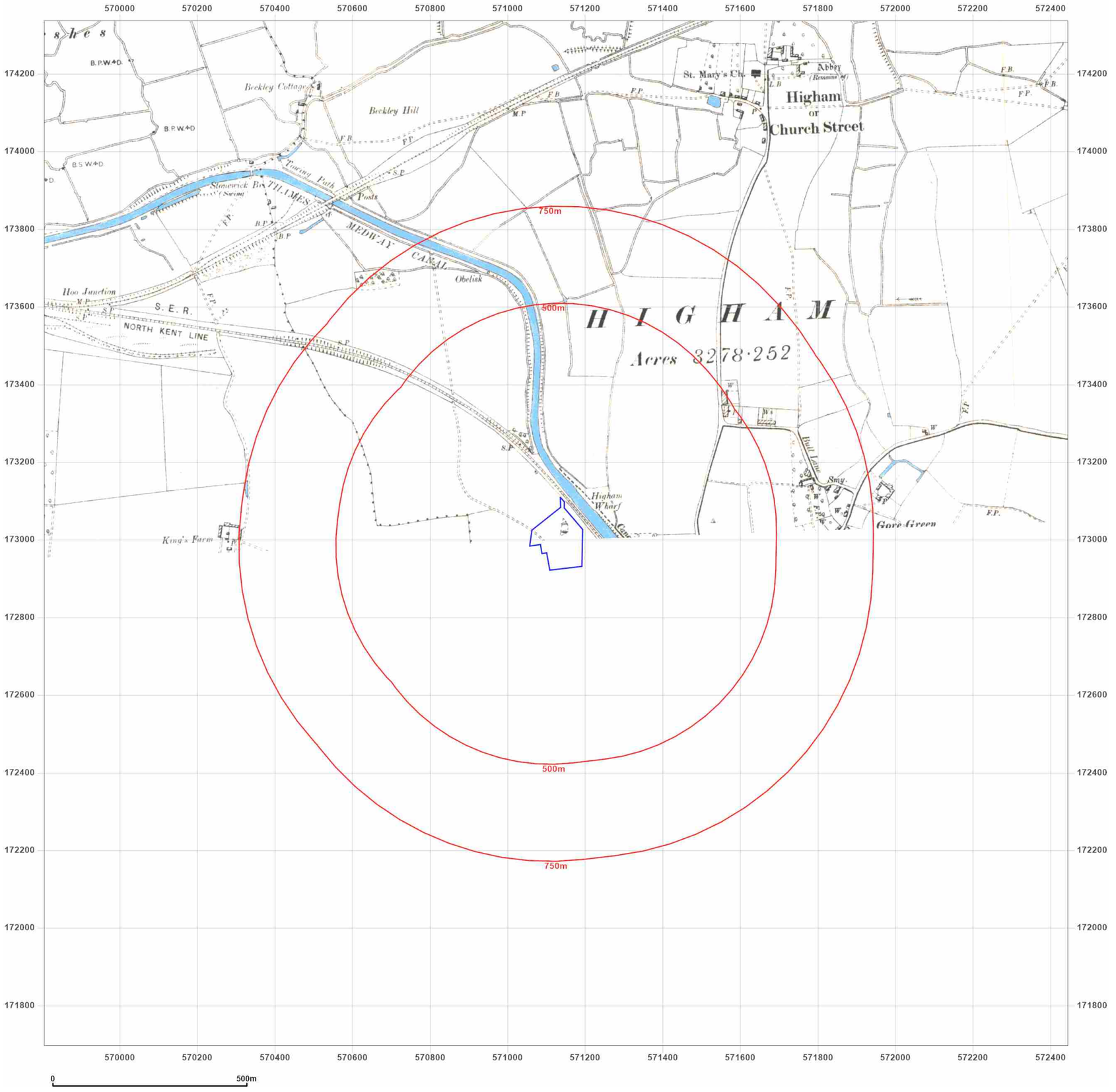

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Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1895**

Scale: 1:10,560

Printed at: 1:10,560

N
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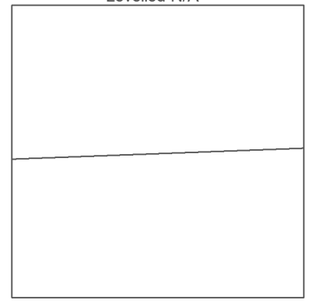
Surveyed 1862
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A



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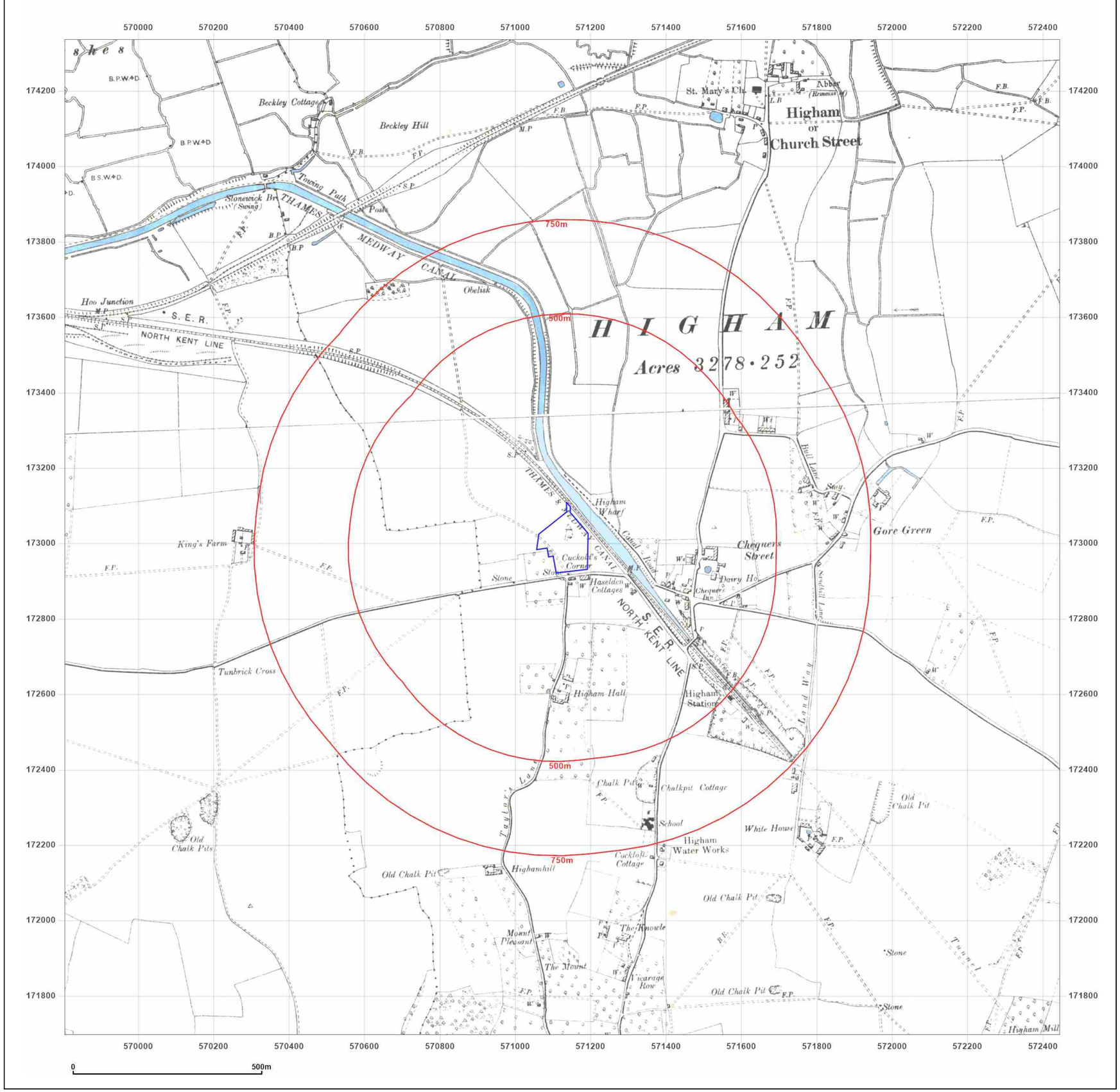

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
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Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1895-1896**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1862
Revised 1896
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1865
Revised 1895
Edition N/A
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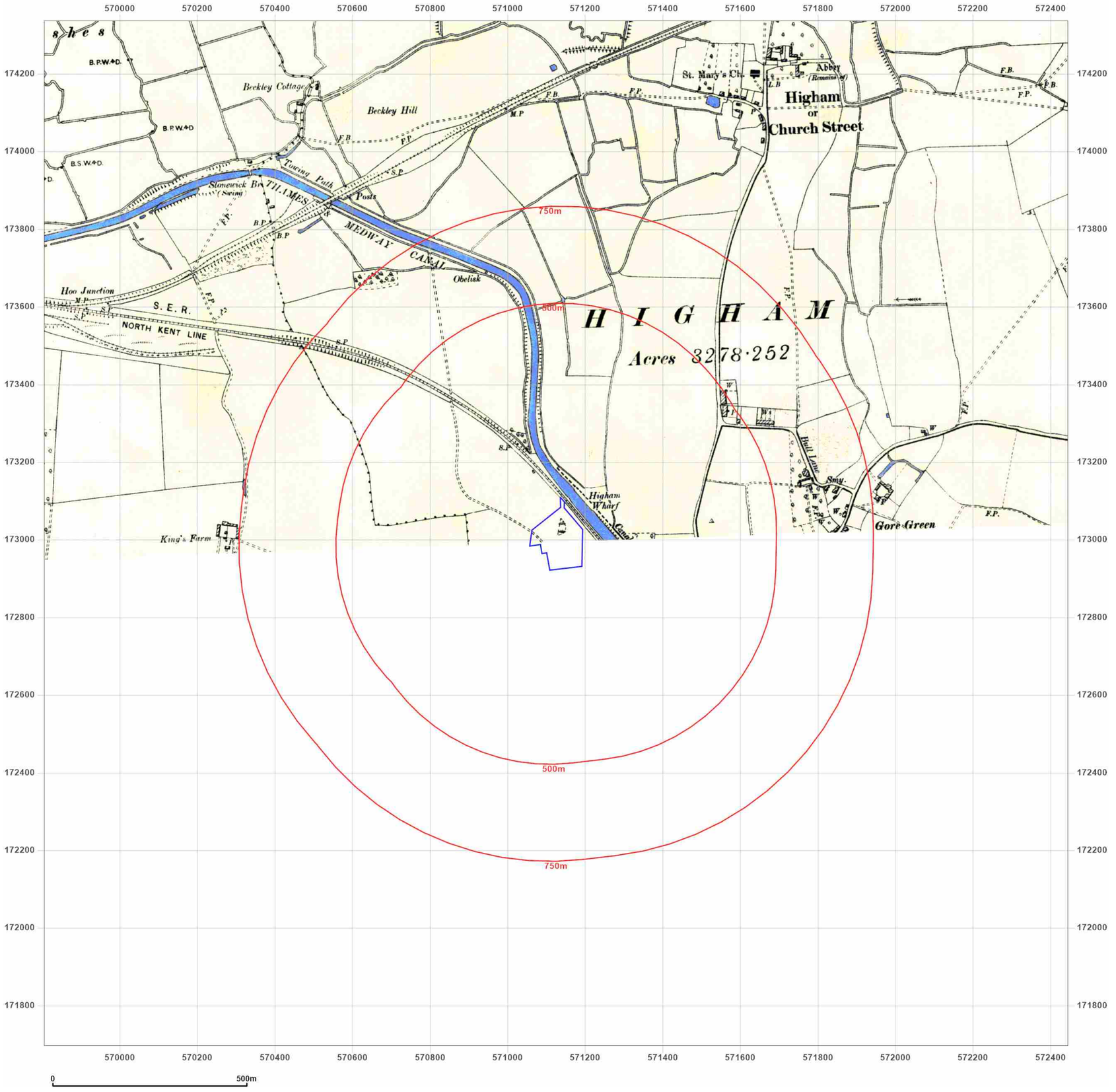

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1896**

Scale: 1:10,560

Printed at: 1:10,560

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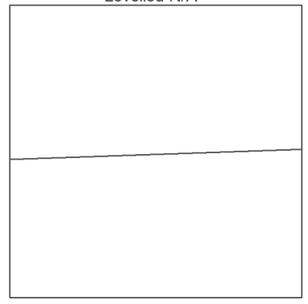
Surveyed 1865
Revised 1896
Edition N/A
Copyright N/A
Levelled N/A



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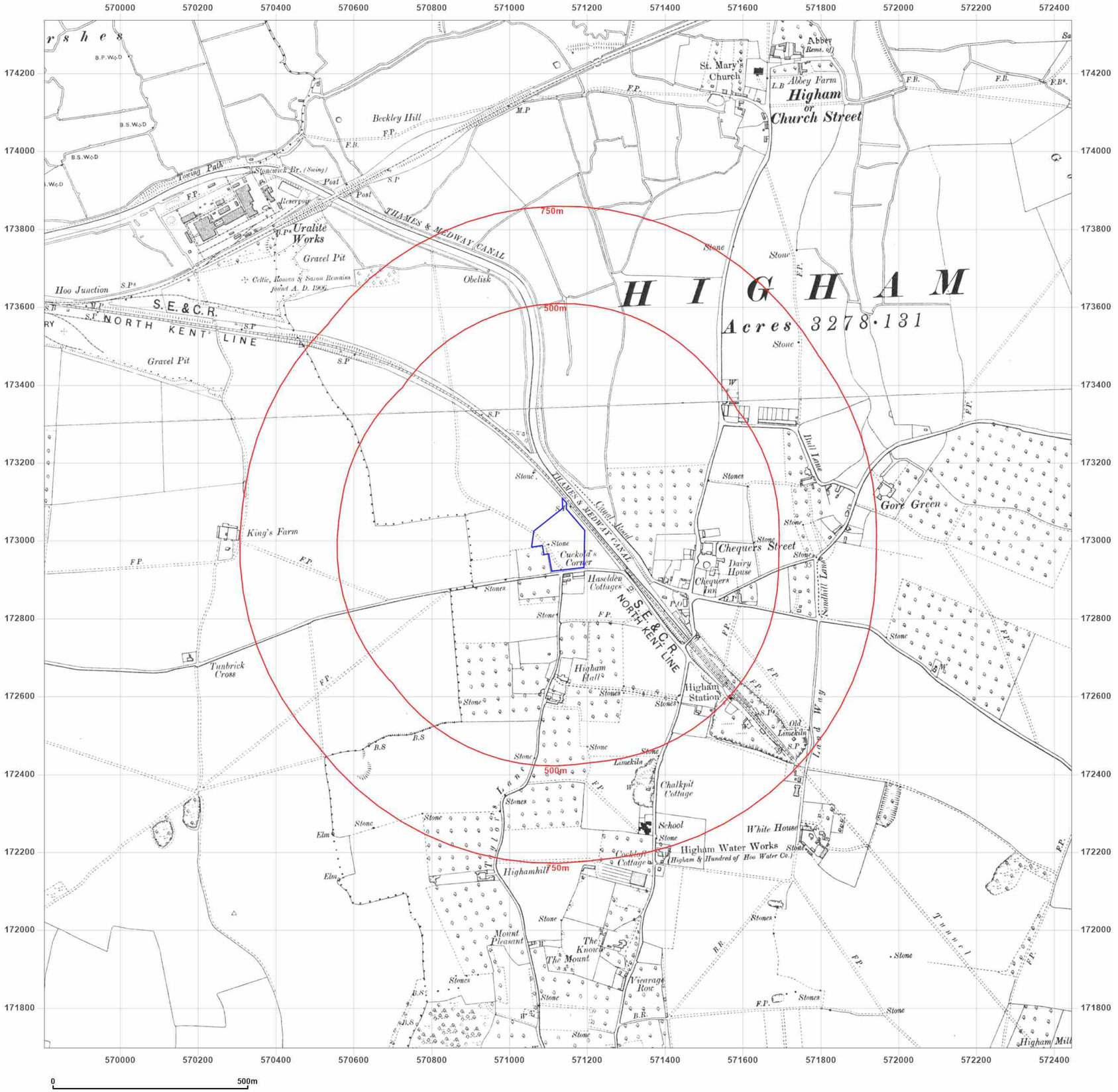

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1907**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1861
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1861
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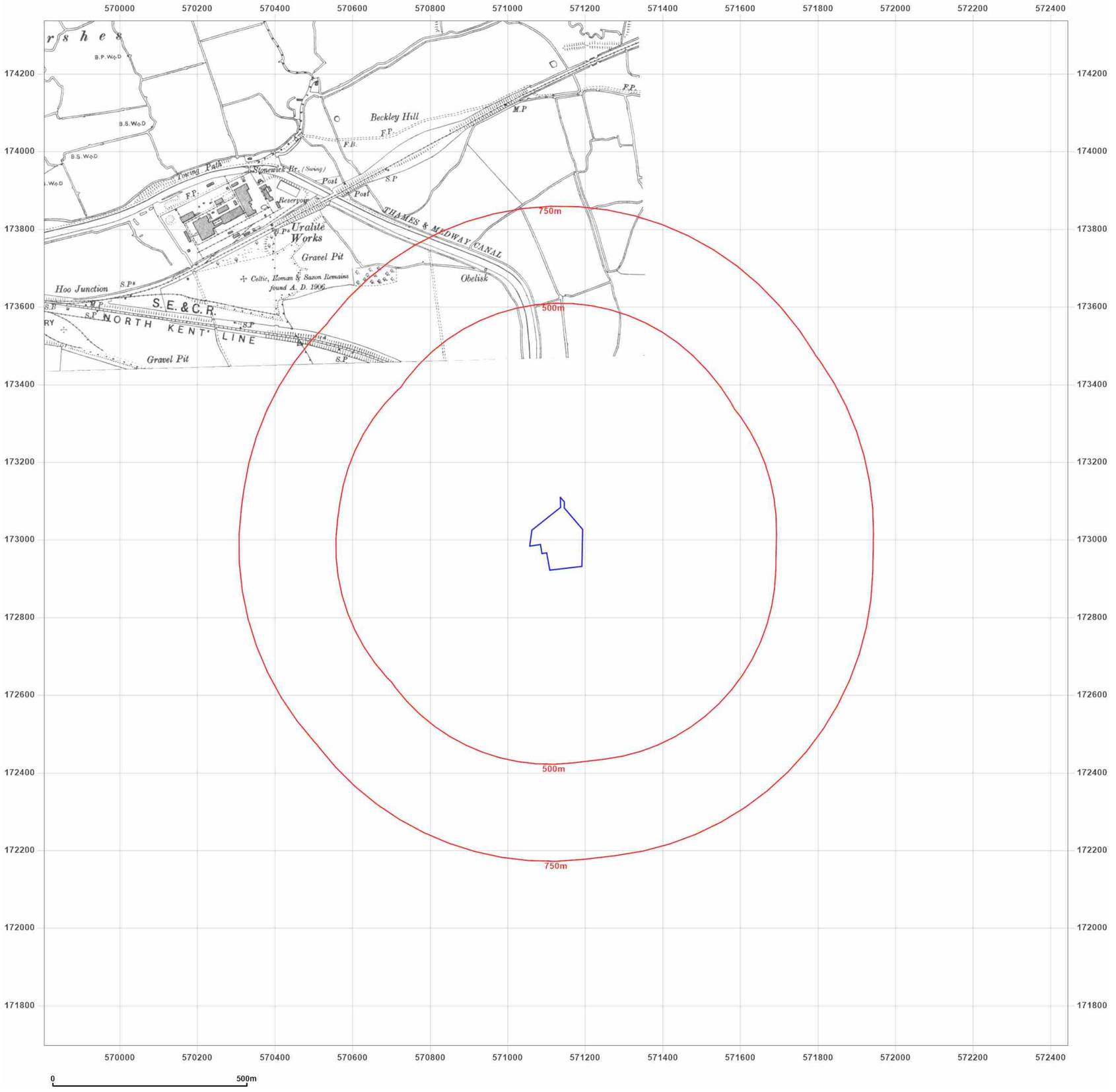

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series
Map date: **1923**
Scale: 1:10,560
Printed at: 1:10,560

N
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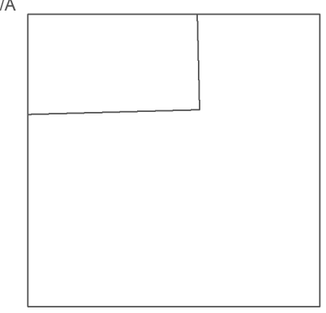
Surveyed 1862
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A



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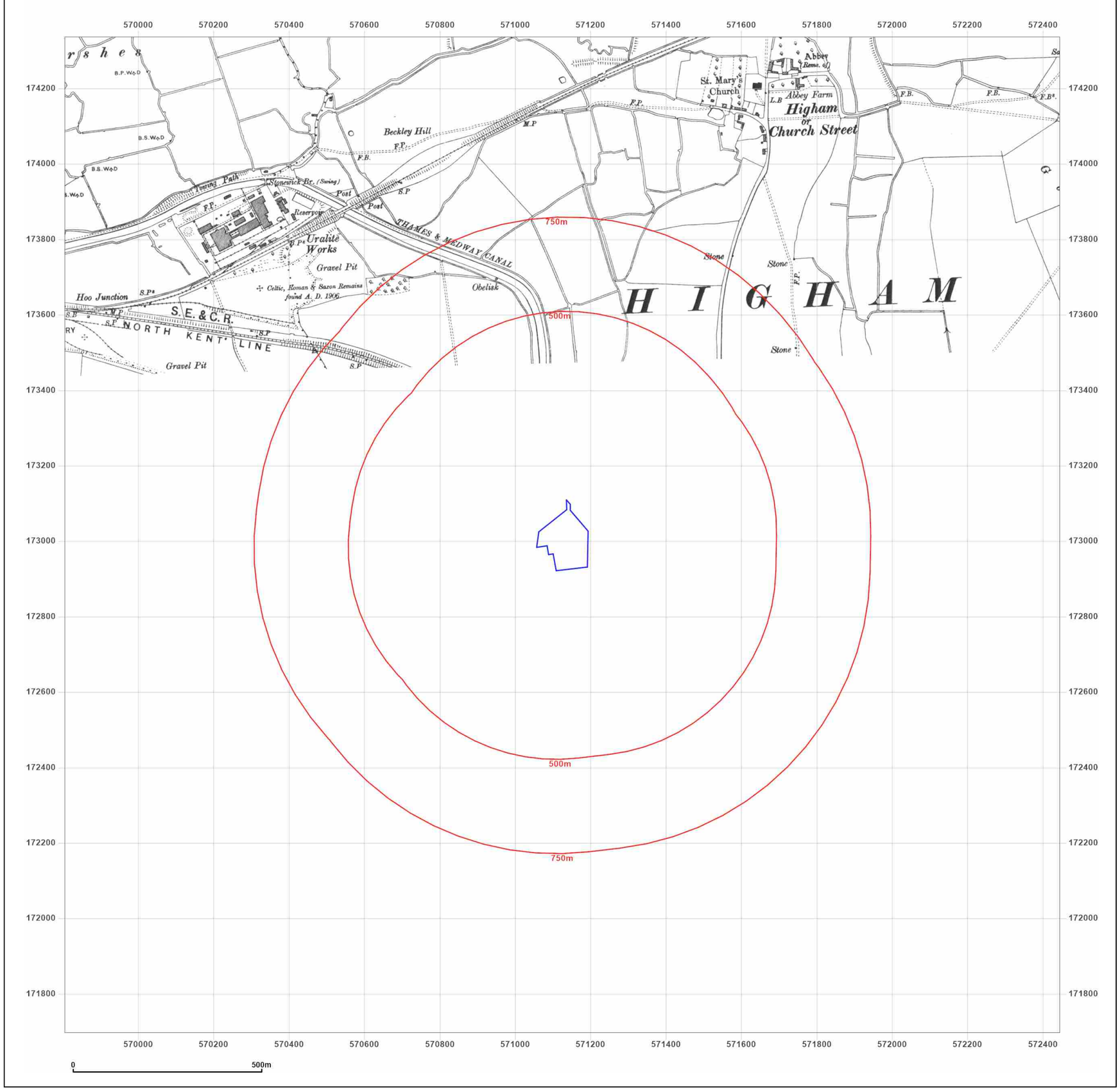

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1923**

Scale: 1:10,560

Printed at: 1:10,560

N
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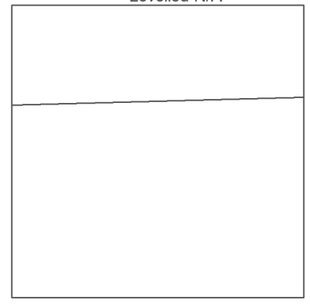
Surveyed 1864
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A



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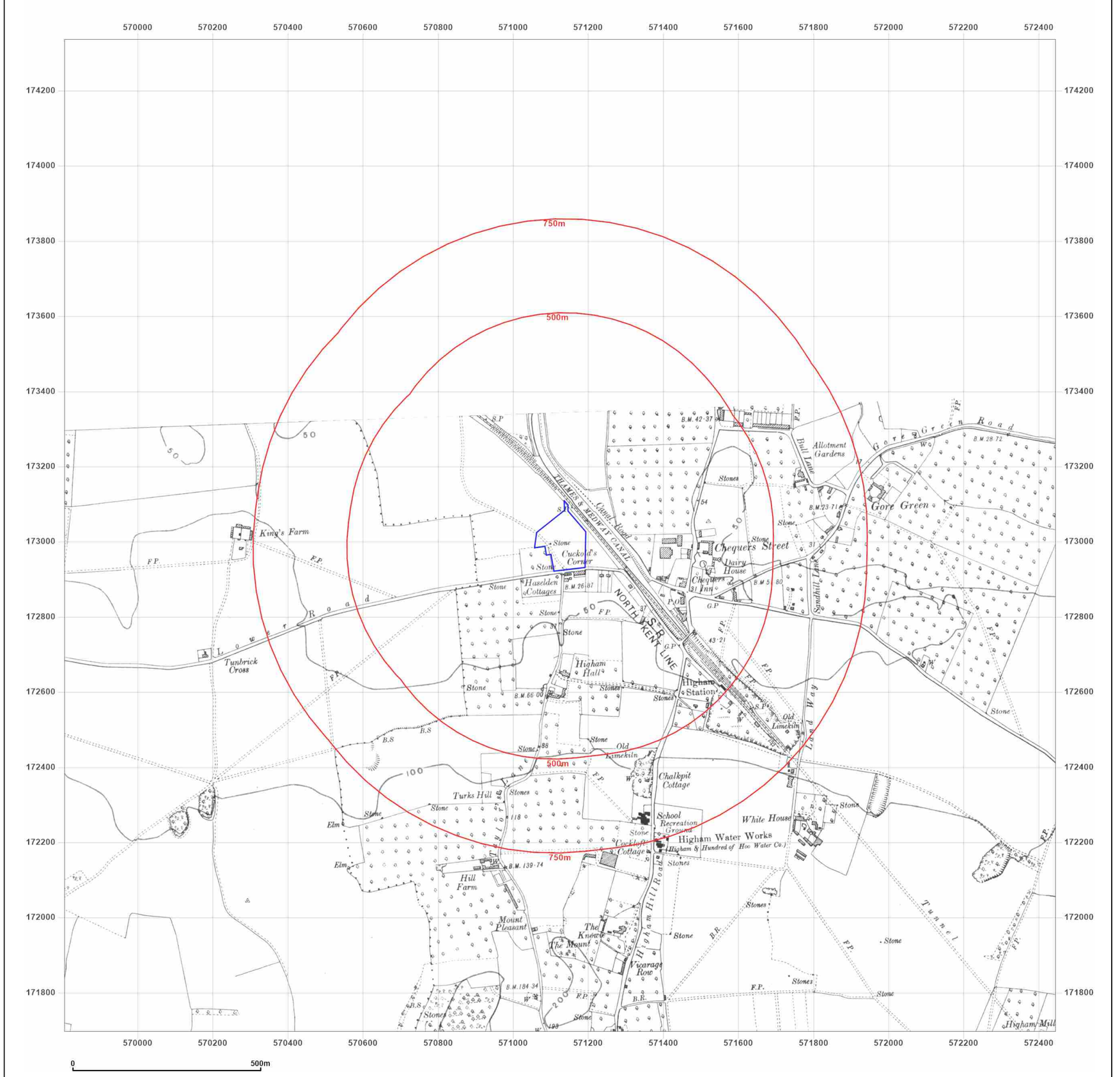

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1931**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1861
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A

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Map legend available at:
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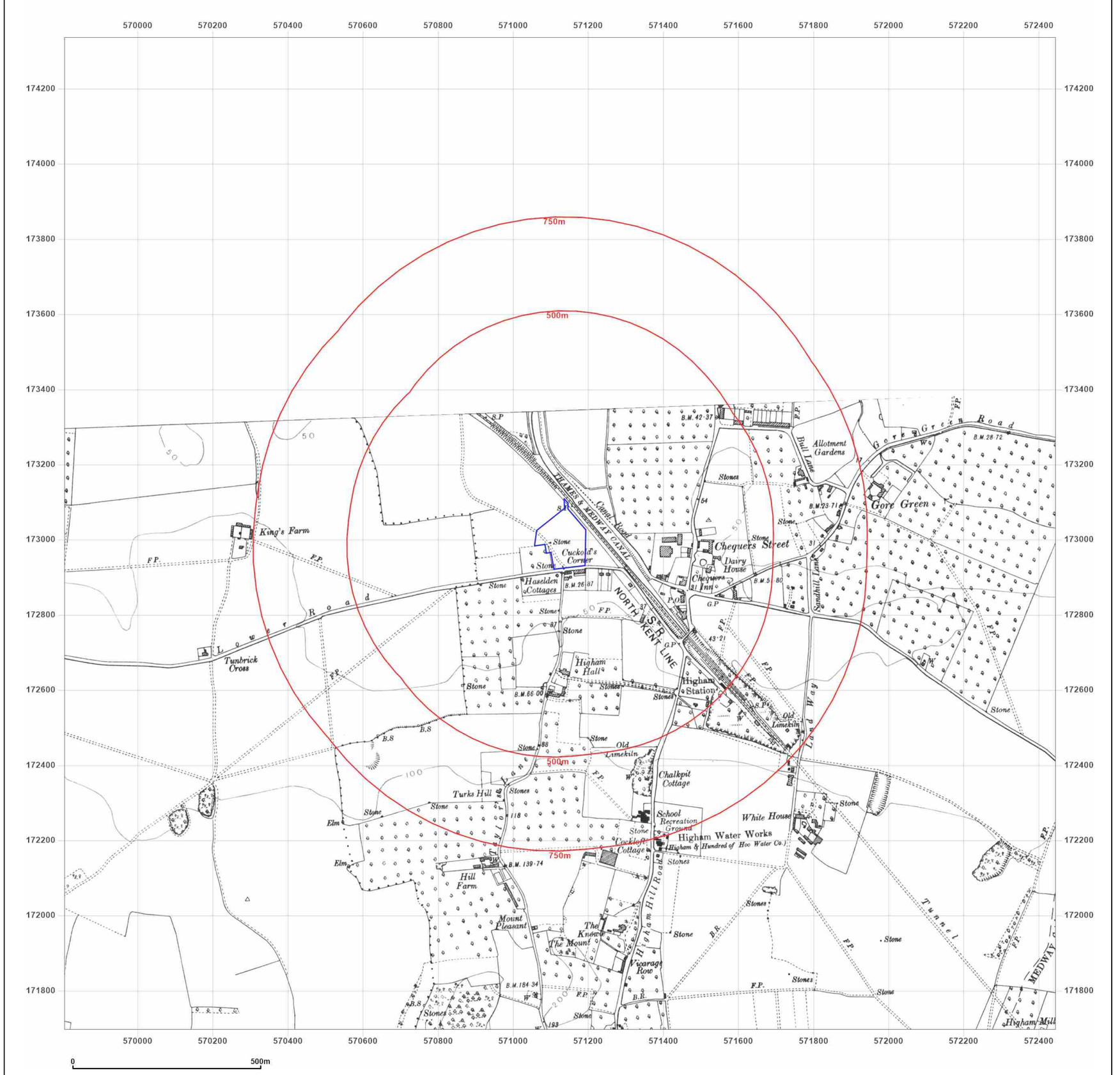

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1931**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1861
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A

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Production date: 18 March 2025

Map legend available at:
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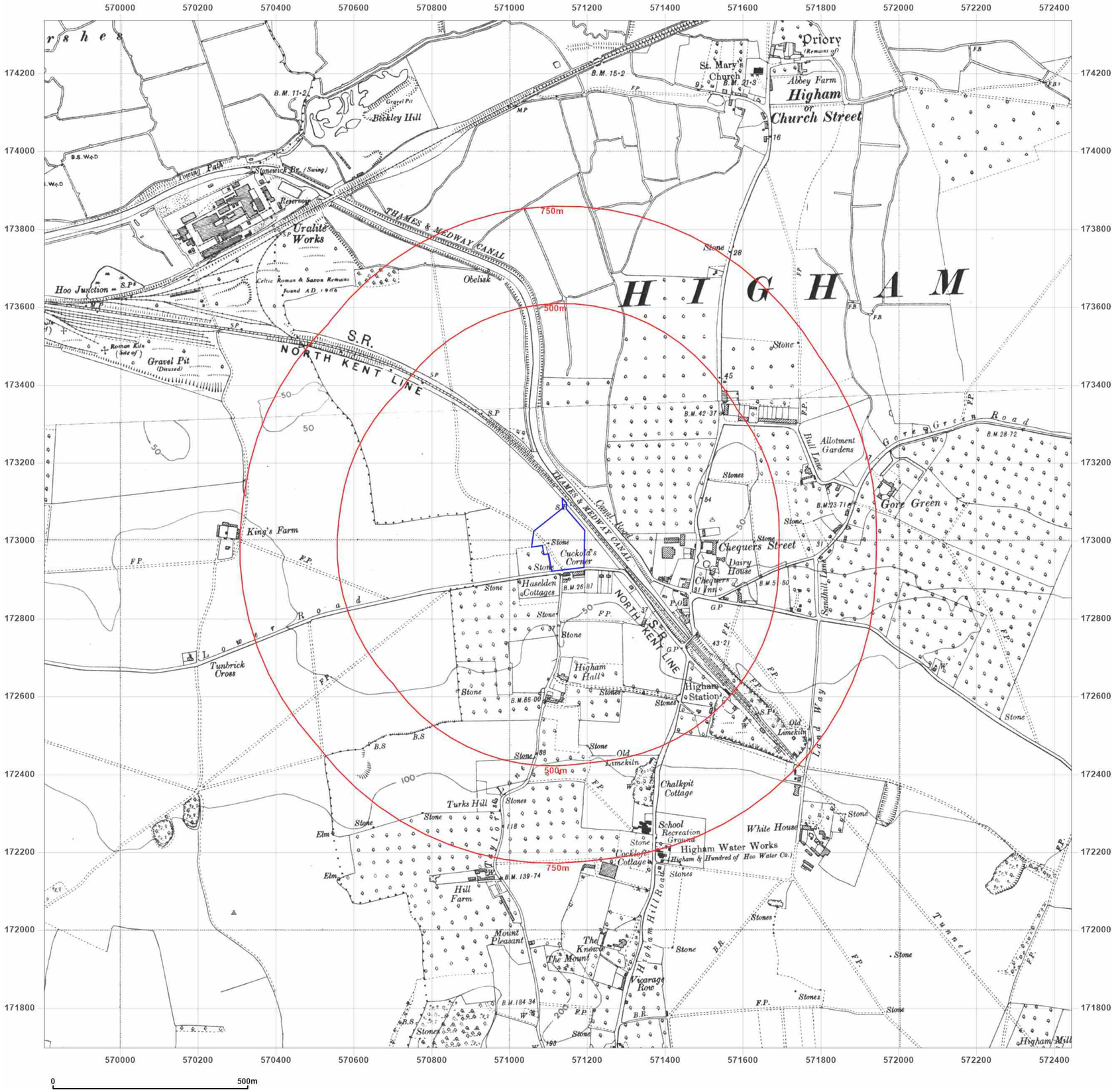

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: County Series

Map date: **1938-1940**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1861
Revised 1940
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1861
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

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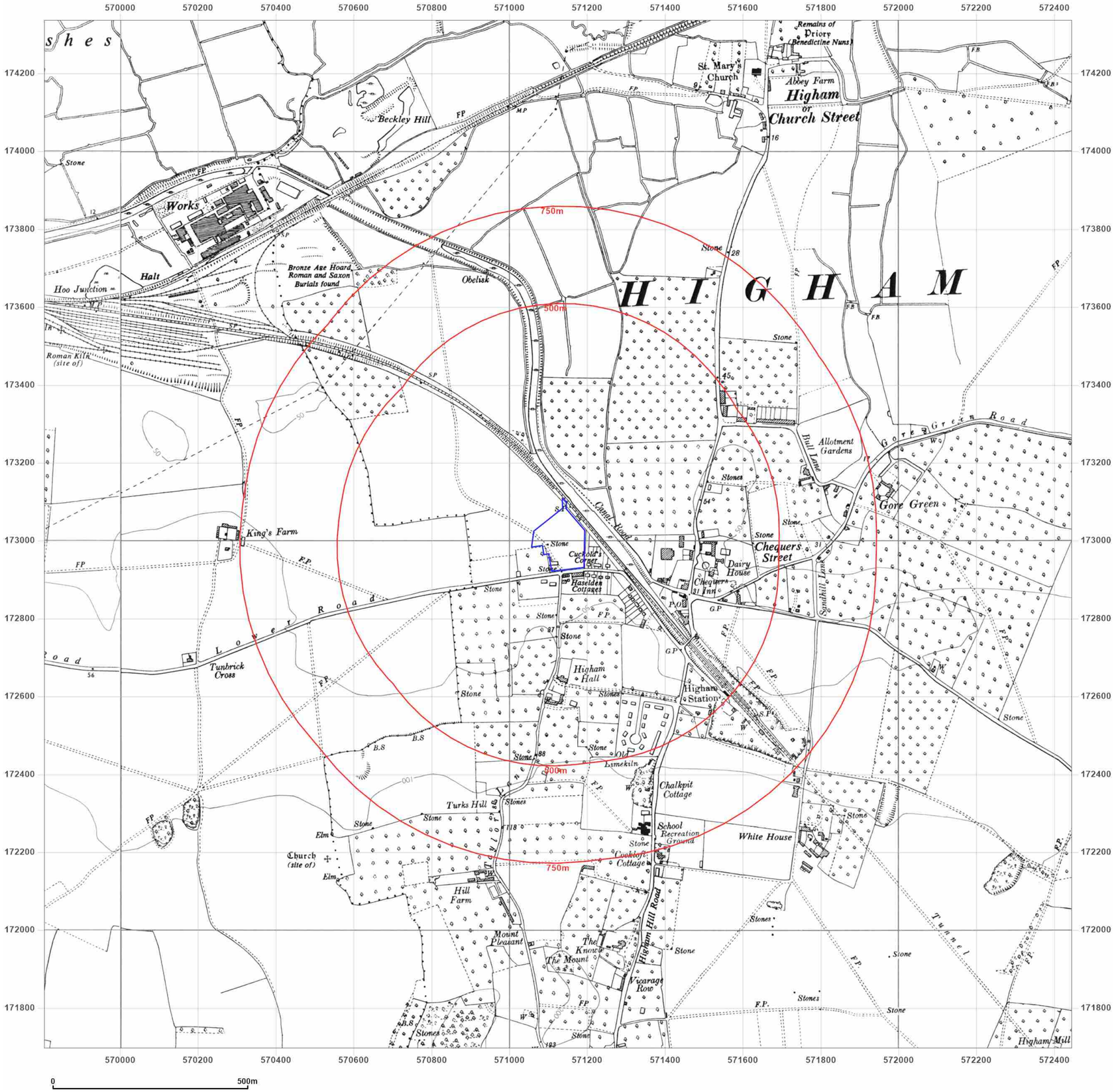

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: Provisional

Map date: **1955**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1863
Revised 1955
Edition N/A
Copyright N/A
Levelled N/A

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

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Production date: 18 March 2025

Map legend available at:
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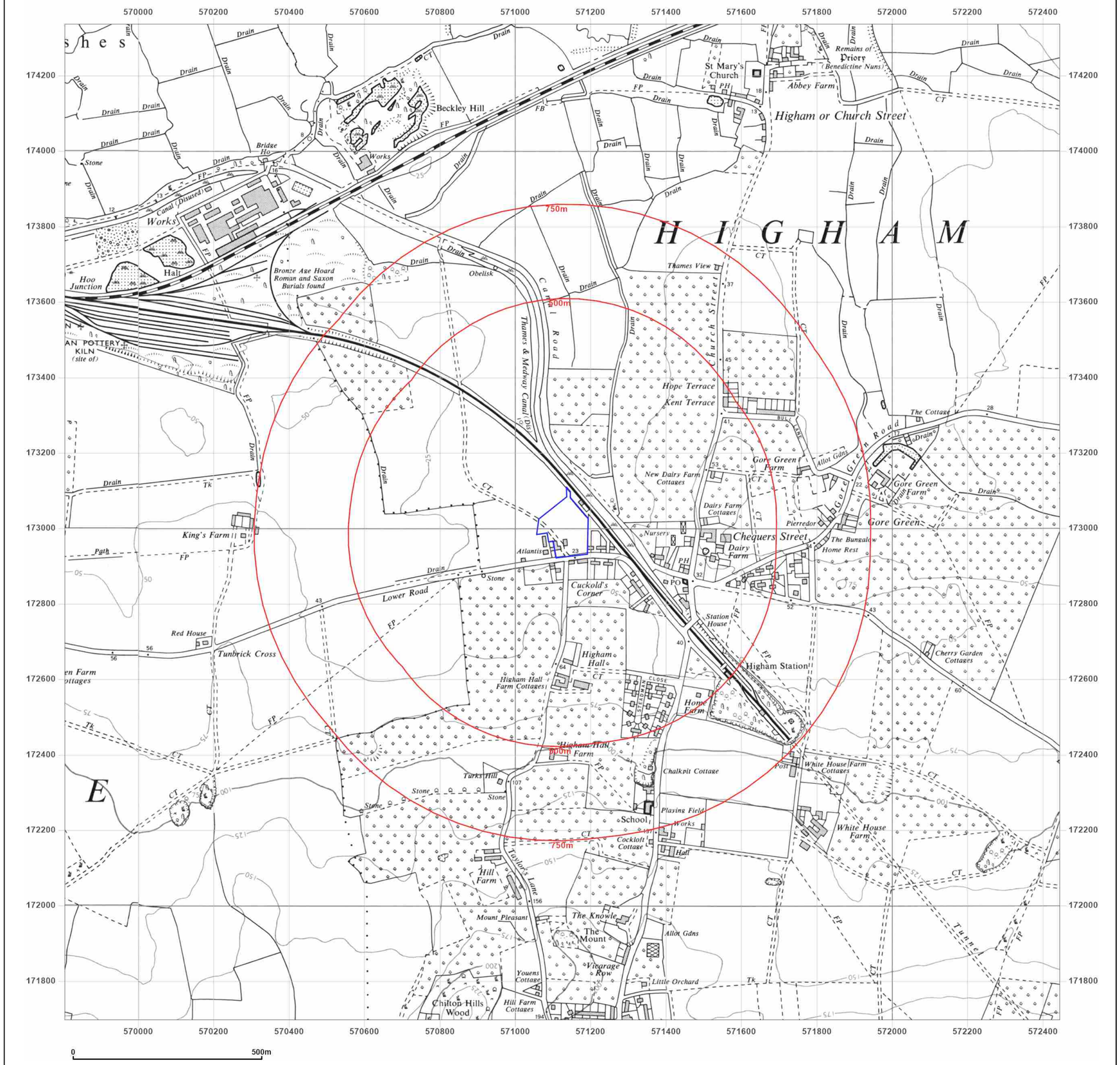

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: Provisional

Map date: **1966**

Scale: 1:10,560

Printed at: 1:10,560

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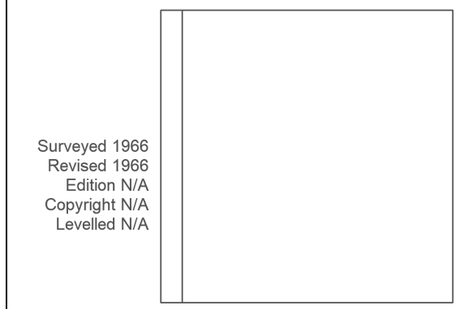

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Production date: 18 March 2025

Map legend available at:
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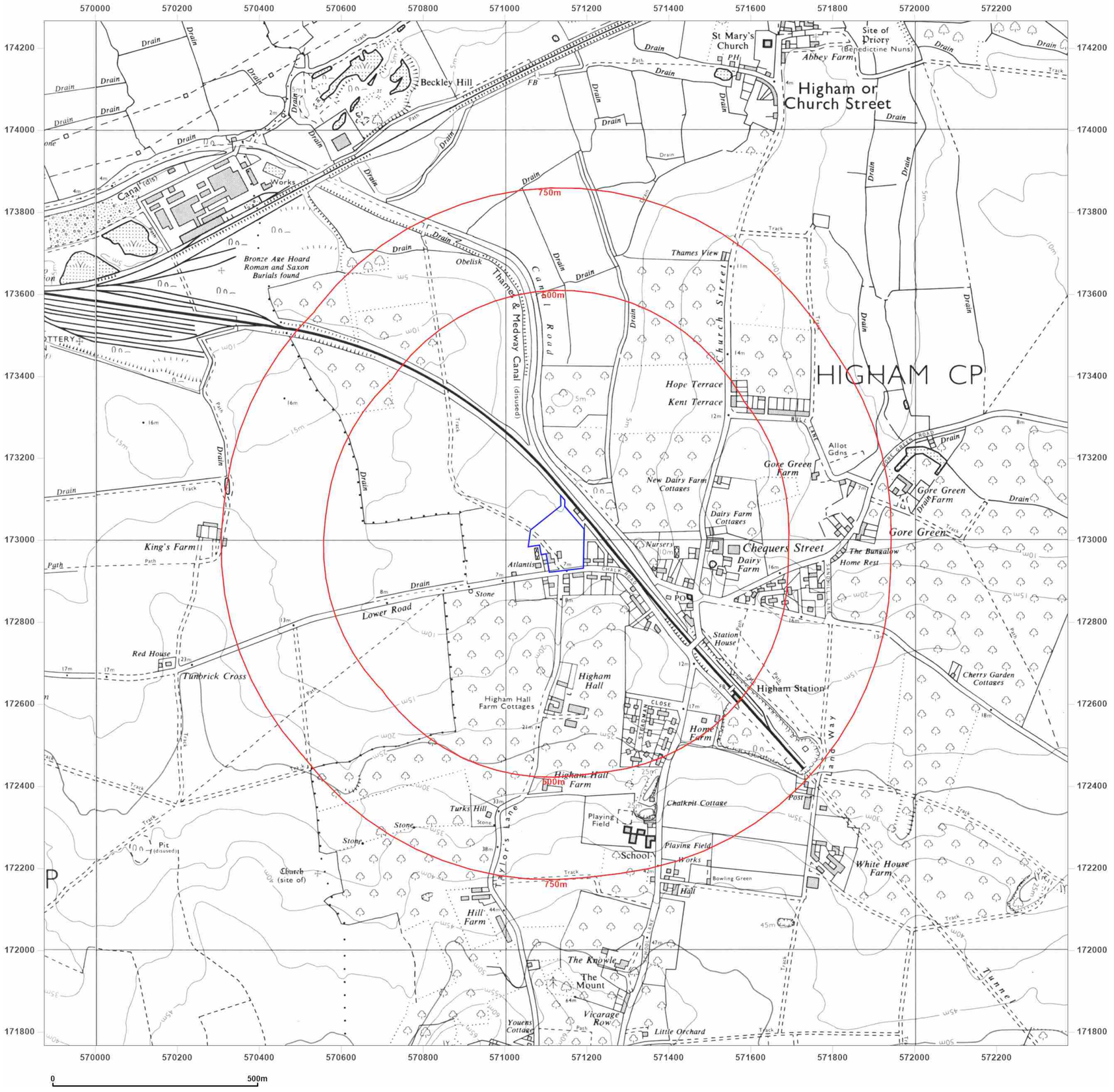

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **1973-1974**

Scale: 1:10,000

Printed at: 1:10,000

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

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

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Production date: 18 March 2025

Map legend available at:
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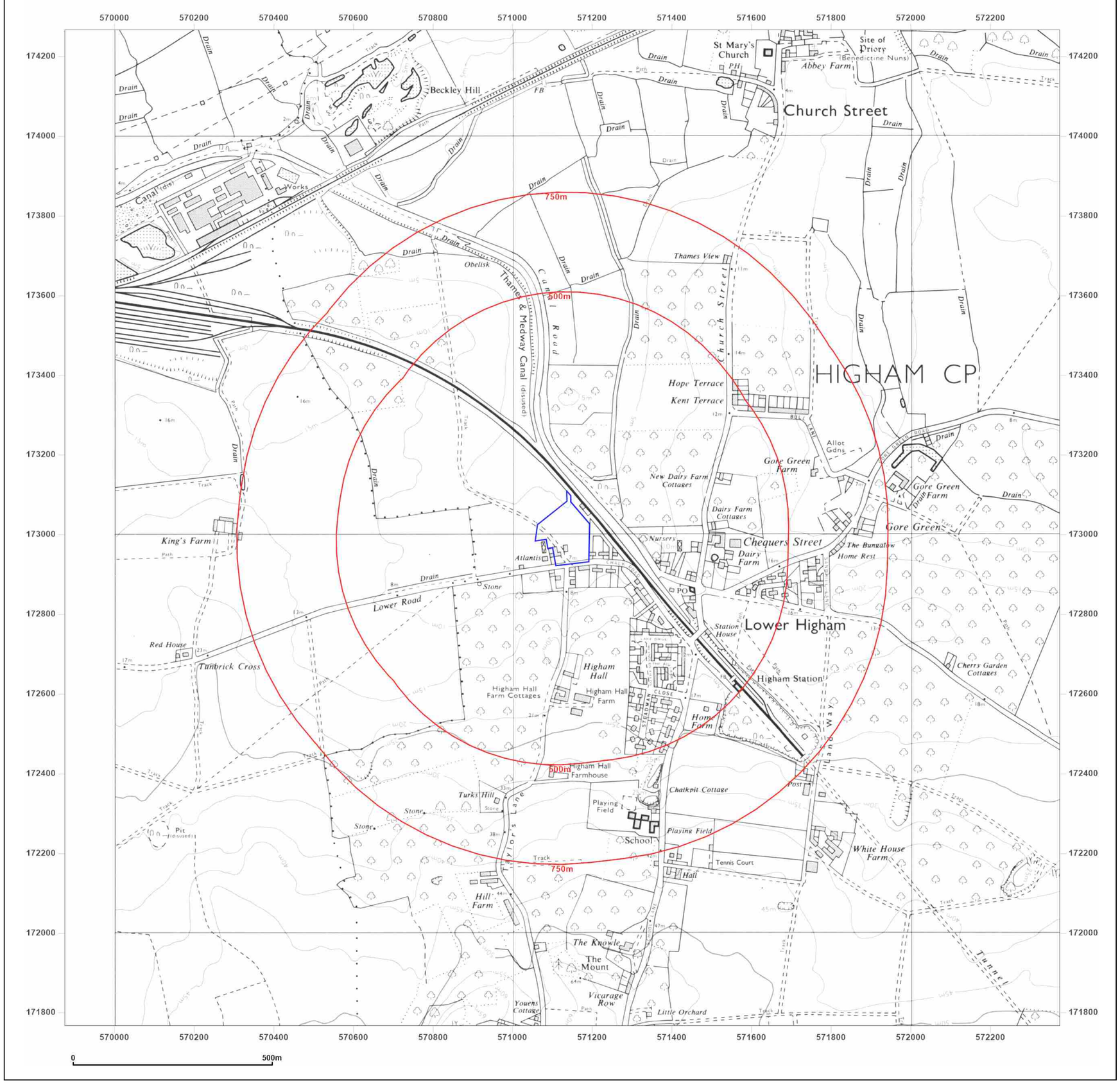

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **1992**

Scale: 1:10,000

Printed at: 1:10,000

N
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Surveyed 1983
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

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Production date: 18 March 2025

Map legend available at:
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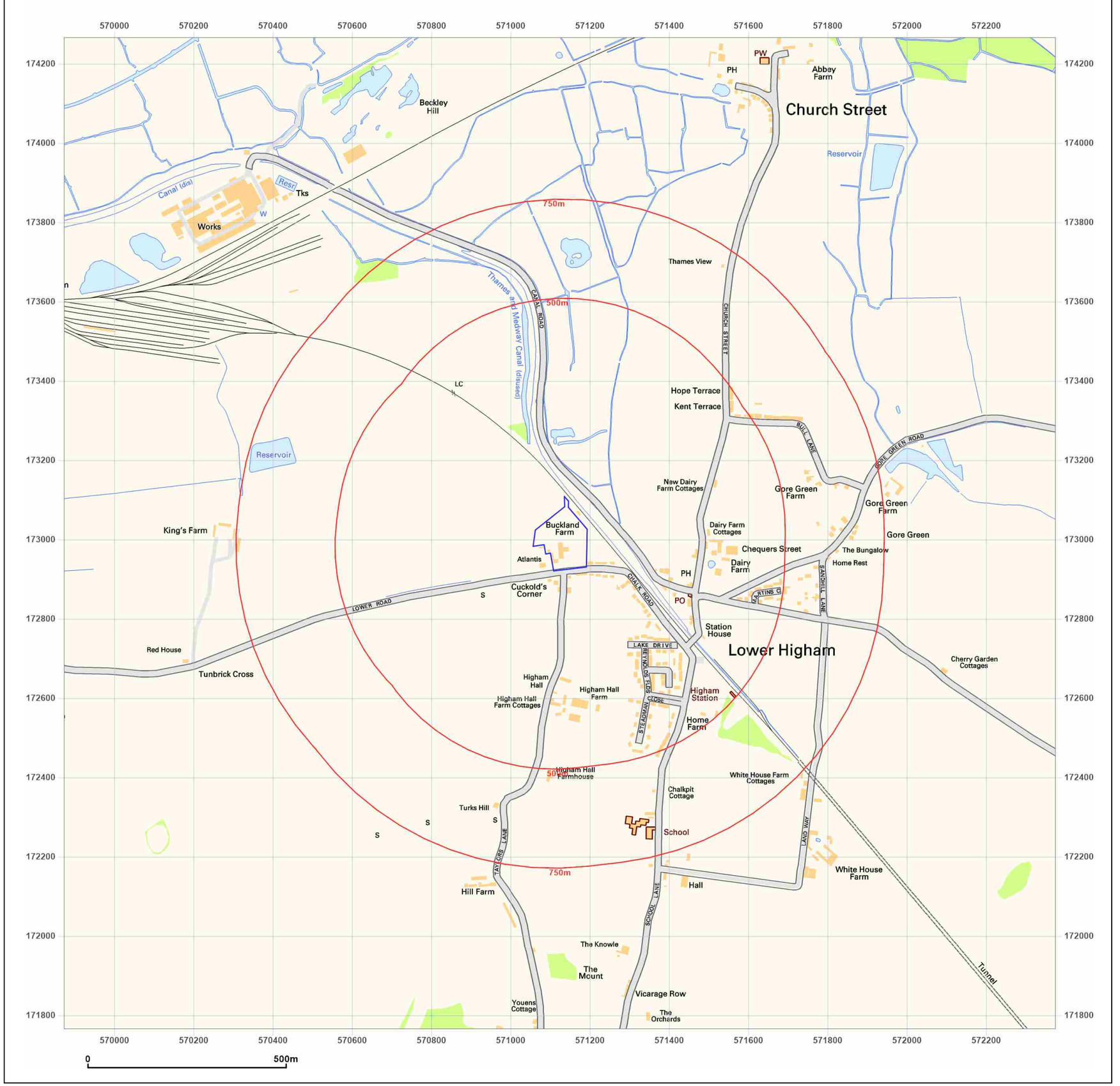

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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2001

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W: www.groundsure.com

Production date: 18 March 2025

Map legend available at:
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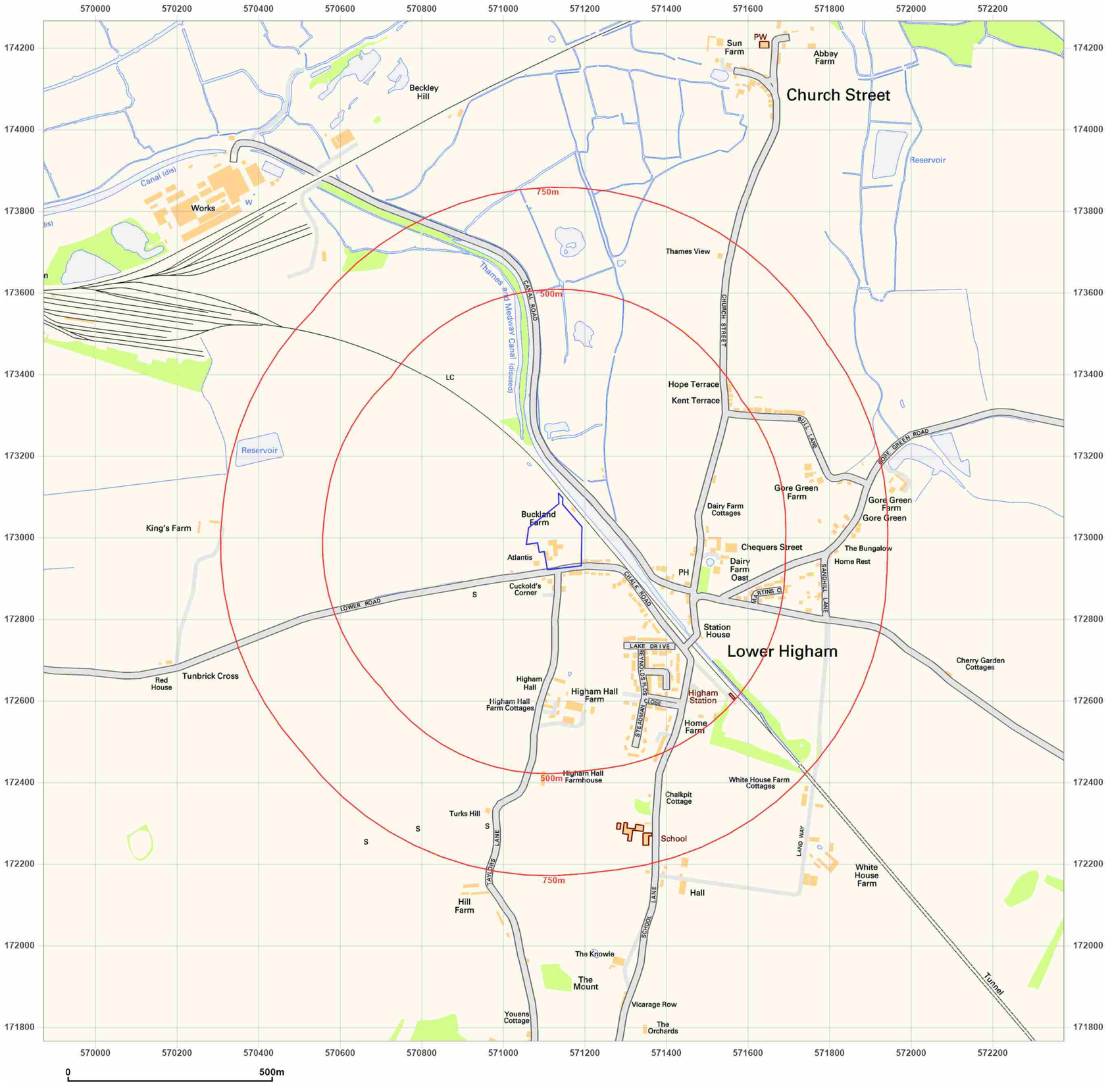

Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
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2010

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W: www.groundsure.com

Production date: 18 March 2025

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Groundsure INSIGHTS

Site Details:

Chalk Road, Higham

Client Ref: 29524
Report Ref: GS-FP6-IAK-6F9-WX7
Grid Ref: 571124, 173016

Map Name: National Grid

Map date: **2025**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
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2025

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T: 08444 159000
E: info@groundsure.com
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Production date: 18 March 2025

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MEC
Consulting Group

APPENDICES

APPENDIX D

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Chalk Road, Higham

Order Details

Date: 18/03/2025

Your ref: 29524

Our Ref: GS-QPT-EAN-XQH-MET

Site Details

Location: 571133 173000

Area: 1.51 ha

Authority: Gravesham Borough Council ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	5	8	32	-
17	1.2	Historical tanks	0	0	0	0	-
18	1.3	Historical energy features	0	0	0	0	-
18 >	1.4 >	Historical petrol stations >	0	0	1	0	-
18 >	1.5 >	Historical garages >	0	0	1	0	-
19	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
20 >	2.1 >	Historical industrial land uses >	0	7	12	45	-
23	2.2	Historical tanks	0	0	0	0	-
23	2.3	Historical energy features	0	0	0	0	-
23 >	2.4 >	Historical petrol stations >	0	0	2	0	-
24 >	2.5 >	Historical garages >	0	0	1	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
25	3.1	Active or recent landfill	0	0	0	0	-
25	3.2	Historical landfill (BGS records)	0	0	0	0	-
26	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
26	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
26	3.5	Historical waste sites	0	0	0	0	-
26	3.6	Licensed waste sites	0	0	0	0	-
26 >	3.7 >	Waste exemptions >	0	19	13	65	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
36 >	4.1 >	Recent industrial land uses >	1	1	2	-	-
37 >	4.2 >	Current or recent petrol stations >	0	0	0	1	-
37	4.3	Electricity cables	0	0	0	0	-
37 >	4.4 >	Gas pipelines >	0	0	1	1	-
38	4.5	Sites determined as Contaminated Land	0	0	0	0	-

38	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
38	4.7	Regulated explosive sites	0	0	0	0	-
38	4.8	Hazardous substance storage/usage	0	0	0	0	-
38	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
39	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
39	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
39	4.12	Radioactive Substance Authorisations	0	0	0	0	-
39	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
39	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
40	4.15	Pollutant release to public sewer	0	0	0	0	-
40	4.16	List 1 Dangerous Substances	0	0	0	0	-
40	4.17	List 2 Dangerous Substances	0	0	0	0	-
40	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
40	4.19	Pollution inventory substances	0	0	0	0	-
41	4.20	Pollution inventory waste transfers	0	0	0	0	-
41	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology** >	On site	0-50m	50-250m	250-500m	500-2000m
42 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
44 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
46 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
47 >	5.4 >	Groundwater vulnerability- soluble rock risk >	Identified (within 0m)				
48	5.5	Groundwater vulnerability- local information	None (within 0m)				
49 >	5.6 >	Groundwater abstractions >	0	0	0	0	8
52 >	5.7 >	Surface water abstractions >	0	0	2	0	26
58 >	5.8 >	Potable abstractions >	0	0	0	0	1
58 >	5.9 >	Source Protection Zones >	0	0	2	1	-
59	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology** >	On site	0-50m	50-250m	250-500m	500-2000m
60 >	6.1 >	Water Network (OS MasterMap) >	0	1	13	-	-

62 >	6.2 >	Surface water features >	0	1	6	-	-
62 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
62	6.4	WFD Surface water bodies	0	0	0	-	-
63	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
64 >	7.1 >	Risk of flooding from rivers and the sea >	Very Low (within 50m)				
65	7.2	Historical Flood Events	0	0	0	-	-
65	7.3	Flood Defences	0	0	0	-	-
65 >	7.4 >	Areas Benefiting from Flood Defences >	1	0	0	-	-
66	7.5	Flood Storage Areas	0	0	0	-	-
67 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
68 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
69 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
71 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
72 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	1	0	1	4
73 >	10.2 >	Conserved wetland sites (Ramsar sites) >	0	1	0	1	4
75	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
75 >	10.4 >	Special Protection Areas (SPA) >	0	0	0	0	3
76	10.5	National Nature Reserves (NNR)	0	0	0	0	0
76	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
76 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	2
76	10.8	Biosphere Reserves	0	0	0	0	0
77	10.9	Forest Parks	0	0	0	0	0
77	10.10	Marine Conservation Zones	0	0	0	0	0
77 >	10.11 >	Green Belt >	1	0	0	0	0
77	10.12	Proposed Ramsar sites	0	0	0	0	0

78	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
78	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
78	10.15	Nitrate Sensitive Areas	0	0	0	0	0
78 >	10.16 >	Nitrate Vulnerable Zones >	2	0	0	0	0
80 >	10.17 >	SSSI Impact Risk Zones >	2	-	-	-	-
81 >	10.18 >	SSSI Units >	0	1	0	1	11
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
96	11.1	World Heritage Sites	0	0	0	-	-
97	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
97	11.3	National Parks	0	0	0	-	-
97 >	11.4 >	Listed Buildings >	0	0	1	-	-
98 >	11.5 >	Conservation Areas >	0	0	1	-	-
98	11.6	Scheduled Ancient Monuments	0	0	0	-	-
98	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
99 >	12.1 >	Agricultural Land Classification >	Grade 1 (within 250m)				
100	12.2	Open Access Land	0	0	0	-	-
100	12.3	Tree Felling Licences	0	0	0	-	-
100 >	12.4 >	Environmental Stewardship Schemes >	0	1	1	-	-
100	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
101 >	13.1 >	Priority Habitat Inventory >	0	1	1	-	-
102	13.2	Habitat Networks	0	0	0	-	-
102	13.3	Open Mosaic Habitat	0	0	0	-	-
102	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
103 >	14.1 >	10k Availability >	Identified (within 500m)				
104	14.2	Artificial and made ground (10k)	0	0	0	0	-
105	14.3	Superficial geology (10k)	0	0	0	0	-

105	14.4	Landslip (10k)	0	0	0	0	-
106	14.5	Bedrock geology (10k)	0	0	0	0	-
106	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
107 >	**15.1 >**	**50k Availability >**	Identified (within 500m)				
108	15.2	Artificial and made ground (50k)	0	0	0	0	-
108	15.3	Artificial ground permeability (50k)	0	0	-	-	-
109 >	**15.4 >**	**Superficial geology (50k) >**	1	1	1	2	-
110 >	**15.5 >**	**Superficial permeability (50k) >**	Identified (within 50m)				
110	15.6	Landslip (50k)	0	0	0	0	-
110	15.7	Landslip permeability (50k)	None (within 50m)				
111 >	**15.8 >**	**Bedrock geology (50k) >**	1	1	0	2	-
112 >	**15.9 >**	**Bedrock permeability (50k) >**	Identified (within 50m)				
112	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
113 >	**16.1 >**	**BGS Boreholes >**	1	0	0	-	-
Page	Section	**Natural ground subsidence >**					
114 >	**17.1 >**	**Shrink swell clays >**	Moderate (within 50m)				
115 >	**17.2 >**	**Running sands >**	Low (within 50m)				
117 >	**17.3 >**	**Compressible deposits >**	High (within 50m)				
118 >	**17.4 >**	**Collapsible deposits >**	Very low (within 50m)				
119 >	**17.5 >**	**Landslides >**	Very low (within 50m)				
120 >	**17.6 >**	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
122	18.1	BritPits	0	0	0	0	-
123 >	**18.2 >**	**Surface ground workings >**	0	16	13	-	-
124 >	**18.3 >**	**Underground workings >**	0	0	0	0	9
125	18.4	Underground mining extents	0	0	0	0	-
125	18.5	Historical Mineral Planning Areas	0	0	0	0	-

125 >	18.6 >	Non-coal mining >	1	1	0	1	0
126	18.7	JPB mining areas	None (within 0m)				
126	18.8	The Coal Authority non-coal mining	0	0	0	0	-
126	18.9	Researched mining	0	0	0	0	-
126	18.10	Mining record office plans	0	0	0	0	-
127	18.11	BGS mine plans	0	0	0	0	-
127	18.12	Coal mining	None (within 0m)				
127	18.13	Brine areas	None (within 0m)				
127	18.14	Gypsum areas	None (within 0m)				
127	18.15	Tin mining	None (within 0m)				
128	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
129	19.1	Natural cavities	0	0	0	0	-
129	19.2	Mining cavities	0	0	0	0	0
129	19.3	Reported recent incidents	0	0	0	0	-
129	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
131 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
133 >	21.1 >	BGS Estimated Background Soil Chemistry >	6	2	-	-	-
134	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
134	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
135	22.1	Underground railways (London)	0	0	0	-	-
135	22.2	Underground railways (Non-London)	0	0	0	-	-
136	22.3	Railway tunnels	0	0	0	-	-
136	22.4	Historical railway and tunnel features	0	0	0	-	-
136	22.5	Royal Mail tunnels	0	0	0	-	-
136	22.6	Historical railways	0	0	0	-	-

136 >	**22.7 >**	**Railways >**	0	5	0	-	-
137	22.8	Crossrail 2	0	0	0	0	-
137	22.9	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 31/05/2021

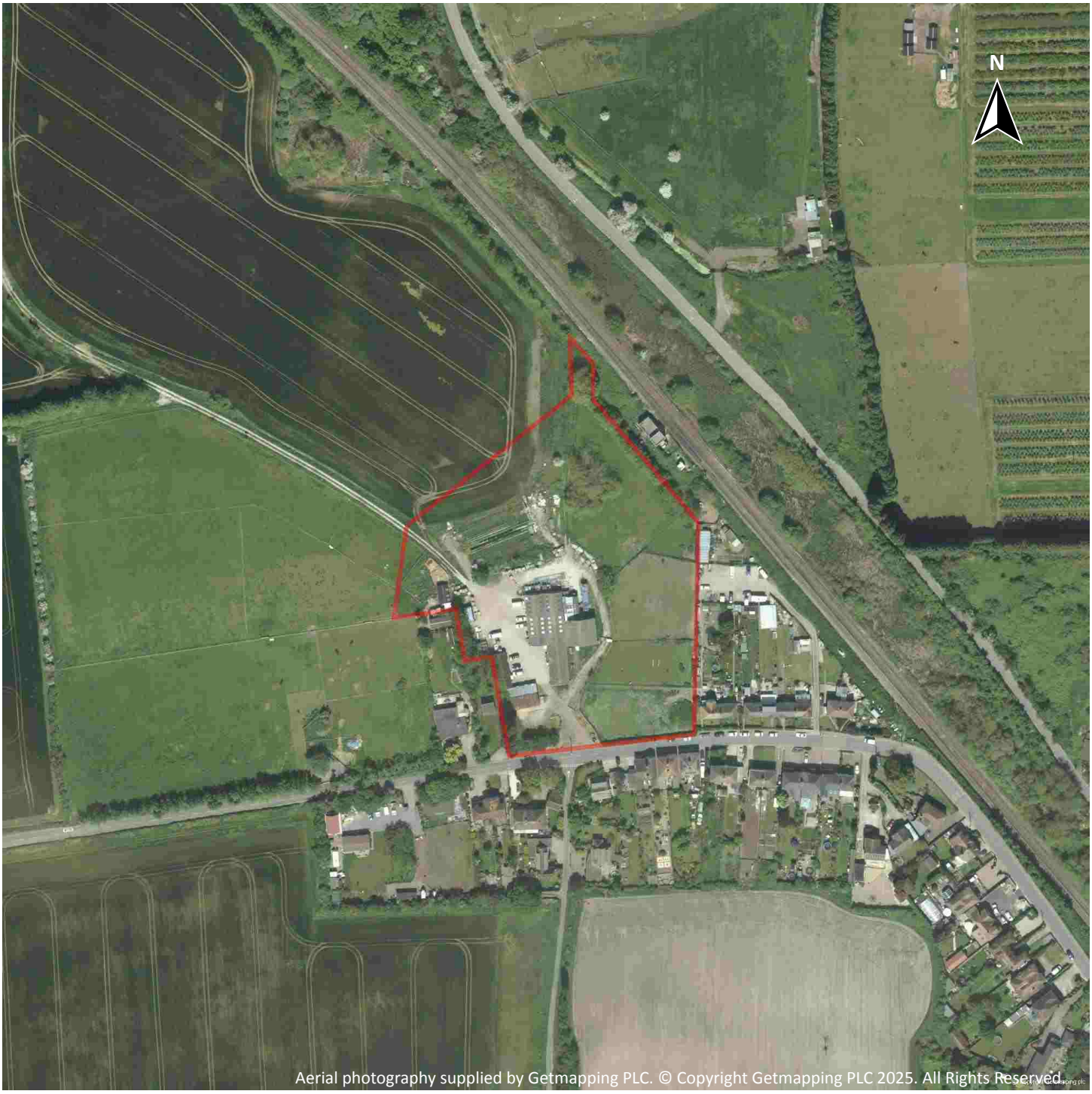
Site Area: 1.51ha

Recent site history - 2018 aerial photograph

Capture Date: 01/09/2018

Site Area: 1.51ha

Recent site history - 2012 aerial photograph



Capture Date: 25/05/2012

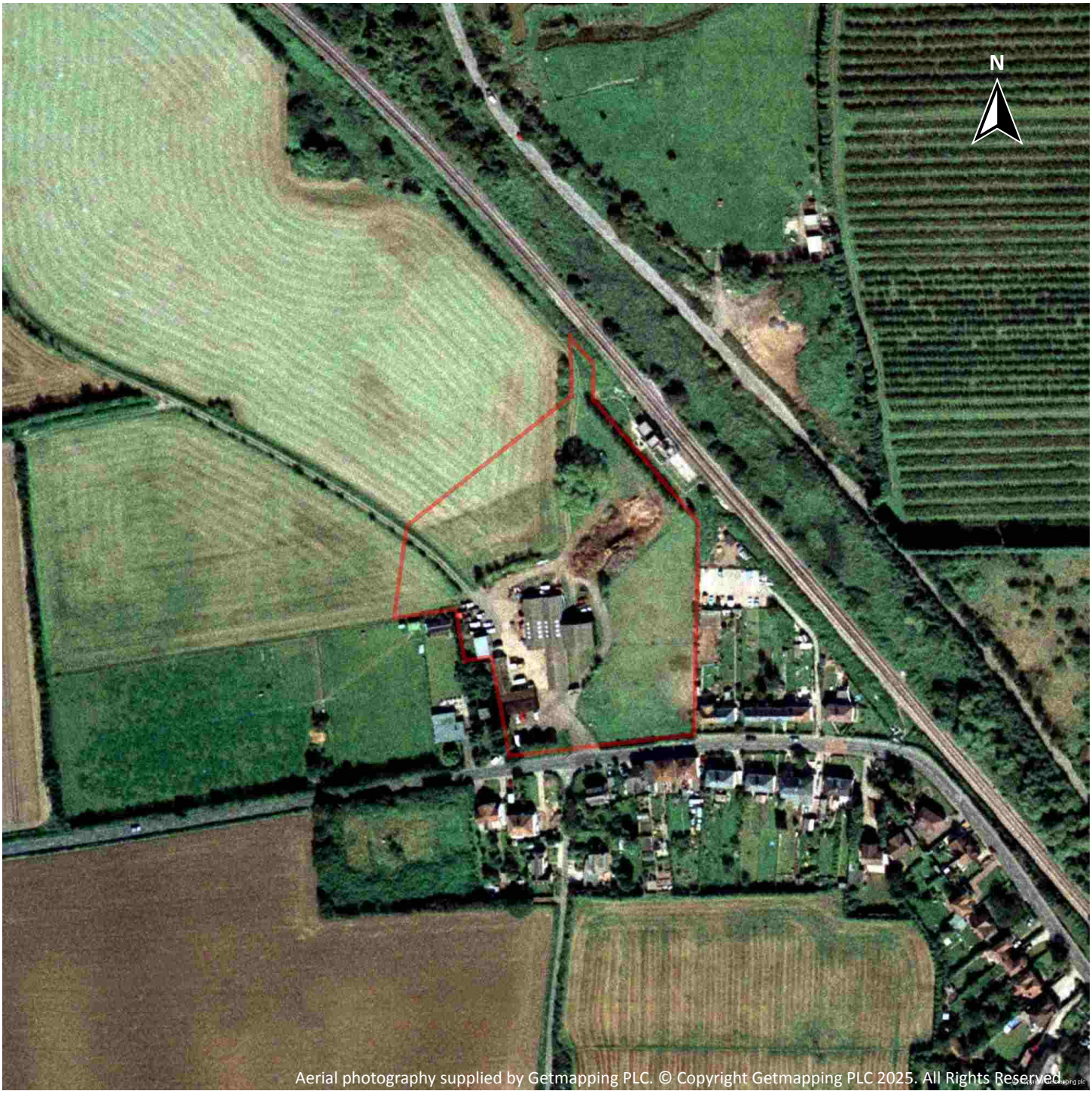
Site Area: 1.51ha

Recent site history - 2008 aerial photograph

Capture Date: 09/10/2008

Site Area: 1.51ha

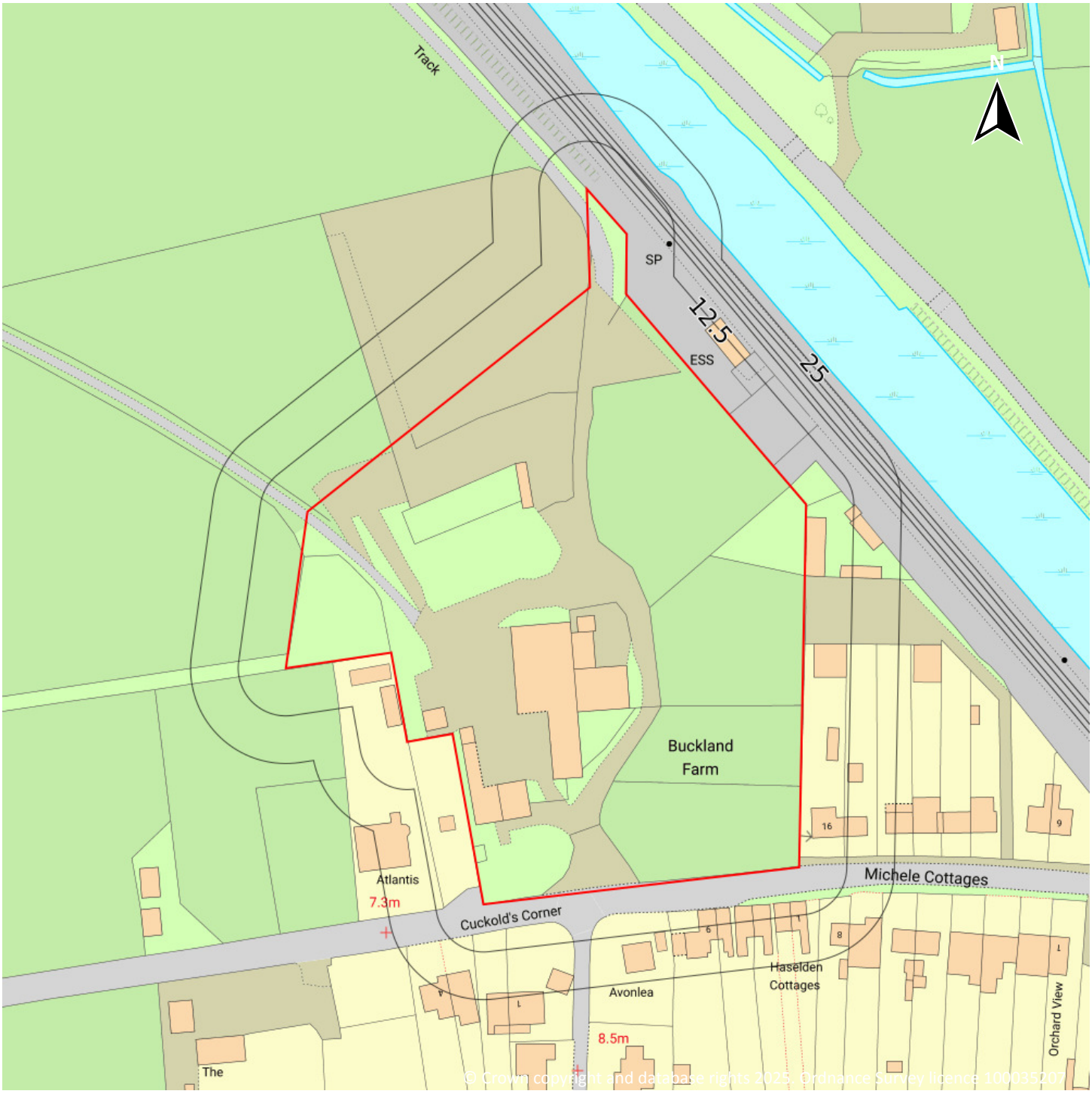
Recent site history - 1999 aerial photograph



Capture Date: 03/09/1999

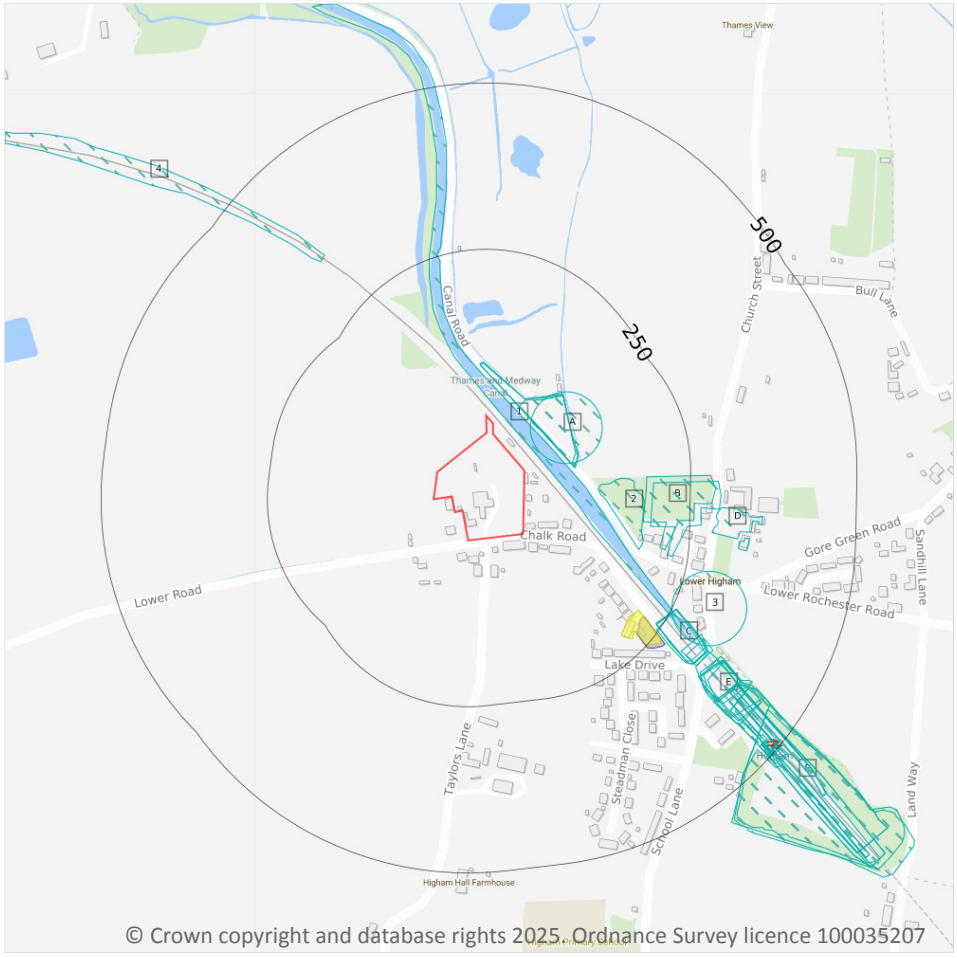
Site Area: 1.51ha

OS MasterMap site plan



Site Area: 1.51ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical petrol stations

Historical garages

1.1 Historical industrial land uses

Records within 500m	45

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

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
1	19m N	Disused Canal	1966 - 1992	2327731

ID	Location	Land use	Dates present	Group ID
A	36m NE	Unspecified Wharf	1895	2231179
A	45m N	Unspecified Wharf	1888	2263918
A	46m N	Unspecified Wharf	1896	2212208
A	48m NE	Unspecified Wharf	1862	2271819
2	111m E	Unspecified Heap	1862	2186721
B	180m E	Nursery	1966	2252229
B	191m E	Nursery	1974 - 1992	2309480
C	240m SE	Cuttings	1895 - 1938	2261976
C	243m SE	Cuttings	1931	2259085
C	243m SE	Cuttings	1888	2266065
3	245m SE	Saw Pit	1862	2169620
C	247m SE	Cuttings	1955	2309222
D	284m E	Dairy House	1931	2195071
C	296m SE	Cuttings	1992	2216566
C	305m SE	Cuttings	1974	2318902
D	324m E	Dairy House	1888	2195072
E	328m SE	Cuttings	1862	2251467
E	338m SE	Cuttings	1992	2324864
4	339m NW	Cuttings	1862	2216265
E	340m SE	Cuttings	1888	2230237
E	340m SE	Cuttings	1931	2240098
E	343m SE	Cuttings	1955	2261712
E	344m SE	Cuttings	1895 - 1938	2259545
E	354m SE	Cuttings	1974	2263520
F	382m SE	Railway Sidings	1966	2204401
F	382m SE	Railway Sidings	1955	2329169
F	388m SE	Railway Sidings	1895 - 1938	2237003
F	389m SE	Railway Station	1931	2205956

ID	Location	Land use	Dates present	Group ID
F	392m SE	Railway Sidings	1931	2216678
F	392m SE	Railway Sidings	1888	2296645
F	400m SE	Railway Station	1888	2251568
F	409m SE	Railway Sidings	1992	2288516
F	409m SE	Railway Sidings	1974	2304968
F	415m SE	Railway Building	1862	2195898
F	451m SE	Unspecified Quarry	1931	2185200
F	452m SE	Cuttings	1955 - 1992	2271259
F	478m SE	Railway Station	1895 - 1938	2235953
F	478m SE	Railway Station	1955	2250532
F	479m SE	Electric Telegraph	1862	2173927
F	480m SE	Railway Station	1966	2216087
F	493m SE	Police Station	1974 - 1992	2215799
F	496m SE	Railway Station	1862	2233409
F	496m SE	Railway Sidings	1931	2269422
F	496m SE	Railway Sidings	1888	2306204

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	1

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

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
C	202m SE	Filling Station	1978 - 1989	4487

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	1

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

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
C	218m SE	Garage	1993	81470

This data is sourced from Ordnance Survey / Groundsure.

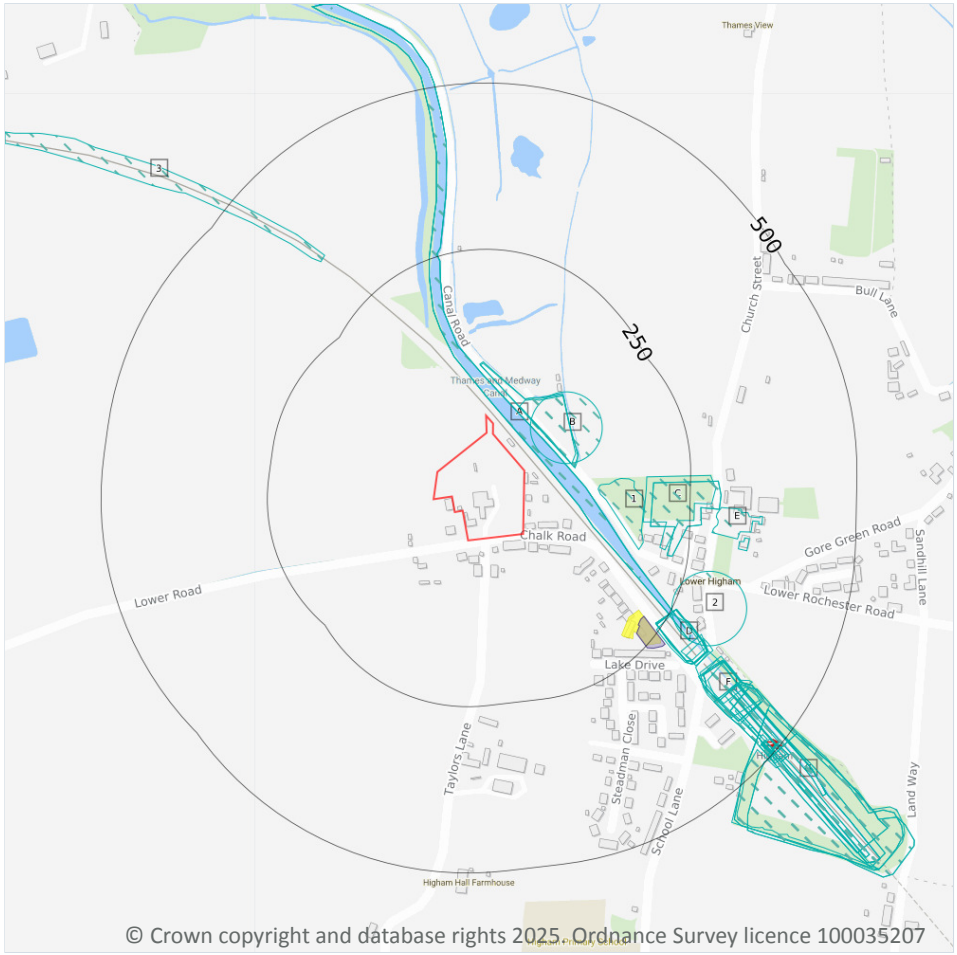
1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical petrol stations

Historical garages

2.1 Historical industrial land uses

Records within 500m	64

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 20 >**

ID	Location	Land Use	Date	Group ID
A	19m N	Disused Canal	1992	2327731
A	19m N	Disused Canal	1974	2327731
A	19m N	Disused Canal	1966	2327731

ID	Location	Land Use	Date	Group ID
B	36m NE	Unspecified Wharf	1895	2231179
B	45m N	Unspecified Wharf	1888	2263918
B	46m N	Unspecified Wharf	1896	2212208
B	48m NE	Unspecified Wharf	1862	2271819
1	111m E	Unspecified Heap	1862	2186721
C	180m E	Nursery	1966	2252229
C	191m E	Nursery	1992	2309480
C	191m E	Nursery	1974	2309480
D	240m SE	Cuttings	1931	2261976
D	240m SE	Cuttings	1938	2261976
D	240m SE	Cuttings	1907	2261976
D	240m SE	Cuttings	1895	2261976
D	243m SE	Cuttings	1931	2259085
D	243m SE	Cuttings	1888	2266065
2	245m SE	Saw Pit	1862	2169620
D	247m SE	Cuttings	1955	2309222
E	284m E	Dairy House	1931	2195071
D	296m SE	Cuttings	1992	2216566
D	305m SE	Cuttings	1974	2318902
E	324m E	Dairy House	1888	2195072
F	328m SE	Cuttings	1862	2251467
F	338m SE	Cuttings	1992	2324864
3	339m NW	Cuttings	1862	2216265
F	340m SE	Cuttings	1931	2240098
F	340m SE	Cuttings	1888	2230237
F	343m SE	Cuttings	1955	2261712
F	344m SE	Cuttings	1931	2259545
F	344m SE	Cuttings	1938	2259545

ID	Location	Land Use	Date	Group ID
F	344m SE	Cuttings	1907	2259545
F	344m SE	Cuttings	1895	2259545
F	354m SE	Cuttings	1974	2263520
G	382m SE	Railway Sidings	1955	2329169
G	382m SE	Railway Sidings	1966	2204401
G	388m SE	Railway Sidings	1938	2237003
G	388m SE	Railway Sidings	1907	2237003
G	388m SE	Railway Sidings	1895	2237003
G	388m SE	Railway Sidings	1931	2237003
G	389m SE	Railway Station	1931	2205956
G	392m SE	Railway Sidings	1931	2216678
G	392m SE	Railway Sidings	1888	2296645
G	400m SE	Railway Station	1888	2251568
G	409m SE	Railway Sidings	1992	2288516
G	409m SE	Railway Sidings	1974	2304968
G	415m SE	Railway Building	1862	2195898
G	451m SE	Unspecified Quarry	1931	2185200
G	452m SE	Cuttings	1955	2271259
G	452m SE	Cuttings	1966	2271259
G	478m SE	Railway Station	1938	2235953
G	478m SE	Railway Station	1907	2235953
G	478m SE	Railway Station	1895	2235953
G	478m SE	Railway Station	1931	2235953
G	478m SE	Railway Station	1955	2250532
G	479m SE	Electric Telegraph	1862	2173927
G	480m SE	Railway Station	1966	2216087
G	493m SE	Police Station	1992	2215799
G	493m SE	Police Station	1974	2215799

ID	Location	Land Use	Date	Group ID
G	496m SE	Railway Station	1862	2233409
G	496m SE	Railway Sidings	1931	2269422
G	496m SE	Railway Sidings	1888	2306204
G	499m SE	Cuttings	1992	2271259
G	499m SE	Cuttings	1974	2271259

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	2

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

Features are displayed on the Past land use - un-grouped map on **page 20 >**

ID	Location	Land Use	Date	Group ID
D	202m SE	Filling Station	1978	4487
D	202m SE	Filling Station	1989	4487

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	1

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

Features are displayed on the Past land use - un-grouped map on **page 20 >**

ID	Location	Land Use	Date	Group ID
D	218m SE	Garage	1993	81470

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

Site Outline

Search buffers in metres (m)

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

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

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

3.5 Historical waste sites

Records within 500m	0

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

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

3.6 Licensed waste sites

Records within 500m	0

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

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

3.7 Waste exemptions

Records within 500m	97

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

Features are displayed on the Waste and landfill map on **page 25 >**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	13m SE	-	WEX266851	Disposing of waste exemption	On a farm	Burning waste in the open

ID	Location	Site	Reference	Category	Sub-Category	Description
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/NF0902SF/A001	Treating waste exemption	Non-agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/NF0902SF/A001	Using waste exemption	Non-agricultural waste only	Burning of waste as a fuel in a small appliance
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0004PT/A001	Disposing of waste exemption	Agricultural waste only	Burning waste in the open
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0004PT/A001	Using waste exemption	Agricultural waste only	Use of mulch
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0404PW/A001	Disposing of waste exemption	Non-agricultural waste only	Burning waste in the open
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0404PW/A001	Using waste exemption	Non-agricultural waste only	Use of mulch
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/NF0902SF/A001	Disposing of waste exemption	Non-agricultural waste only	Burning waste in the open
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/FF0107UQ/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0004PT/A001	Storing waste exemption	Agricultural waste only	Storage of waste in secure containers
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0004PT/A001	Treating waste exemption	Agricultural waste only	Aerobic composting and associated prior treatment
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0004PT/A001	Treating waste exemption	Agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0004PT/A001	Using waste exemption	Agricultural waste only	Burning of waste as a fuel in a small appliance
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0404PW/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in secure containers

ID	Location	Site	Reference	Category	Sub-Category	Description
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0404PW/A001	Treating waste exemption	Non-agricultural waste only	Aerobic composting and associated prior treatment
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0404PW/A001	Treating waste exemption	Non-agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	17m S	Buckland Farm Chalk Road Rochester Kent Me3 7jy	EPR/EF0404PW/A001	Using waste exemption	Non-agricultural waste only	Burning of waste as a fuel in a small appliance
A	18m S	Buckland Farm, Chalk Road, Higham, Rochester, Kent, Me3 7jy	WEX124572	Disposing of waste exemption	On a farm	Burning waste in the open
A	18m S	Buckland Farm, Chalk Road, Higham, Me3 7jy	WEX127034	Disposing of waste exemption	On a farm	Burning waste in the open
1	104m N	-	WEX133130	Using waste exemption	On a farm	Use of waste in construction
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX176748	Using waste exemption	On a farm	Use of waste in construction
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX176748	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX020749	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX020749	Using waste exemption	On a farm	Use of waste in construction
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX020749	Disposing of waste exemption	On a farm	Burning waste in the open
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX020749	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX176748	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX176748	Disposing of waste exemption	On a farm	Burning waste in the open
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX308275	Disposing of waste exemption	On a farm	Burning waste in the open
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX308275	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX308275	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
B	213m SE	The Old Barn, Chalk Road, Higham, Rochester, Me3 7la	WEX308275	Using waste exemption	On a farm	Use of waste in construction
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Disposal by incineration
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Sorting mixed waste
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste food
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Crushing and emptying waste vehicle oil filters

ID	Location	Site	Reference	Category	Sub-Category	Description
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste in a biobed or biofilter
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Recovery of scrap metal
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of mulch
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste to manufacture finished goods
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Deposit of waste from dredging of inland waters
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Deposit of waste from a portable sanitary convenience
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in secure containers
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Cleaning, washing, spraying or coating relevant waste
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Preparatory treatments (baling, sorting, shredding etc)
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on non-agricultural land to confer benefit
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading of plant matter to confer benefit
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Incorporation of ash into soil
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Burning of waste as a fuel in a small appliance
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste derived biodiesel as fuel

ID	Location	Site	Reference	Category	Sub-Category	Description
C	275m S	Higham Hall Farm Taylors Lane Rochester Kent Me3 7ju	EPR/FH0978WX/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Disposing of waste exemption	On a farm	Burning waste in the open
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Disposing of waste exemption	On a farm	Disposal by incineration
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Treating waste exemption	On a farm	Recovery of scrap metal
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Use of waste to manufacture finished goods
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Storing waste exemption	On a farm	Storage of waste in a secure place
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Storing waste exemption	On a farm	Storage of waste in secure containers
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Pig and poultry ash
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Spreading of plant matter to confer benefit

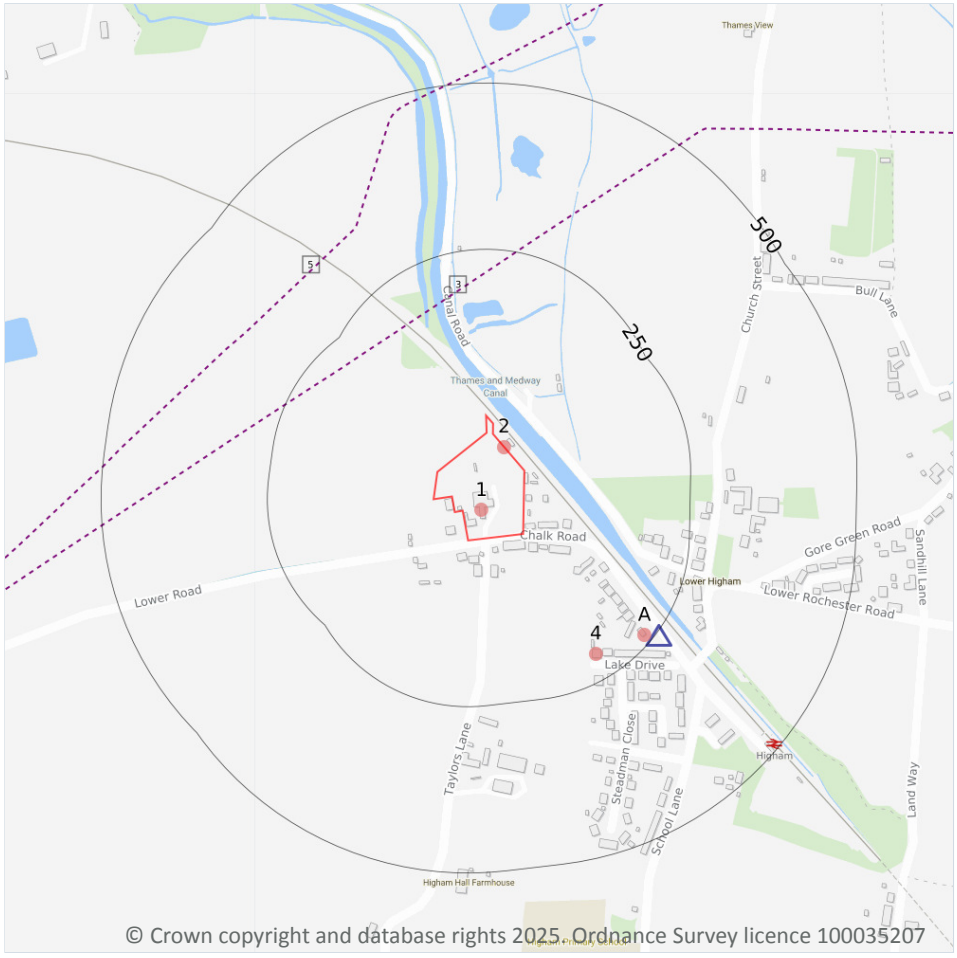
ID	Location	Site	Reference	Category	Sub-Category	Description
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Use of waste for a specified purpose
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Use of waste derived biodiesel as fuel
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Use of baled end-of-life tyres in construction
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX322864	Using waste exemption	On a farm	Use of waste in construction
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX032552	Storing waste exemption	On a farm	Storage of waste in secure containers
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX032552	Storing waste exemption	On a farm	Storage of waste in a secure place
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX032557	Using waste exemption	On a farm	Use of waste in construction
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX032557	Using waste exemption	On a farm	Spreading waste on non-agricultural land to confer benefit
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Use of waste to manufacture finished goods
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Treating waste exemption	On a farm	Recovery of scrap metal
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice

ID	Location	Site	Reference	Category	Sub-Category	Description
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Disposing of waste exemption	On a farm	Disposal by incineration
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Disposing of waste exemption	On a farm	Burning waste in the open
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Use of waste in construction
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Use of baled end-of-life tyres in construction
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Use of waste derived biodiesel as fuel
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Use of waste for a specified purpose
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Using waste exemption	On a farm	Pig and poultry ash
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Storing waste exemption	On a farm	Storage of waste in secure containers
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX191159	Storing waste exemption	On a farm	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX032554	Disposing of waste exemption	On a farm	Disposal by incineration
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX032554	Disposing of waste exemption	On a farm	Burning waste in the open
C	276m S	Higham Hall, Taylors Lane, Higham, Rochester, Me3 7ju	WEX032557	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Current or recent petrol stations

Gas pipelines

4.1 Recent industrial land uses

Records within 250m	**4**

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 36 >**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Moor Fast Marine Ltd**	**Unit A Buckland Farm, Chalk Road, Higham, Rochester, Kent, ME3 7JY**	**Marine Engineers and Services**	**Engineering Services**
2	**On site**	**Electricity Sub Station**	**Kent, ME3**	**Electrical Features**	**Infrastructure and Facilities**
4	211m SE	Galdans	1, Lake Drive, Higham, Rochester, Kent, ME3 7LZ	Cutting, Drilling and Welding Services	Construction Services

ID	Location	Company	Address	Activity	Category
A	237m SE	Kingsway Motors	Chalk Road, Higham, Rochester, Kent, ME3 7LA	Vehicle Repair, Testing and Servicing	Repair and Servicing

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**1**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 36 >**

ID	Location	Company	Address	LPG	Status
A	254m SE	UNBRANDED	Chalk Road, Higham, Rochester, Kent, ME3 7LA	No	Closed

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	**2**

High pressure underground gas transmission pipelines.

Features are displayed on the Current industrial land use map on **page 36 >**

ID	Location	Pipe Name	Details	
3	180m N	ISLE OF GRAIN TO GRAVESEND	Pipe Number: - Pipeline Safety Regulations Number: - Ownership: National Grid Maximum Operating Pressure (Bar): -	Pipeline Diameter (mm): 900 Wall Thickness (mm): - Year of commission: Not specified Abandonment Status: Not abandoned
5	340m NW	SHORNE TO ISLE OF GRAIN	Pipe Number: - Pipeline Safety Regulations Number: - Ownership: National Grid Maximum Operating Pressure (Bar): -	Pipeline Diameter (mm): 600 Wall Thickness (mm): - Year of commission: Not specified Abandonment Status: Not abandoned

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	0

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

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	0

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

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

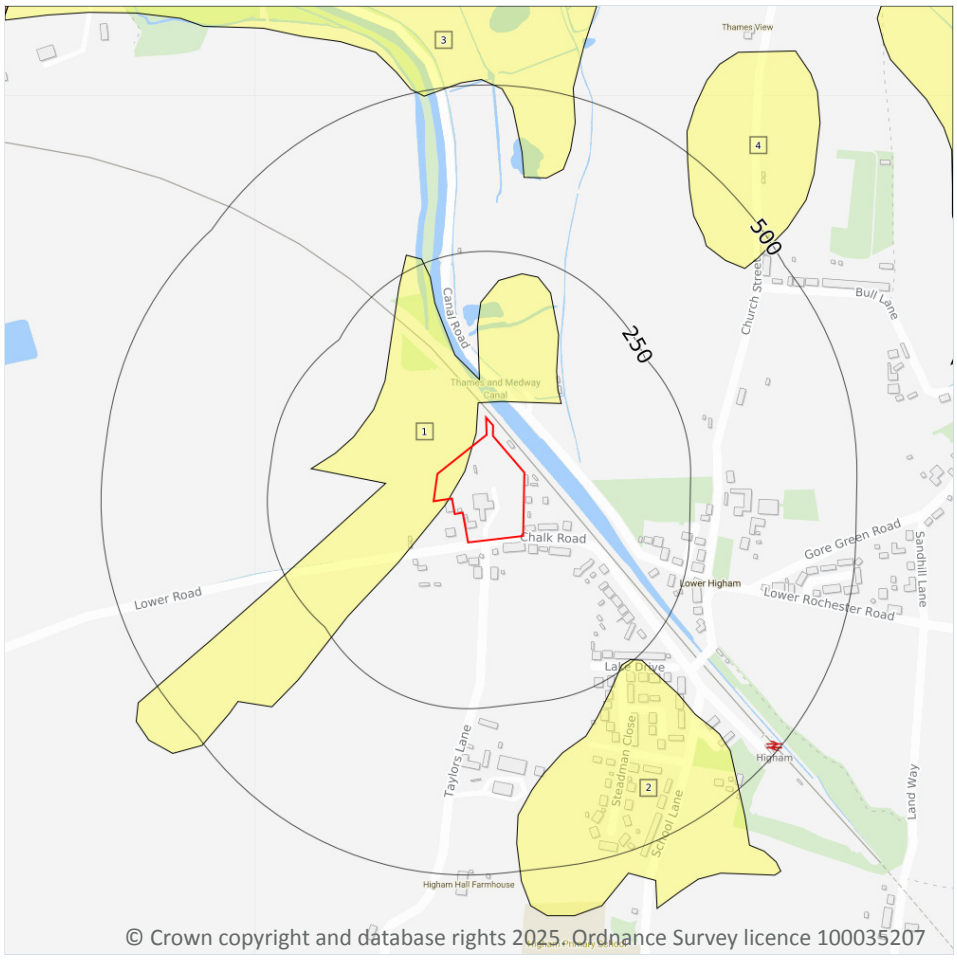
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	4

Aquifer status of groundwater held within superficial geology.

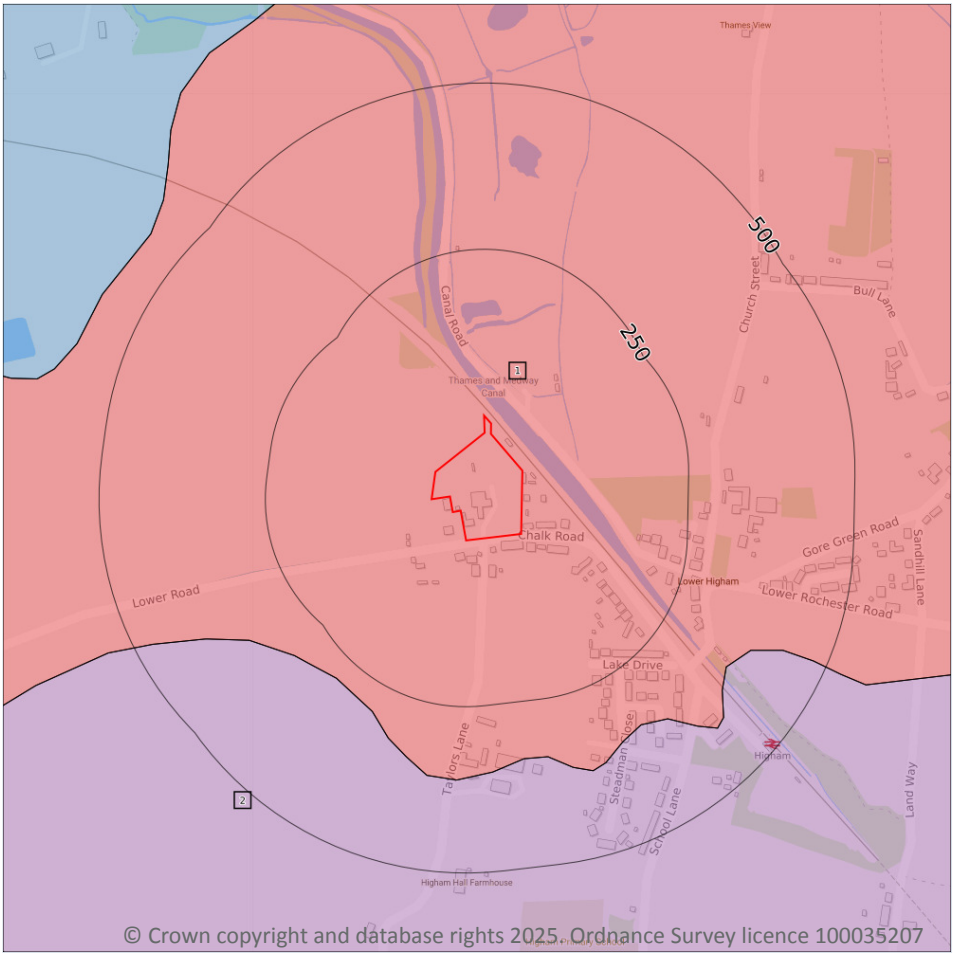
Features are displayed on the Hydrogeology map on **page 42 >**

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	244m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

ID	Location	Designation	Description
3	366m N	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
4	419m NE	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



Site Outline

Search buffers in metres (m)

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

5.2 Bedrock aquifer

Records within 500m	2

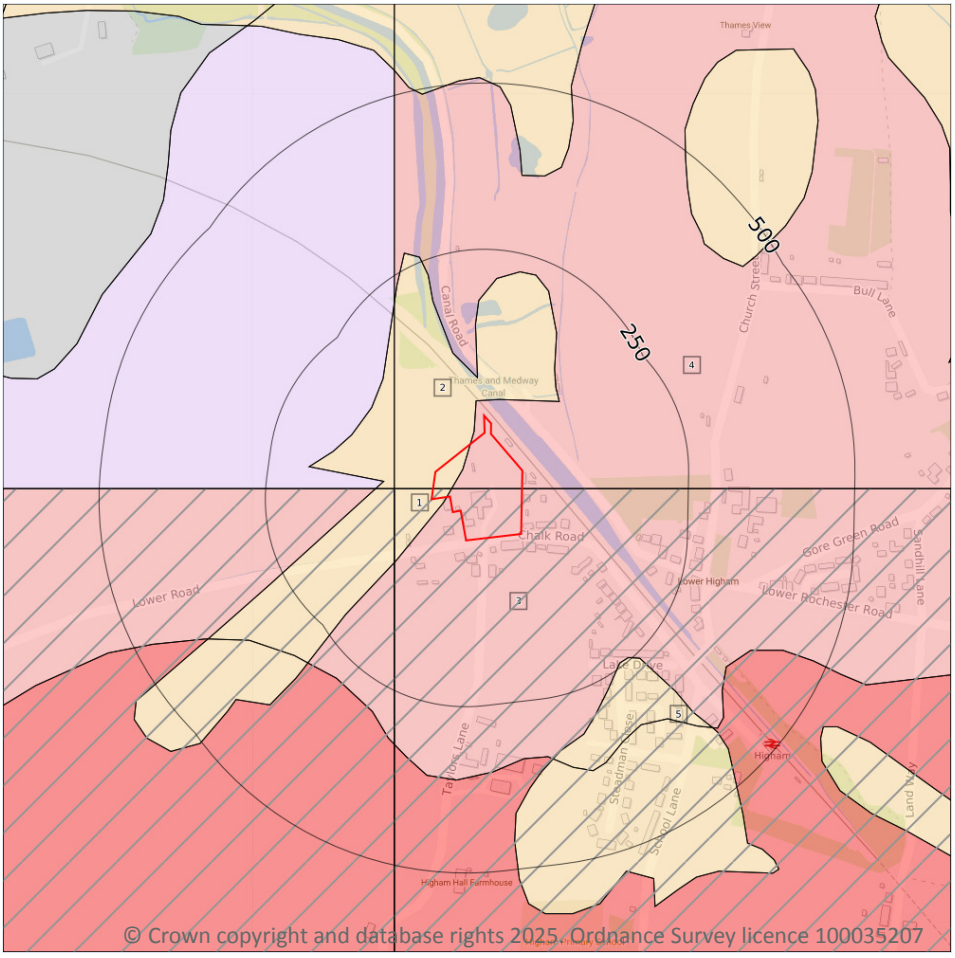
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 44 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	284m SW	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

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

Bedrock vulnerability

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

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	4

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 46 >**

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

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	1

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
5	**Very significant soluble rocks are likely to be present with a high possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, especially in adverse conditions such as concentrated surface or subsurface water flow.**	**6.0%**

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

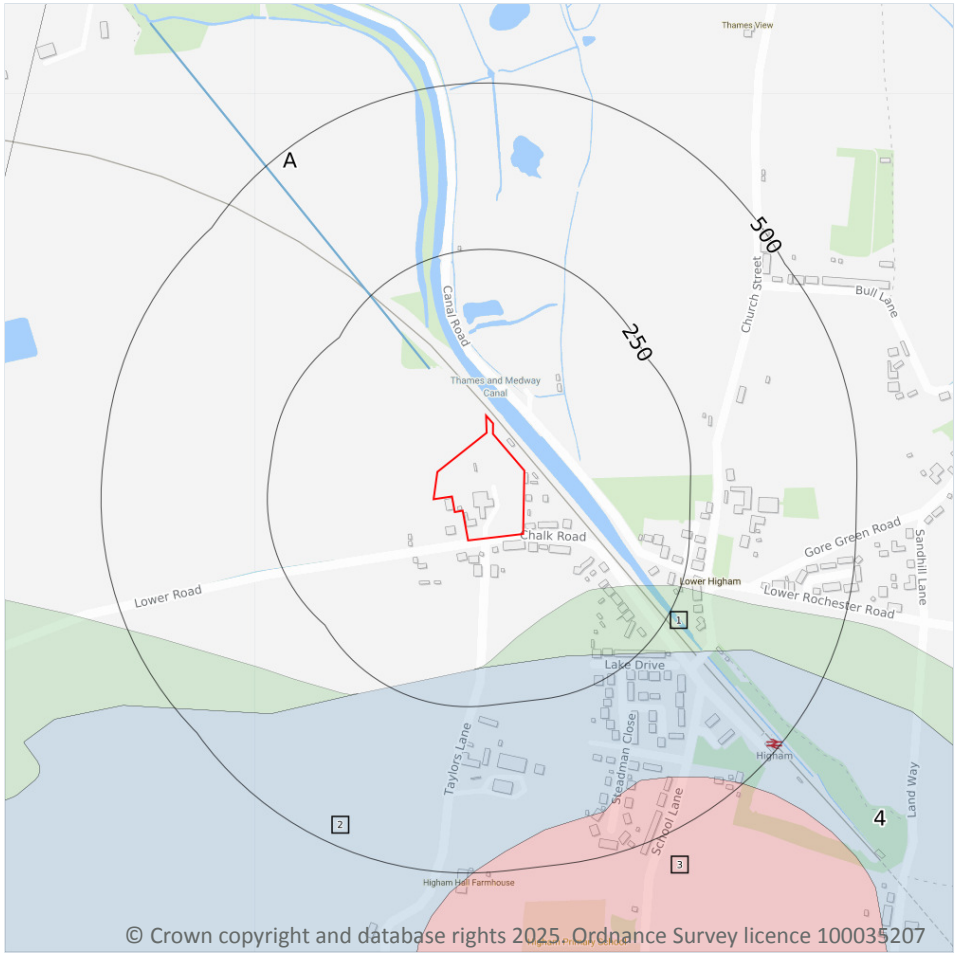
5.5 Groundwater vulnerability- local information

Records on site	0

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

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	8

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 49 >**

ID	Location	Details	
4	713m SE	Status: Active Licence No: SO/040/0001/068 Details: Dewatering Direct Source: Southern Region Groundwater Point: AREA 'A' AT HIGHAM TUNNEL PUMPS, HIGHAM Data Type: Poly4 Name: Network Rail Limited (South East Route) Easting: 571719 Northing: 172453	Annual Volume (m^3): 820155 Max Daily Volume (m^3): 2247 Original Application No: NPS/NA/001800 Original Start Date: 07/12/2021 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 07/12/2021 Version End Date: -
-	742m S	Status: Active Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, WELLS AND ADITS AT HIGHAM PS, SHORNE Data Type: Poly4 Name: Southern Water Services Ltd Easting: 571400 Northing: 172220	Annual Volume (m^3): 17700000 Max Daily Volume (m^3): 92000 Original Application No: 169/0639D Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -
-	1018m NW	Status: Active Licence No: 9/40/01/0086/GR Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: CHALK U/G STRATA AT SHORNE Data Type: Point Name: LEJ Properties Ltd Easting: 570300 Northing: 173700	Annual Volume (m^3): 318000 Max Daily Volume (m^3): 727 Original Application No: NPS/WR/015820 Original Start Date: 23/05/1966 Expiry Date: - Issue No: 104 Version Start Date: 04/07/2014 Version End Date: -
-	1018m NW	Status: Active Licence No: 9/40/01/0086/GR Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: CHALK U/G STRATA AT SHORNE Data Type: Point Name: LEJ Properties Ltd Easting: 570300 Northing: 173700	Annual Volume (m^3): 318000 Max Daily Volume (m^3): 727 Original Application No: NPS/WR/015820 Original Start Date: 23/05/1966 Expiry Date: - Issue No: 104 Version Start Date: 04/07/2014 Version End Date: -

ID	Location	Details	
-	1050m NW	Status: Historical Licence No: 9/40/01/0086/GR Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: BOREHOLE 1 AT NURALITE (UK) LTD, HIGHAM, ROCHESTER Data Type: Point Name: LEJ Properties Ltd Easting: 570380 Northing: 173840	Annual Volume (m^3): 318000 Max Daily Volume (m^3): 727 Original Application No: NPS/WR/015820 Original Start Date: 23/05/1966 Expiry Date: - Issue No: 104 Version Start Date: 04/07/2014 Version End Date: -
-	1050m NW	Status: Historical Licence No: 9/40/01/0086/GR Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: BOREHOLE 1 AT NURALITE (UK) LTD, HIGHAM, ROCHESTER Data Type: Point Name: LEJ Properties Ltd Easting: 570380 Northing: 173840	Annual Volume (m^3): 318000 Max Daily Volume (m^3): 727 Original Application No: NPS/WR/015820 Original Start Date: 23/05/1966 Expiry Date: - Issue No: 104 Version Start Date: 04/07/2014 Version End Date: -
-	1137m NW	Status: Historical Licence No: 9/40/01/0086/GR Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: BOREHOLE 2 AT NURALITE (UK) LTD, HIGHAM, ROCHESTER Data Type: Point Name: LEJ Properties Ltd Easting: 570170 Northing: 173730	Annual Volume (m^3): 318000 Max Daily Volume (m^3): 727 Original Application No: NPS/WR/015820 Original Start Date: 23/05/1966 Expiry Date: - Issue No: 104 Version Start Date: 04/07/2014 Version End Date: -
-	1137m NW	Status: Historical Licence No: 9/40/01/0086/GR Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: BOREHOLE 2 AT NURALITE (UK) LTD, HIGHAM, ROCHESTER Data Type: Point Name: LEJ Properties Ltd Easting: 570170 Northing: 173730	Annual Volume (m^3): 318000 Max Daily Volume (m^3): 727 Original Application No: NPS/WR/015820 Original Start Date: 23/05/1966 Expiry Date: - Issue No: 104 Version Start Date: 04/07/2014 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	28

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 49 >**

ID	Location	Details	
A	110m NW	Status: Active Licence No: 9/40/01/0061/SR Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: POINTS A-B, UNNAMED WATERCOURSE, KINGS FARM, HIGHAM. Data Type: Line Name: Lillechurch Farms & Contracting Limited Easting: 570630 Northing: 173700	Annual Volume (m^3): 36386 Max Daily Volume (m^3): 1164 Original Application No: NPS/WR/029662 Original Start Date: 06/05/1966 Expiry Date: - Issue No: 102 Version Start Date: 23/10/2018 Version End Date: -
A	110m NW	Status: Active Licence No: 9/40/01/0061/SR Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: POINTS A-B, UNNAMED WATERCOURSE, KINGS FARM, HIGHAM. Data Type: Line Name: Lillechurch Farms & Contracting Limited Easting: 570630 Northing: 173700	Annual Volume (m^3): 36386 Max Daily Volume (m^3): 1164 Original Application No: NPS/WR/029662 Original Start Date: 06/05/1966 Expiry Date: - Issue No: 102 Version Start Date: 23/10/2018 Version End Date: -
B	735m W	Status: Historical Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: HIGHAM MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569828 Northing: 171019	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
B	735m W	Status: Active Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: HIGHAM MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569828 Northing: 171019	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -

ID	Location	Details	
-	904m E	Status: Active Licence No: 9/40/01/0501/S Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: POINT A, UNNAMED WATERCOURSE, HIGHAM. Data Type: Point Name: Lillechurch Farms & Contracting Limited Easting: 572080 Northing: 173200	Annual Volume (m^3): 28000 Max Daily Volume (m^3): 1440 Original Application No: 169/0156 Original Start Date: 18/07/1977 Expiry Date: - Issue No: 100 Version Start Date: 23/11/2006 Version End Date: -
-	959m E	Status: Active Licence No: 9/40/01/0501/S Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: POINT B, UNNAMED WATERCOURSE, GORE GREEN FARM, HIGHAM. Data Type: Point Name: Lillechurch Farms & Contracting Limited Easting: 572120 Northing: 173270	Annual Volume (m^3): 28000 Max Daily Volume (m^3): 1440 Original Application No: 169/0156 Original Start Date: 18/07/1977 Expiry Date: - Issue No: 100 Version Start Date: 23/11/2006 Version End Date: -
-	1055m NW	Status: Historical Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: SHORNE MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568009 Northing: 174408	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	1055m NW	Status: Active Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: SHORNE MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568009 Northing: 174408	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	1158m N	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 2, DITCHES AT HIGHAM MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569842 Northing: 174962	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 11/10/2018 Version End Date: -

ID	Location	Details	
-	1158m N	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 2, DITCHES AT HIGHAM MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569842 Northing: 174962	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 11/10/2018 Version End Date: -
-	1158m N	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 2, DITCHES AT HIGHAM MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569842 Northing: 174962	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -
-	1158m N	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 2, DITCHES AT HIGHAM MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569842 Northing: 174962	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 01/04/2022 Version End Date: -
-	1158m N	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 2, DITCHES AT HIGHAM MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569842 Northing: 174962	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 01/04/2022 Version End Date: -

ID	Location	Details	
-	1158m N	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 2, DITCHES AT HIGHAM MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569842 Northing: 174962	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2024 Version End Date: -
-	1158m N	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 2, DITCHES AT HIGHAM MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569842 Northing: 174962	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2024 Version End Date: -
-	1223m NE	Status: Active Licence No: 01/128 Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: POINT A, THE HIGHAM ABBEY DYKE, HIGHAM. Data Type: Point Name: The Master, Fellows of the College of St John the Evangelist Easting: 571940 Northing: 174030	Annual Volume (m^3): 22750 Max Daily Volume (m^3): 995 Original Application No: 169/1458 Original Start Date: 01/11/1995 Expiry Date: - Issue No: 102 Version Start Date: 08/02/2008 Version End Date: -
-	1411m NW	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 11/10/2018 Version End Date: -
-	1411m NW	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 11/10/2018 Version End Date: -

ID	Location	Details	
-	1411m NW	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -
-	1411m NW	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 01/04/2022 Version End Date: -
-	1411m NW	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 01/04/2022 Version End Date: -
-	1411m NW	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2024 Version End Date: -
-	1411m NW	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2024 Version End Date: -

ID	Location	Details	
-	1419m NW	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568070 Northing: 174370	Annual Volume (m^3): 70000 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 01/05/2013 Version End Date: -
-	1576m N	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT D, DENTON NEW CUT AT HIGHAM MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 570503 Northing: 174554	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -
-	1576m N	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT D, DENTON NEW CUT AT HIGHAM MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 570503 Northing: 174554	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2016 Version End Date: -
-	1988m N	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT C, DENTON NEW CUT AT HIGHAM MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 571093 Northing: 175097	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -

ID	Location	Details	
-	1988m N	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT C, DENTON NEW CUT AT HIGHAM MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 571093 Northing: 175097	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2016 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m **1**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 49 >**

ID	Location	Details	
-	742m S	Status: Active Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, WELLS AND ADITS AT HIGHAM PS, SHORNE Data Type: Poly4 Name: Southern Water Services Ltd Easting: 571400 Northing: 172220	Annual Volume (m^3): 17700000 Max Daily Volume (m^3): 92000 Original Application No: 169/0639D Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m **3**

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 49 >**

ID	Location	Type	Description
1	122m SE	3	Total catchment
2	191m S	2	Outer catchment
3	410m SE	1	Inner catchment

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

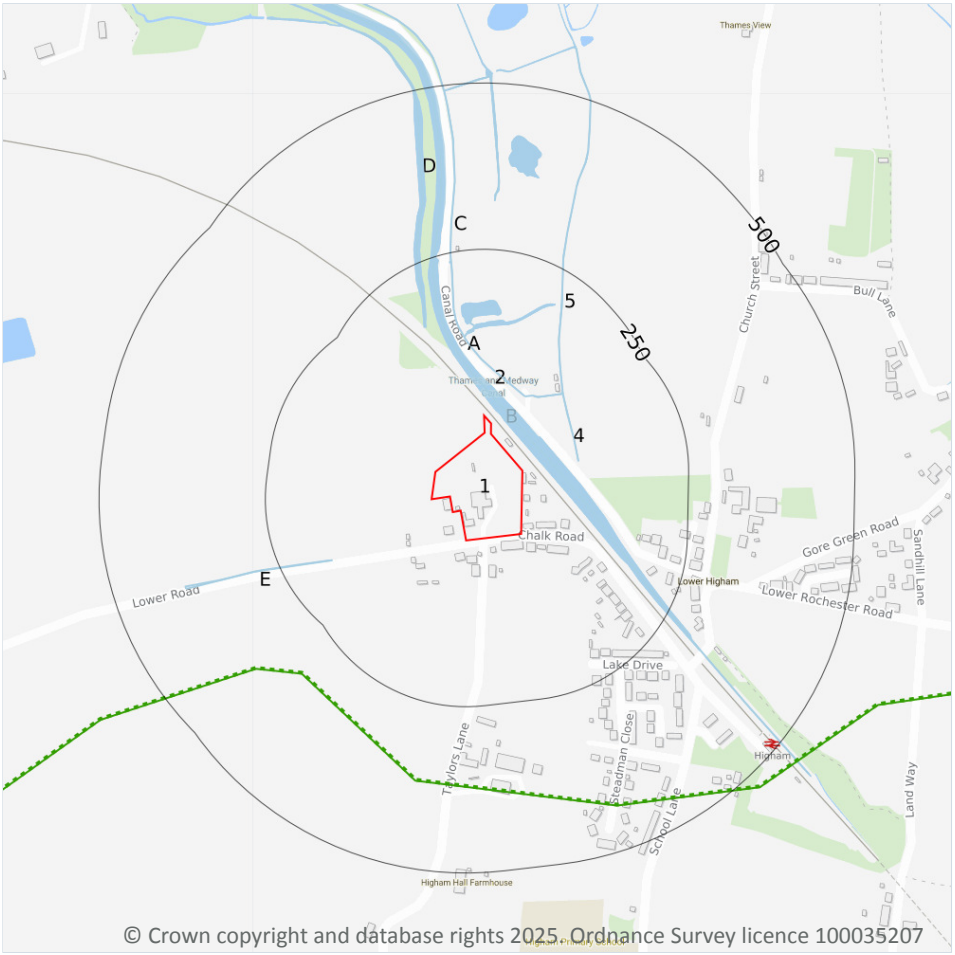
5.10 Source Protection Zones (confined aquifer)

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



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**14**

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

Features are displayed on the Hydrology map on **page 60 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	29m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thames and Medway Canal

ID	Location	Type of water feature	Ground level	Permanence	Name
2	62m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	65m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	75m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	85m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	117m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	122m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	122m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	126m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	131m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	136m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	141m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	161m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	175m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	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 60 >**

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 60 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**Coastal Catchment**	**Not part of a river WB catchment**	**130**	**Lower Medway**	**Medway**

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

6.4 WFD Surface water bodies

Records identified	0

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.

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

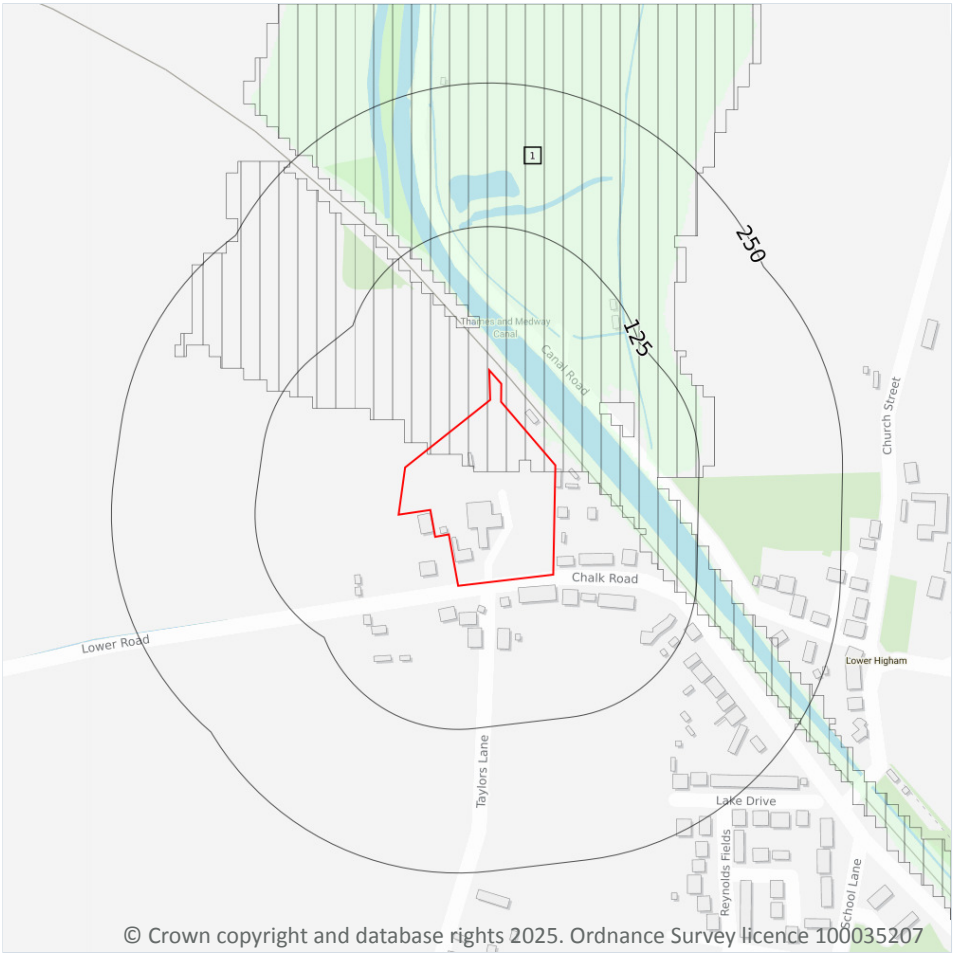
6.5 WFD Groundwater bodies

Records on site	0

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

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

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	3

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

Features are displayed on the River and coastal flooding map on **page 64 >**

Distance	Flood risk category
On site	**N/A**
0 - 50m	Very Low

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	**1**

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.

Features are displayed on the River and coastal flooding map on **page 64 >**

ID	Location	
1	**On site**	**Area benefiting from flood defences**

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

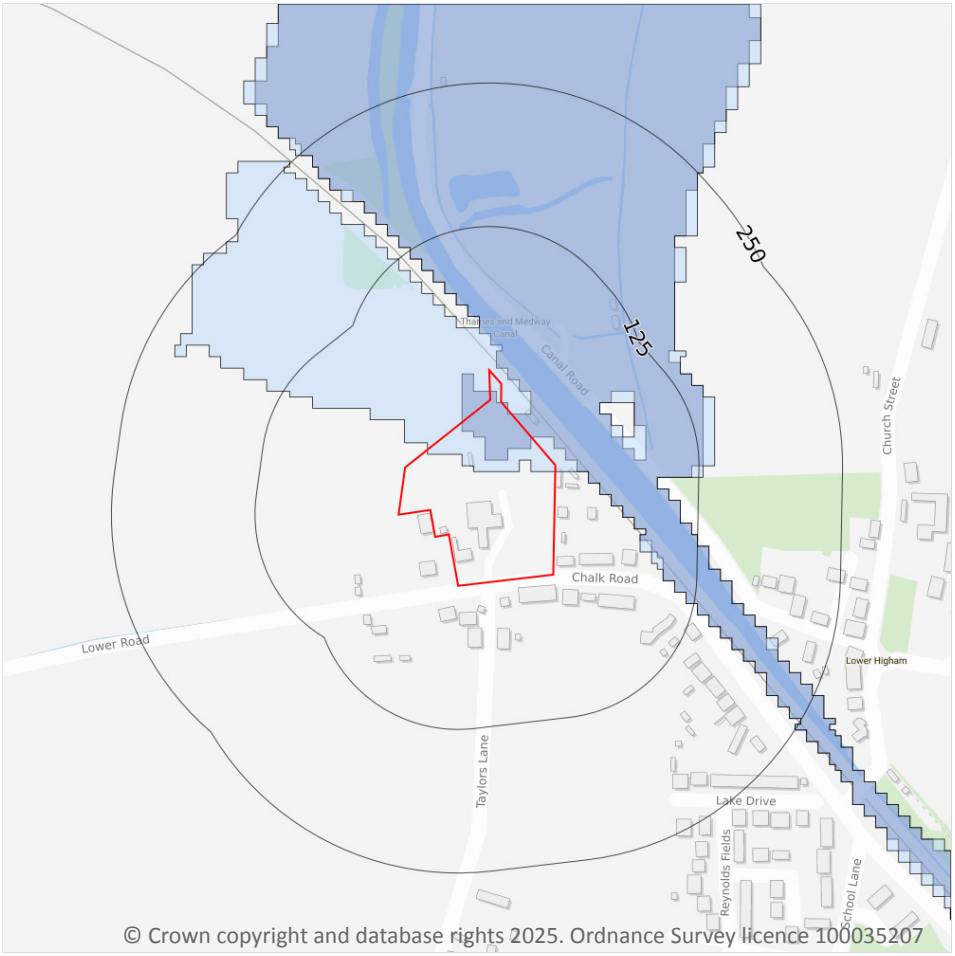
7.5 Flood Storage Areas

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



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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.

Features are displayed on the River and coastal flooding map on **page 64 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

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

7.7 Flood Zone 3

Records within 50m	1

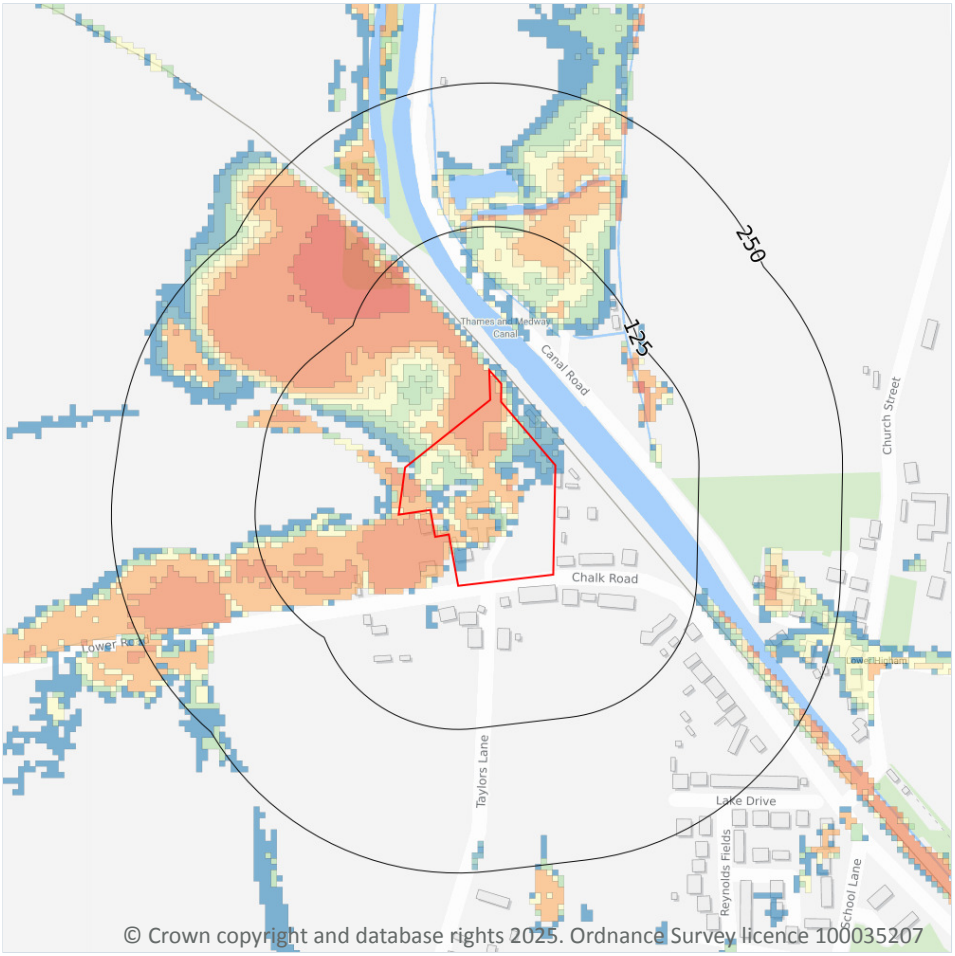
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 64 >**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

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

8 Surface water flooding



Site Outline
Search buffers in metres (m)

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

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

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

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

8.1 Surface water flooding

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

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

Features are displayed on the Surface water flooding map on **page 69 >**

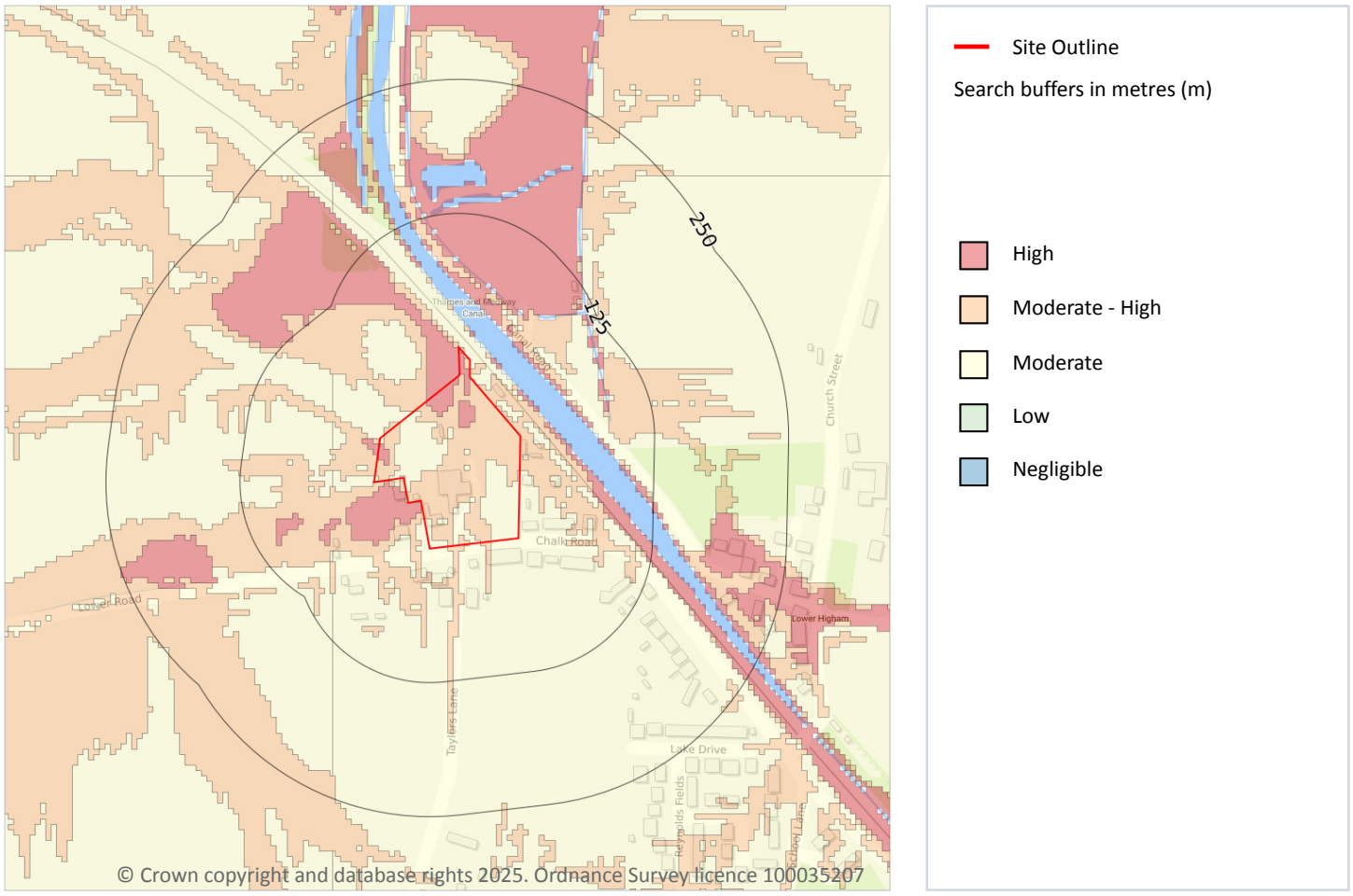
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



9.1 Groundwater flooding

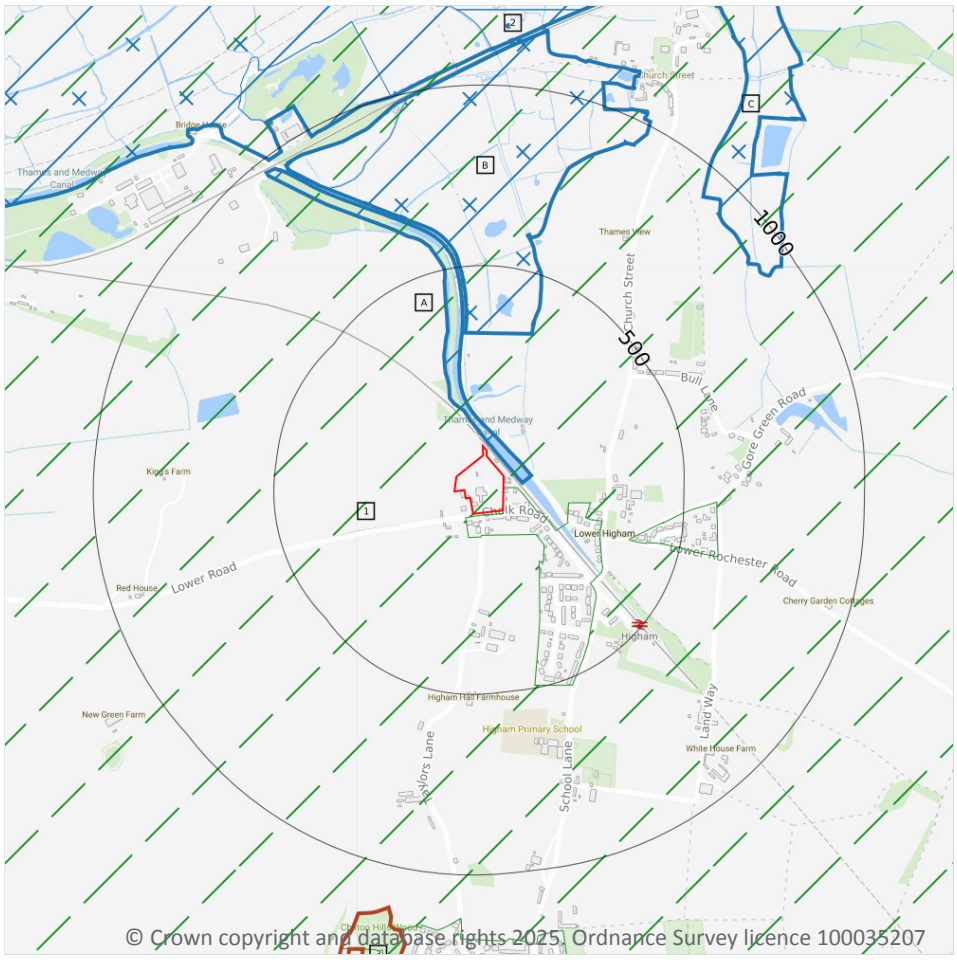
Highest risk on site	**High**
Highest risk within 50m	**High**

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 71 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

- Sites of Special Scientific Interest (SSSI)
- Conserved wetland sites (Ramsar sites)
- Special Protection Areas (SPA)
- Designated Ancient Woodland
- Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	6

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 72 >**

ID	Location	Name	Data source
A	17m N	South Thames Estuary and Marshes	Natural England

ID	Location	Name	Data source
B	313m N	South Thames Estuary and Marshes	Natural England
C	890m NE	South Thames Estuary and Marshes	Natural England
D	980m NW	South Thames Estuary and Marshes	Natural England
-	1696m NE	South Thames Estuary and Marshes	Natural England
-	1702m W	South Thames Estuary and Marshes	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	**6**

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.

Features are displayed on the Environmental designations map on **page 72 >**

ID	Location	Site	Details
A	17m N	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.
B	313m N	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.

ID	Location	Site	Details
C	890m NE	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.
D	988m NW	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.
-	1696m NE	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.
-	1702m W	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.

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	3

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.

Features are displayed on the Environmental designations map on **page 72 >**

ID	Location	Name	Species of interest	Habitat description	Data source
2	1098m N	Thames Estuary & Marshes	Hen harrier; Pied avocet; Ringed plover; Grey plover; Red knot; Common redshank; Black-tailed godwit; Dunlin	Shingle, Sea cliffs, Islets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Inland water bodies (Standing water, Running water); Bogs, Marshes, Water fringed vegetation, Fens; Dry grassland, Steppes; Humid grassland, Mesophile grassland; Salt marshes, Salt pastures, Salt steppes	Natural England
4	1209m N	Thames Estuary & Marshes	Hen harrier; Pied avocet; Ringed plover; Grey plover; Red knot; Common redshank; Black-tailed godwit; Dunlin	Shingle, Sea cliffs, Islets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Inland water bodies (Standing water, Running water); Bogs, Marshes, Water fringed vegetation, Fens; Dry grassland, Steppes; Humid grassland, Mesophile grassland; Salt marshes, Salt pastures, Salt steppes	Natural England
-	1696m NE	Thames Estuary & Marshes	Hen harrier; Pied avocet; Ringed plover; Grey plover; Red knot; Common redshank; Black-tailed godwit; Dunlin	Shingle, Sea cliffs, Islets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Inland water bodies (Standing water, Running water); Bogs, Marshes, Water fringed vegetation, Fens; Dry grassland, Steppes; Humid grassland, Mesophile grassland; Salt marshes, Salt pastures, Salt steppes	Natural England

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 72 >**

ID	Location	Name	Woodland Type
3	1115m S	Unknown	Ancient Replanted Woodland
-	1695m SW	Peartree Wood	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 72 >**

ID	Location	Name	Local Authority name
1	**On site**	**London Green Belt**	**Gravesham**

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	2

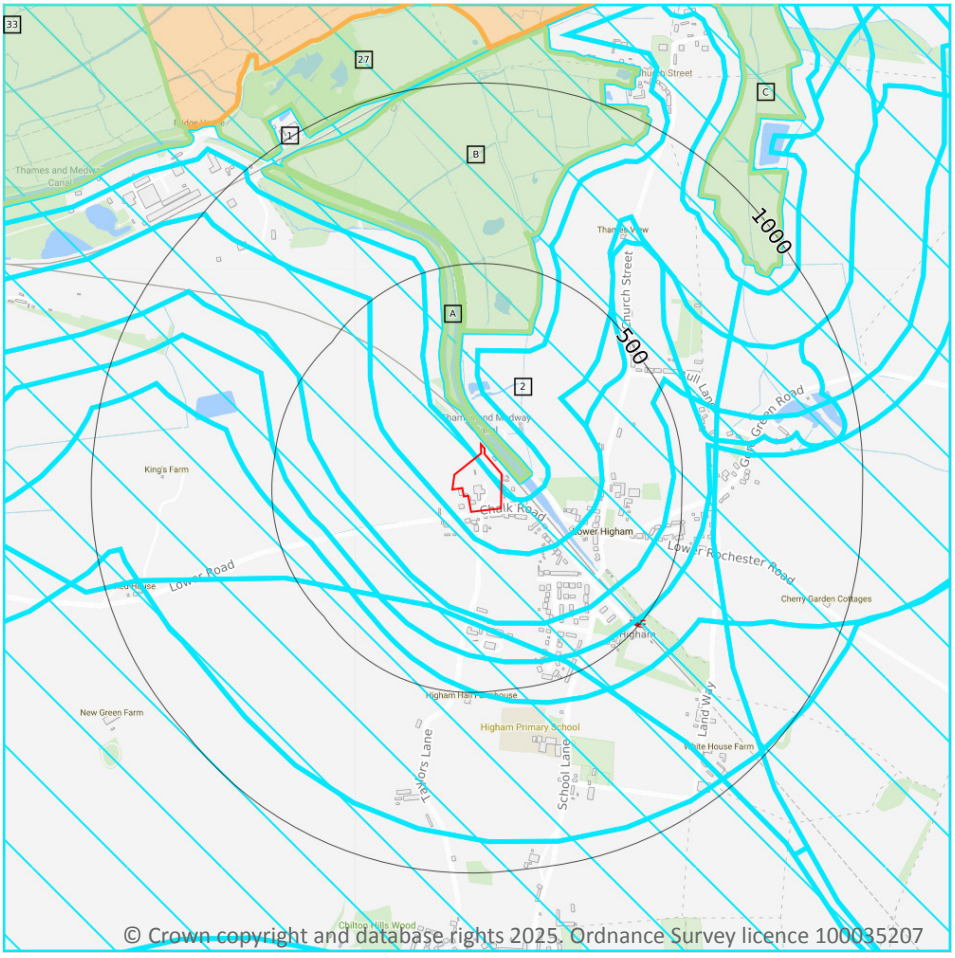
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**COASTAL STREAMS TO LOWER THAMES NVZ**	**Surface Water**	**665**	**Existing**

Location	Name	Type	NVZ ID	Status
On site	**North Kent**	**Groundwater**	**65**	**Existing**

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

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

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

10.17 SSSI Impact Risk Zones

Records on site	2

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 80 >**

ID	Location	Type of developments requiring consultation
1	On site	**All applications - ALL PLANNING APPLICATIONS - EXCEPT HOUSEHOLDER APPLICATIONS. Notes: For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SPAs and Ramsar Sites. Check with Local Planning Authority.**

ID	Location	Type of developments requiring consultation
2	On site	**All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. 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. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 10 units or more. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply . Notes: For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SPAs and Ramsar Sites. Check with Local Planning Authority.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**13**

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 80 >**

ID:	A
Location:	17m N
SSSI name:	South Thames Estuary and Marshes
Unit name:	Hiigham Marsh By Canal Rd
Broad habitat:	Neutral Grassland - Lowland
Condition:	Favourable
Reportable features:	

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: B
Location: 313m N
SSSI name: South Thames Estuary and Marshes
Unit name: Hiigham Marsh By Canal Rd
Broad habitat: Neutral Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: C
Location: 890m NE
SSSI name: South Thames Estuary and Marshes
Unit name: Church Street Marsh
Broad habitat: Neutral Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: 27
Location: 980m NW
SSSI name: South Thames Estuary and Marshes
Unit name: Beckley Hill
Broad habitat: Boundary And Linear Features

Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: 30
Location: 1098m N
SSSI name: South Thames Estuary and Marshes
Unit name: Higham Marshes Se
Broad habitat: Neutral Grassland - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Unfavourable - Recovering	27/09/2022
Ditches	Not Recorded	01/01/1900

ID: 32
Location: 1152m NW
SSSI name: South Thames Estuary and Marshes
Unit name: Higham Marsh W
Broad habitat: Neutral Grassland - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Unfavourable - Recovering	17/01/2023
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900

Feature name	Feature condition	Date of assessment
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Not Recorded	01/01/1900

ID: 33
Location: 1163m NW
SSSI name: South Thames Estuary and Marshes
Unit name: Shorne Marsh E
Broad habitat: Neutral Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Not Recorded	01/01/1900

ID: -
Location: 1594m NE
SSSI name: South Thames Estuary and Marshes
Unit name: Higham Marshes
Broad habitat: Neutral Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Assemblages of breeding birds - Lowland open waters and their margins	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Invert. assemblage W211 open water on disturbed sediments	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: -
Location: 1673m N
SSSI name: South Thames Estuary and Marshes
Unit name: Higham Marshes Ne
Broad habitat: Neutral Grassland - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Unfavourable - Recovering	17/01/2023
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Not Recorded	01/01/1900

ID: -
Location: 1696m NE
SSSI name: South Thames Estuary and Marshes
Unit name: Higham Marshes
Broad habitat: Neutral Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Assemblages of breeding birds - Lowland open waters and their margins	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Invert. assemblage W211 open water on disturbed sediments	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: -
Location: 1702m W
SSSI name: South Thames Estuary and Marshes
Unit name: Filborough Marsh E
Broad habitat: Neutral Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: -
Location: 1749m NW
SSSI name: South Thames Estuary and Marshes
Unit name: Shorne Marsh Mid
Broad habitat: Neutral Grassland - Lowland

Condition: Favourable
Reportable features:

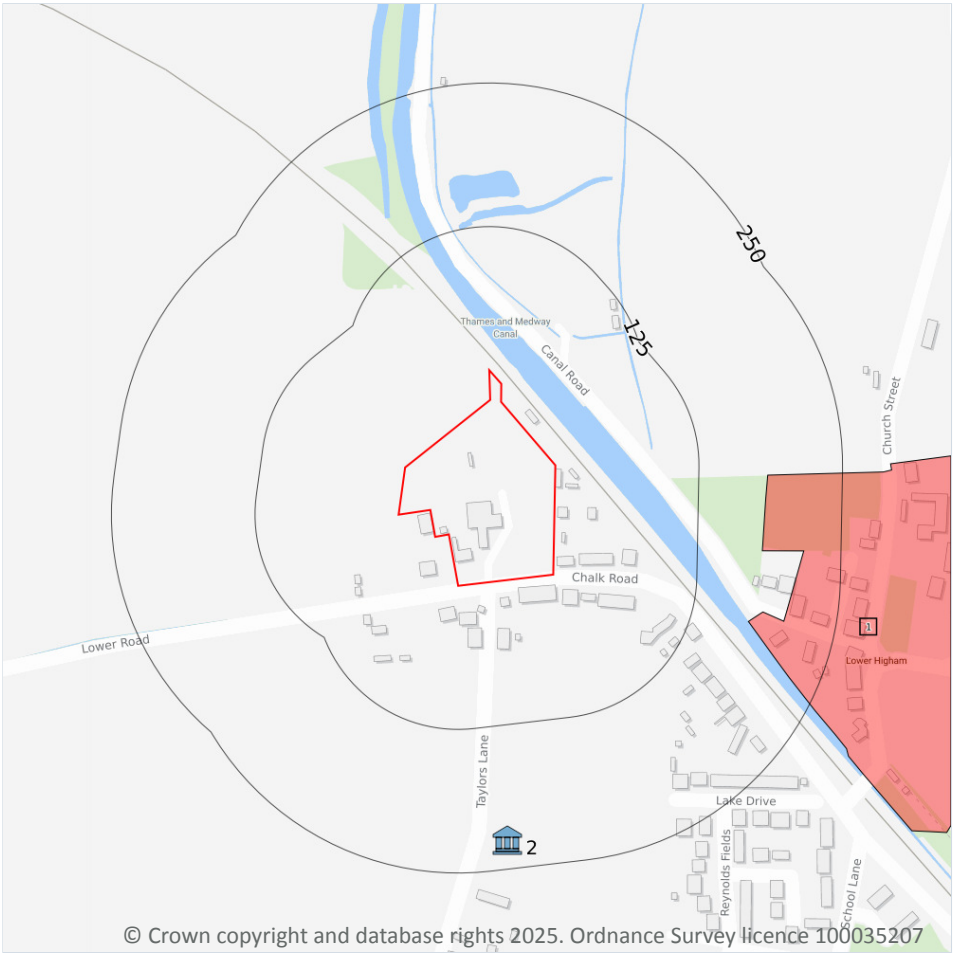
Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Not Recorded	01/01/1900

ID: -
Location: 1754m N
SSSI name: South Thames Estuary and Marshes
Unit name: Timber Lake
Broad habitat: Standing Open Water And Canals
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021

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

11 Visual and cultural designations



Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	1

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

Features are displayed on the Visual and cultural designations map on **page 96 >**

ID	Location	Name	Grade	Reference Number	Listed date
2	225m S	Garden Walls To Higham Hall	II	1096339	21/11/1966

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

11.5 Conservation Areas

Records within 250m	1

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.

Features are displayed on the Visual and cultural designations map on **page 96 >**

ID	Location	Name	District	Date of designation
1	175m SE	Lower Higham	Gravesham	29/09/2008

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

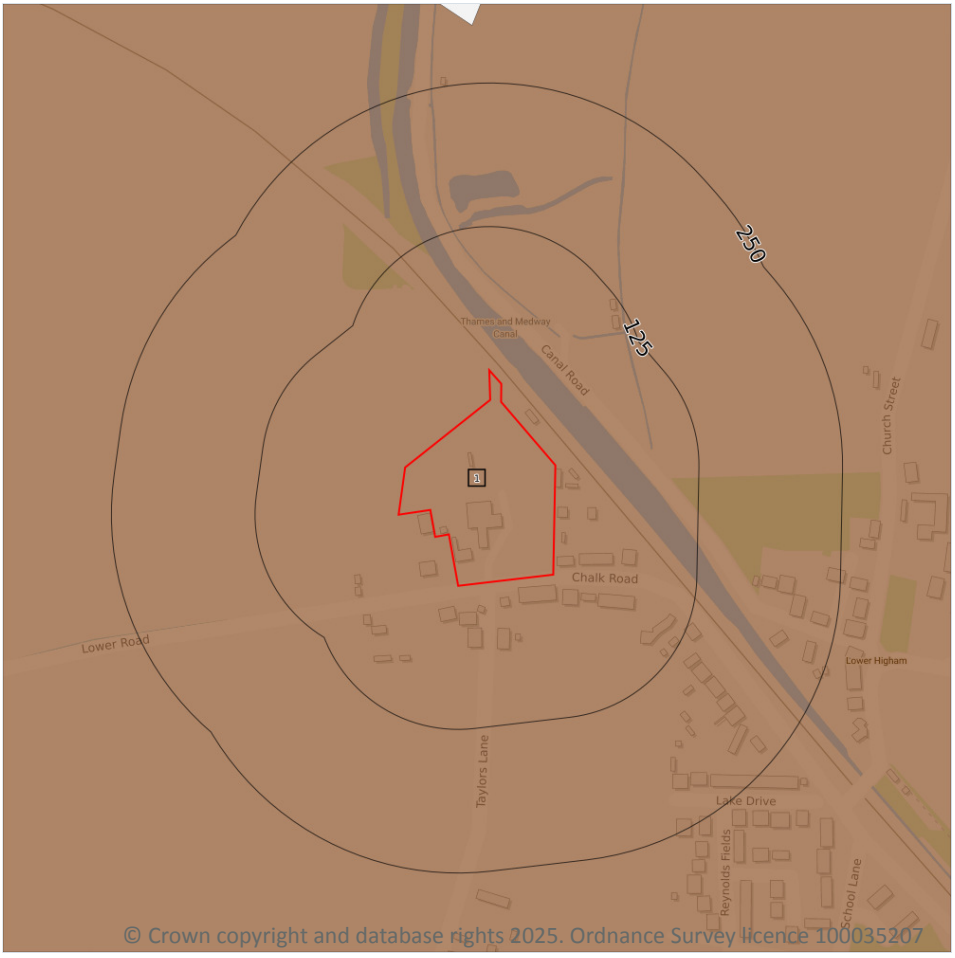
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

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

12.1 Agricultural Land Classification

Records within 250m	1

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

Features are displayed on the Agricultural designations map on **page 99 >**

ID	Location	Classification	Description
1	On site	Grade 1	**Excellent quality agricultural land. Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.**

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	2

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

Location	Reference	Scheme	Start Date	End date
5m N	AG00428112	Entry Level plus Higher Level Stewardship	01/06/2013	31/05/2023
162m N	AG00428112	Entry Level plus Higher Level Stewardship	01/06/2013	31/05/2023

This data is sourced from Natural England.

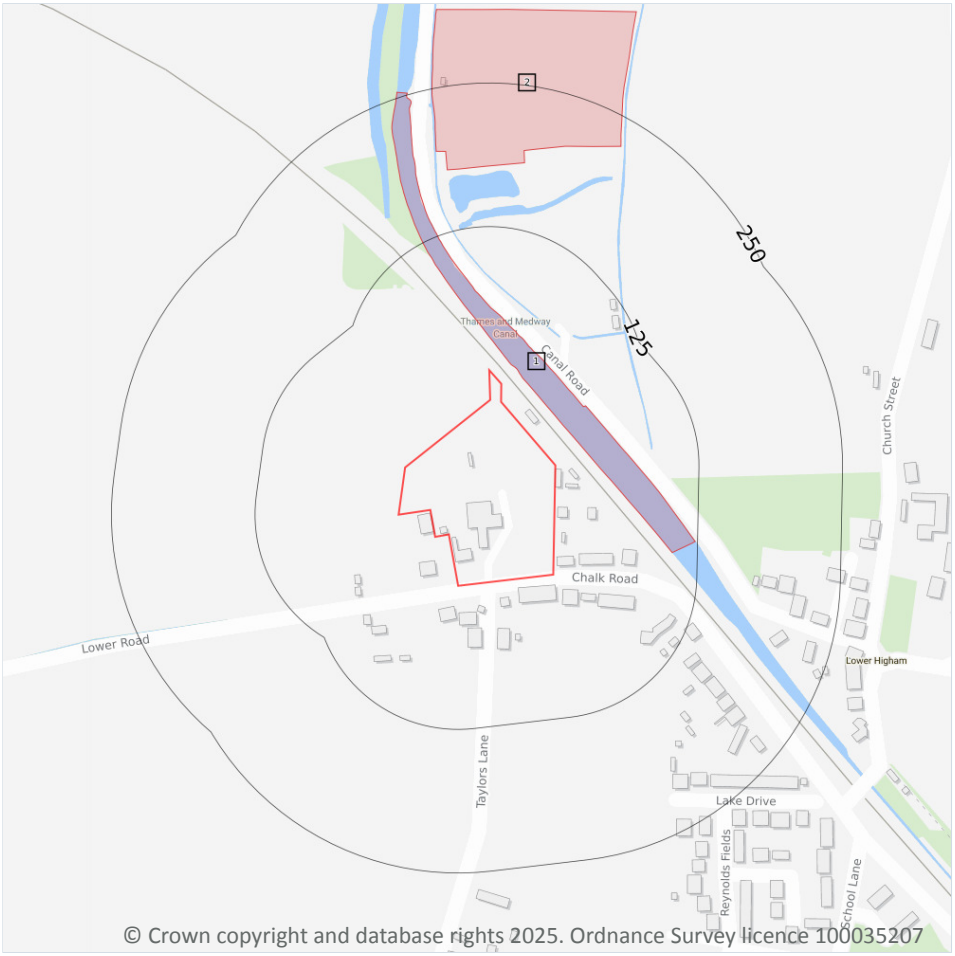
12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

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

13.1 Priority Habitat Inventory

Records within 250m	2

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

Features are displayed on the Habitat designations map on **page 101 >**

ID	Location	Main Habitat	Other habitats
1	18m N	No main habitat but additional habitats present	Main habitat: RBEDS (INV > 50%)
2	177m N	Coastal and floodplain grazing marsh	Main habitat: CFPGM (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.

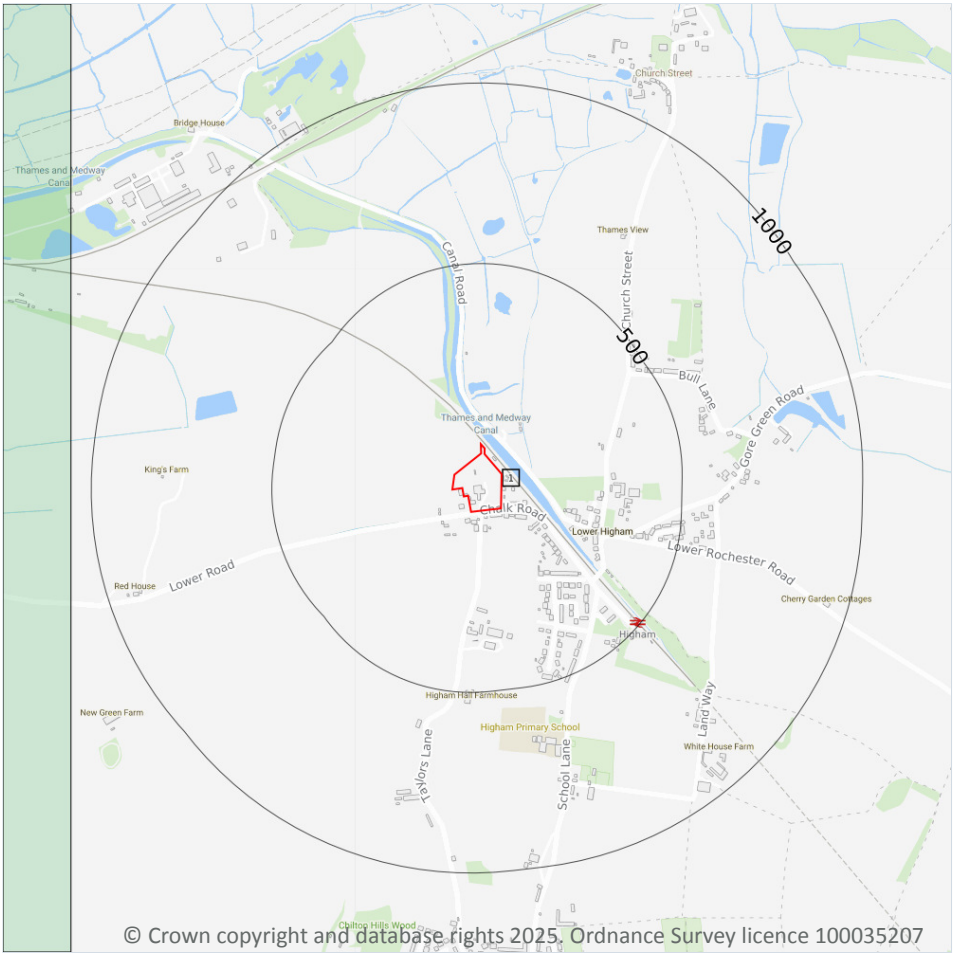
13.4 Limestone Pavement Orders

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	1

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

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 103 >**

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

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

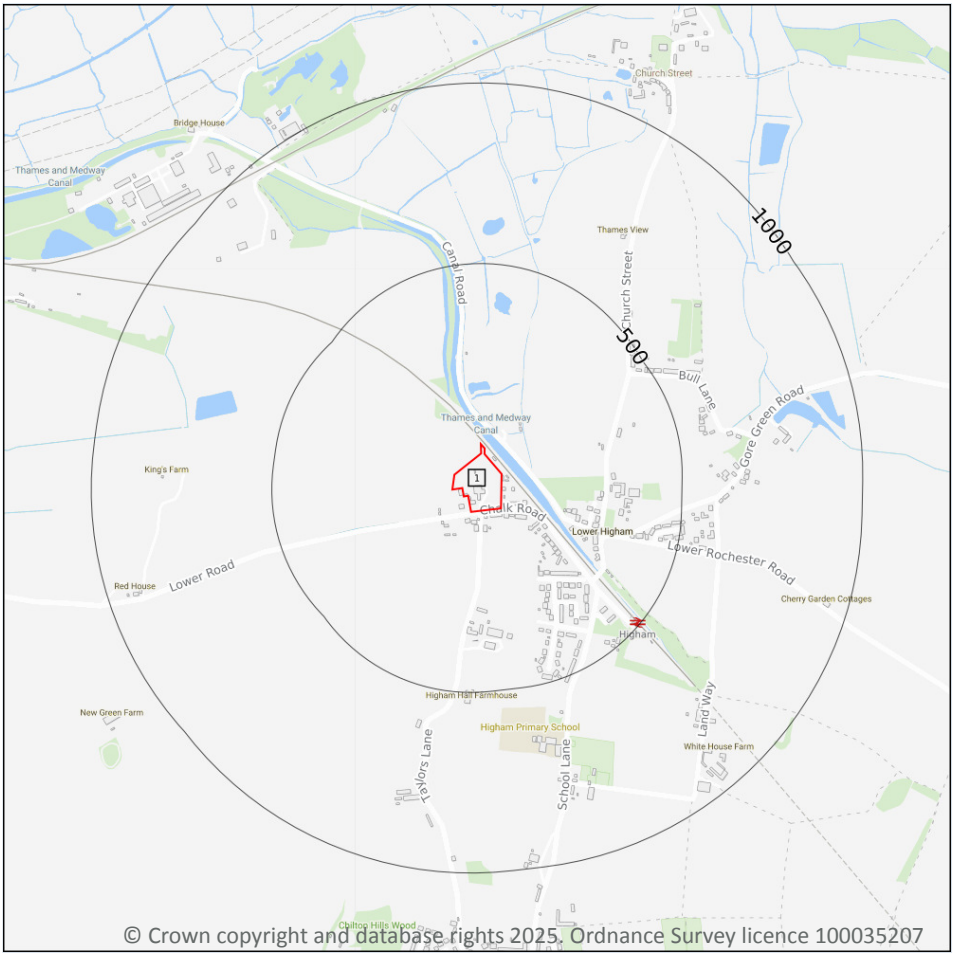
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 107 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW272_chatham_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.

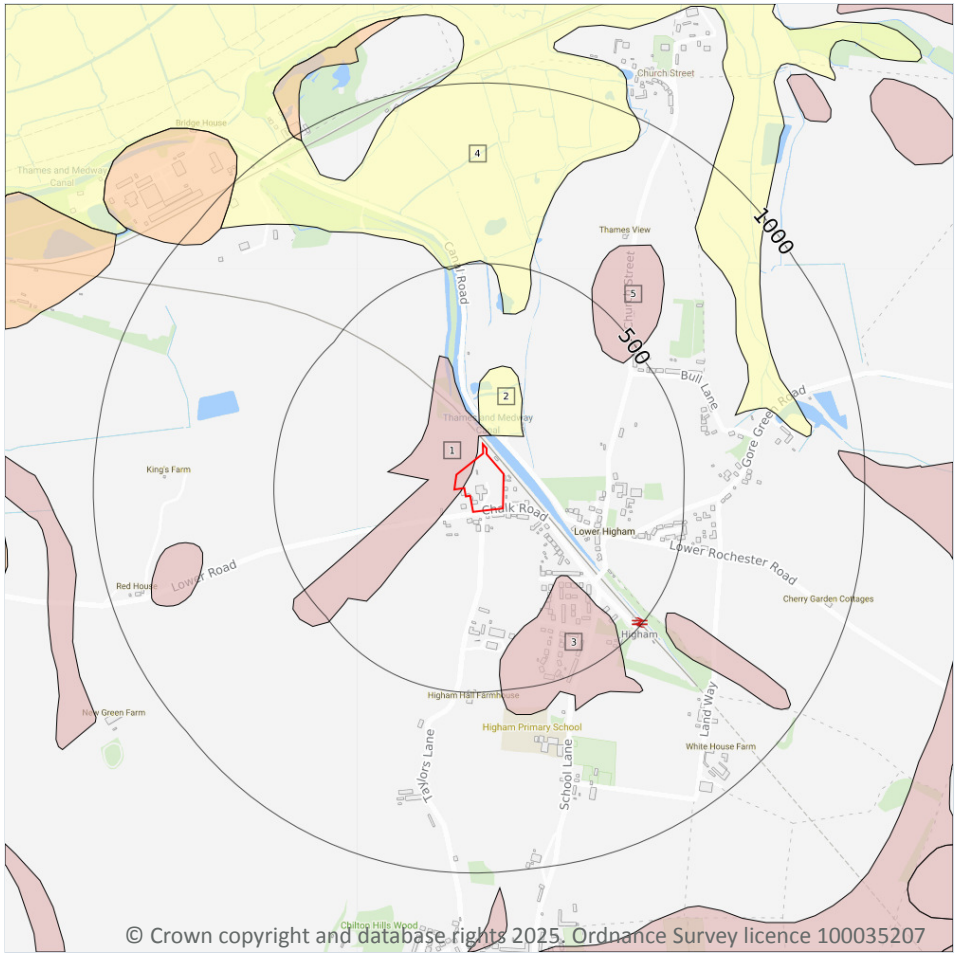
15.3 Artificial ground permeability (50k)

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 **5**

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 109 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**HEAD-XCZSV**	**HEAD**	**CLAY, SILT, SAND AND GRAVEL**
2	33m N	ALV-XCZSP	ALLUVIUM	CLAY, SILT, SAND AND PEAT
3	244m SE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
4	366m N	ALV-XCZSP	ALLUVIUM	CLAY, SILT, SAND AND PEAT
5	419m NE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	**2**

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**	**High**	**Very Low**
33m N	Intergranular	Moderate	Very 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.

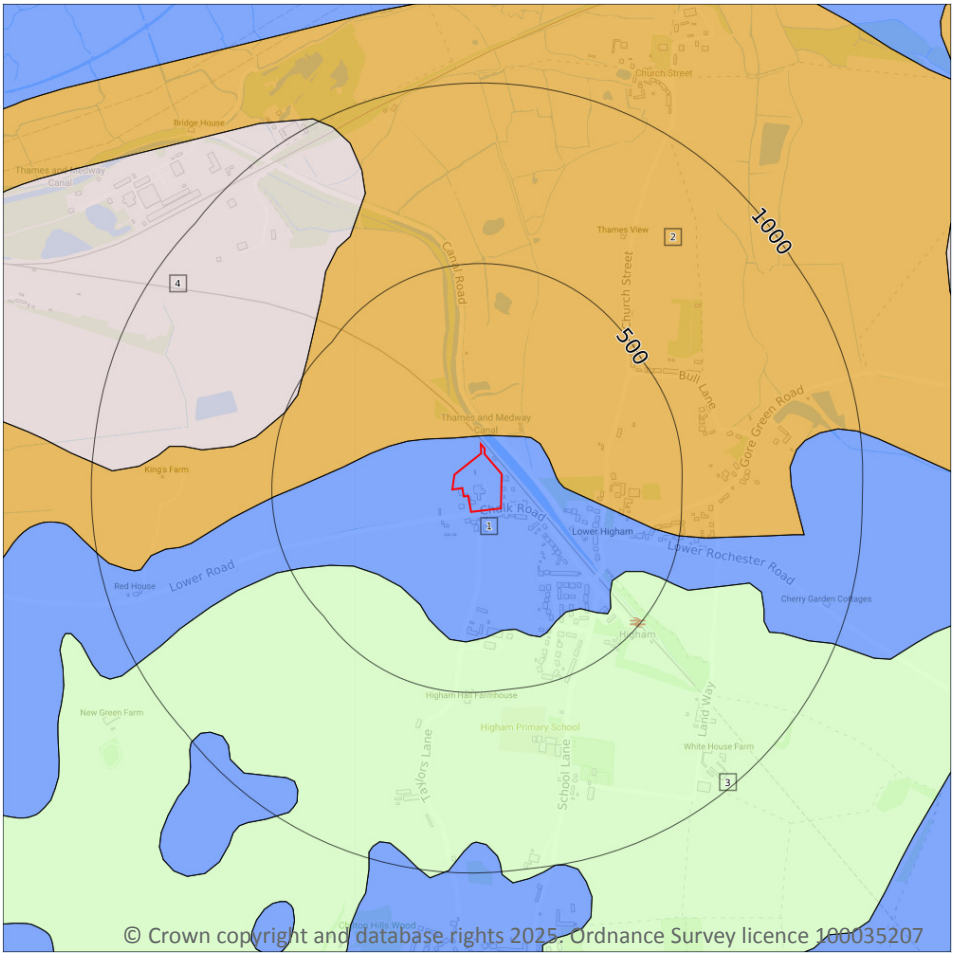
15.7 Landslip permeability (50k)

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 **4**

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 111 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**TAB-XSZC**	**THANET FORMATION - SAND, SILT AND CLAY**	**THANETIAN**
2	23m N	LMBE-XSZC	LAMBETH GROUP - SAND, SILT AND CLAY	THANETIAN
3	284m SW	SECK-CHLK	SEAFORD CHALK FORMATION - CHALK	CONIACIAN
4	487m NW	LC-XCZ	LONDON CLAY FORMATION - CLAY AND SILT	YPRESIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**2**

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	**Intergranular**	**High**	**Low**
23m N	Intergranular	High	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**0**

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

This data is sourced from the British Geological Survey.

16 Boreholes

Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

16.1 BGS Boreholes

Records within 250m	1

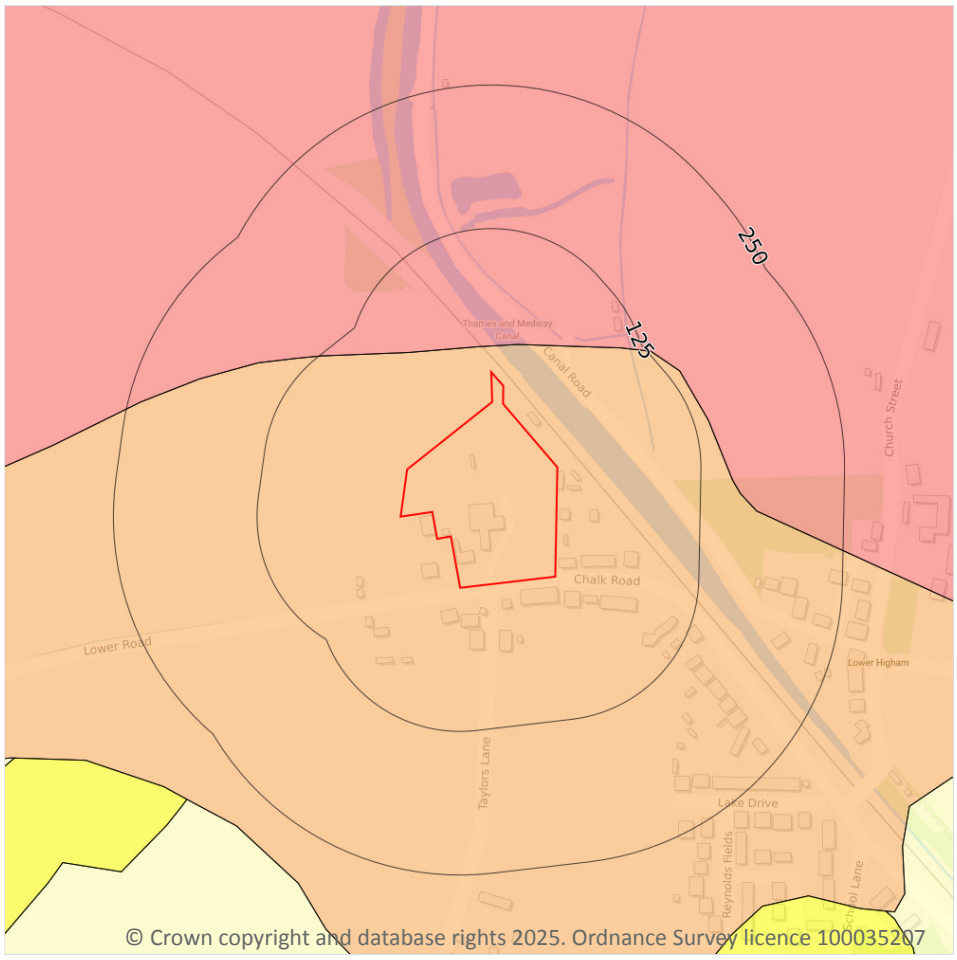
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several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

Features are displayed on the Boreholes map on **page 113 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	**On site**	**571100 173000**	**BUCKLAND FARM,LOWER HIGHAM**	**62.0**	**N**	**637844** ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	2

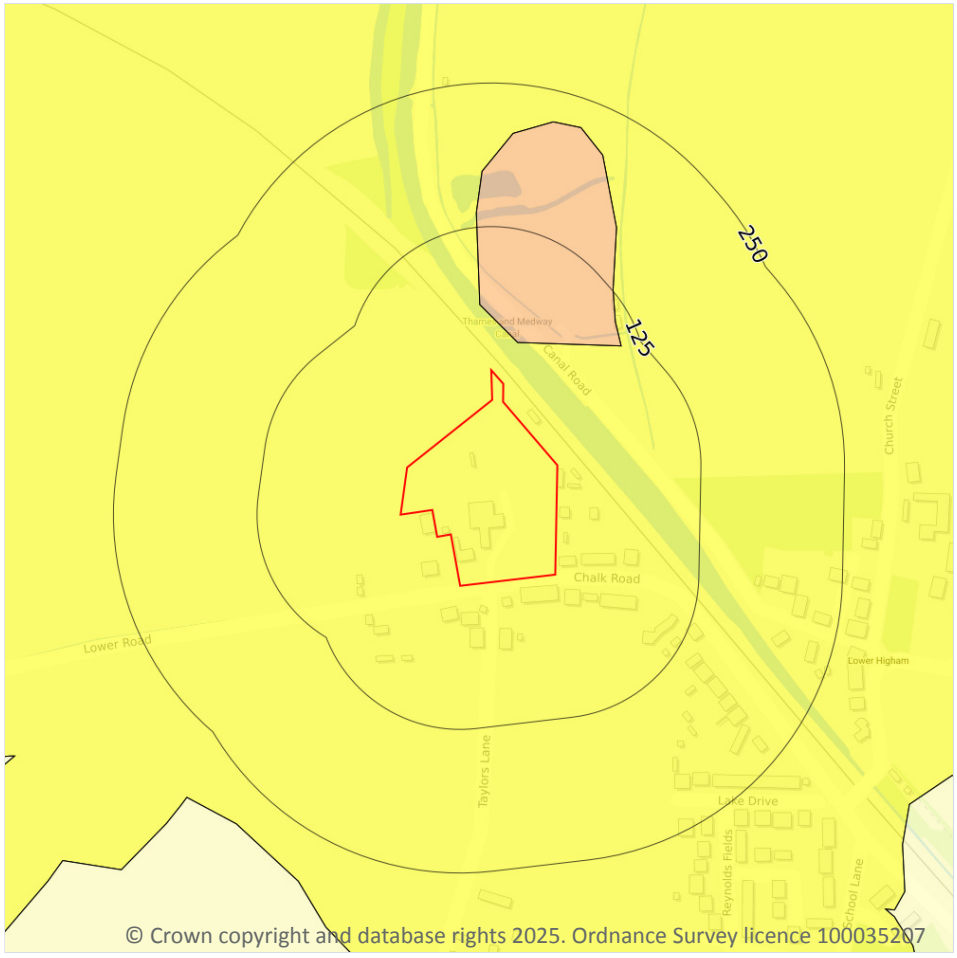
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 114 >**

Location	Hazard rating	Details
On site	**Low**	**Ground conditions predominantly medium plasticity.**
23m N	Moderate	Ground conditions predominantly high plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	2

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.

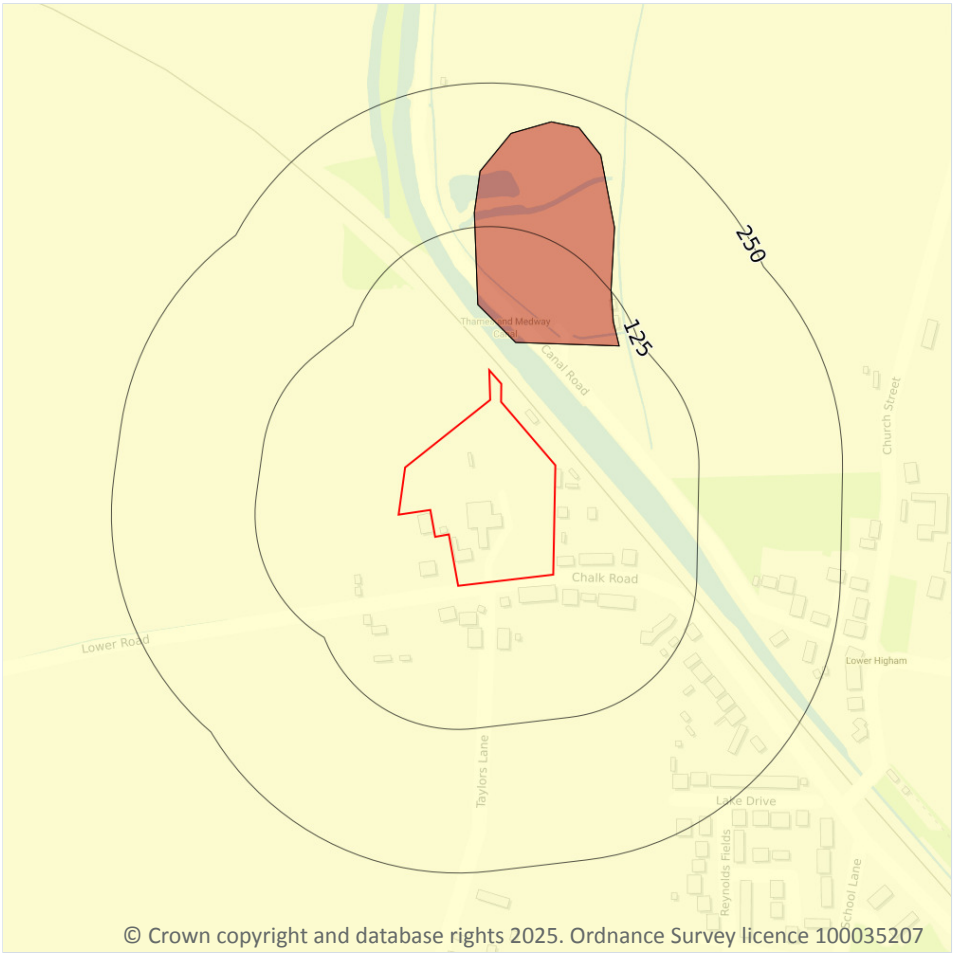
Features are displayed on the Natural ground subsidence - Running sands map on **page 115 >**

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.**

Location	Hazard rating	Details
33m N	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	2

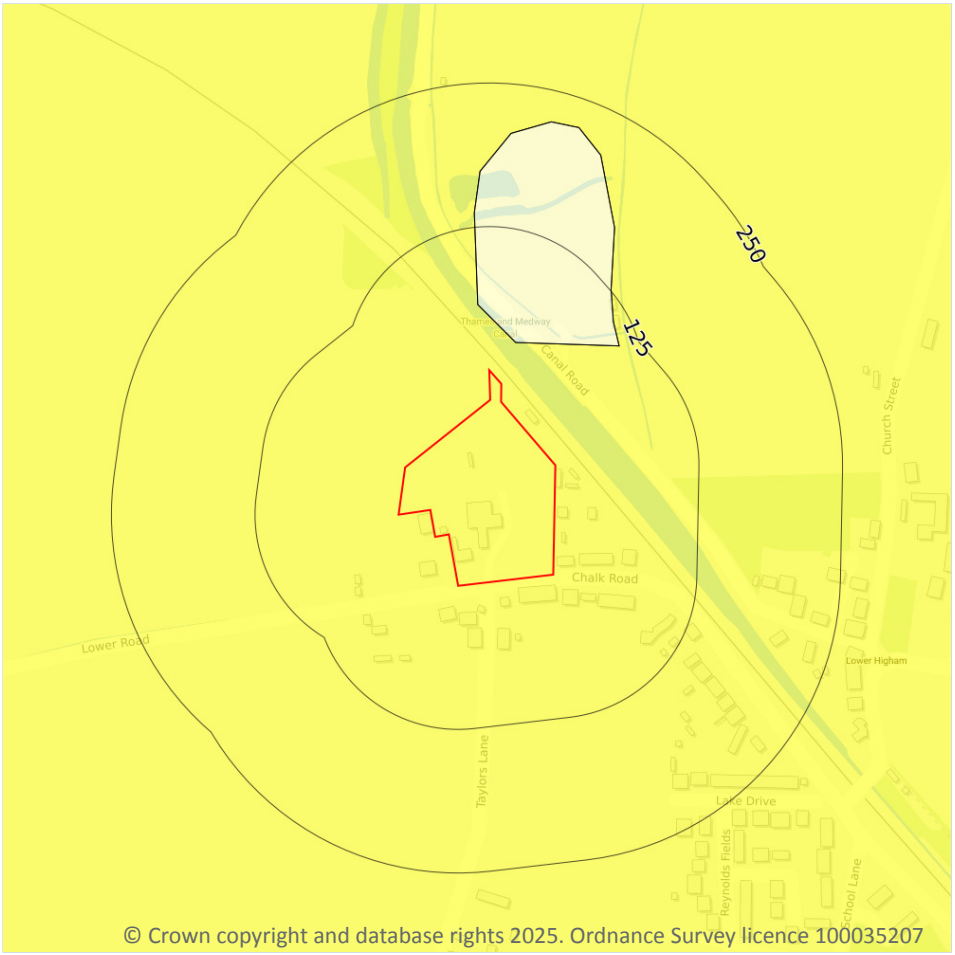
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 117 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
33m N	High	Highly compressible strata present. Significant constraint on land use depending on thickness.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	2

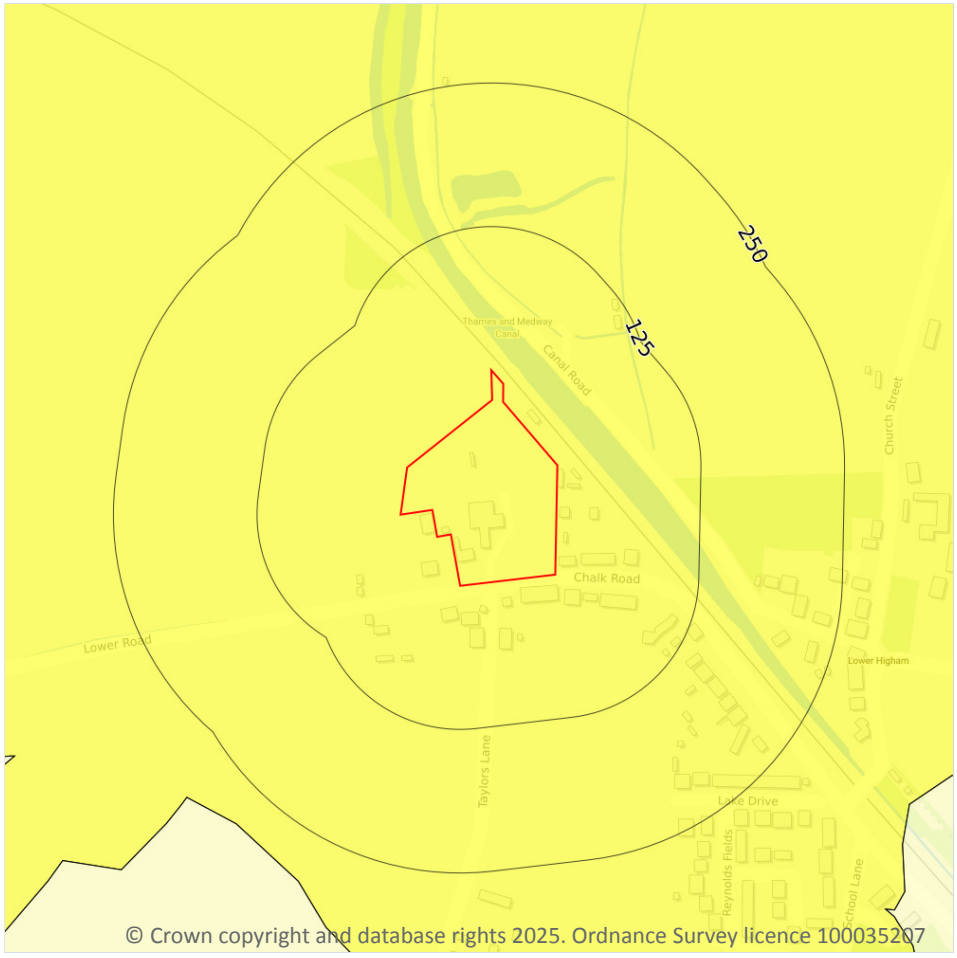
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 118 >**

Location	Hazard rating	Details
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**
33m N	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	1

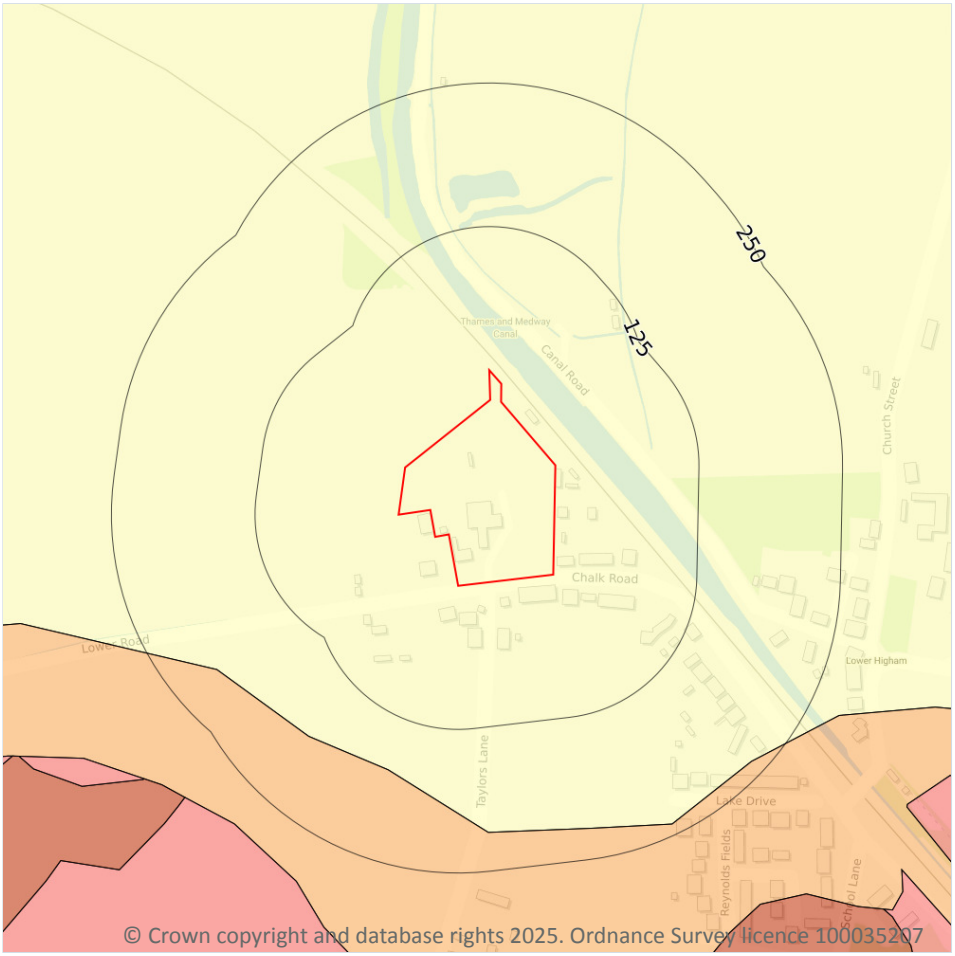
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 119 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

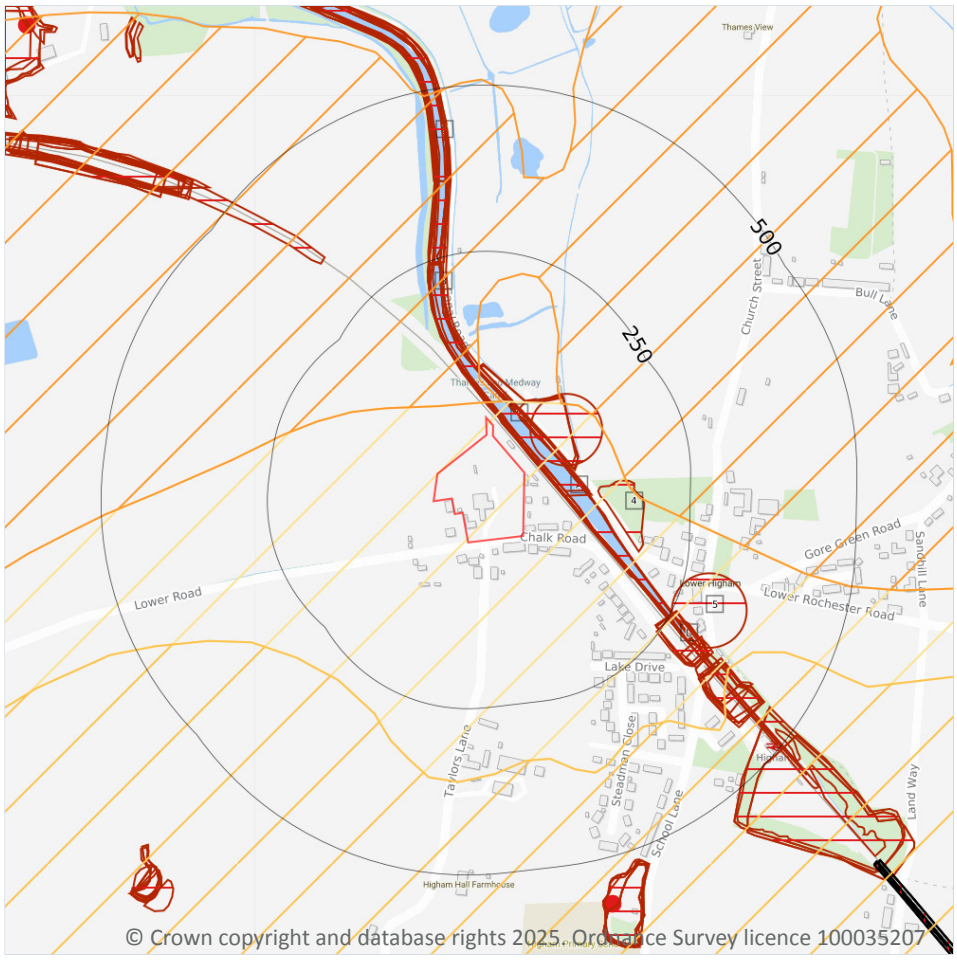
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 120 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

BritPits

Surface ground workings

Underground workings

Underground mining extents

Historical mineral planning areas

TCA non-coal mining

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	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.

18.2 Surface ground workings

Records within 250m	29

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

Features are displayed on the Mining and ground workings map on **page 122 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	13m N	Canal	1931	1:10560
A	13m N	Canal	1888	1:10560
B	14m N	Canal	1896	1:10560
2	16m N	Canal	1862	1:10560
A	16m N	Canal	1931	1:10560
A	16m N	Canal	1938	1:10560
A	16m N	Canal	1907	1:10560
A	16m N	Canal	1895	1:10560
C	19m N	Disused Canal	1992	1:10000
C	19m N	Disused Canal	1974	1:10000
C	19m N	Disused Canal	1966	1:10560
B	20m N	Canal	1895	1:10560
A	36m NE	Unspecified Wharf	1895	1:10560
A	45m N	Unspecified Wharf	1888	1:10560
A	46m N	Unspecified Wharf	1896	1:10560
A	48m NE	Unspecified Wharf	1862	1:10560
4	111m E	Unspecified Heap	1862	1:10560
D	240m SE	Cuttings	1931	1:10560
D	240m SE	Cuttings	1938	1:10560
D	240m SE	Cuttings	1907	1:10560
D	240m SE	Cuttings	1895	1:10560
E	241m N	Canal	1940	1:10560
E	241m N	Canal	1907	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
E	241m N	Canal	1896	1:10560
E	242m N	Canal	1888	1:10560
D	243m SE	Cuttings	1931	1:10560
D	243m SE	Cuttings	1888	1:10560
5	245m SE	Saw Pit	1862	1:10560
D	247m SE	Cuttings	1955	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	**9**

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

Features are displayed on the Mining and ground workings map on **page 122 >**

ID	Location	Land Use	Year of mapping	Mapping scale
K	722m SE	Tunnel	1862	1:10560
K	724m SE	Tunnel	1938	1:10560
K	724m SE	Tunnel	1907	1:10560
K	724m SE	Tunnel	1895	1:10560
K	724m SE	Tunnel	1931	1:10560
K	725m SE	Tunnel	1992	1:10000
K	725m SE	Tunnel	1974	1:10000
K	725m SE	Tunnel	1955	1:10560
K	725m SE	Tunnel	1966	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	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	3

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 and ground workings map on **page 122 >**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Not available**	**Chalk**	**A**	**Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.**
3	23m N	Not available	Chalk	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
6	284m SW	Not available	Chalk	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

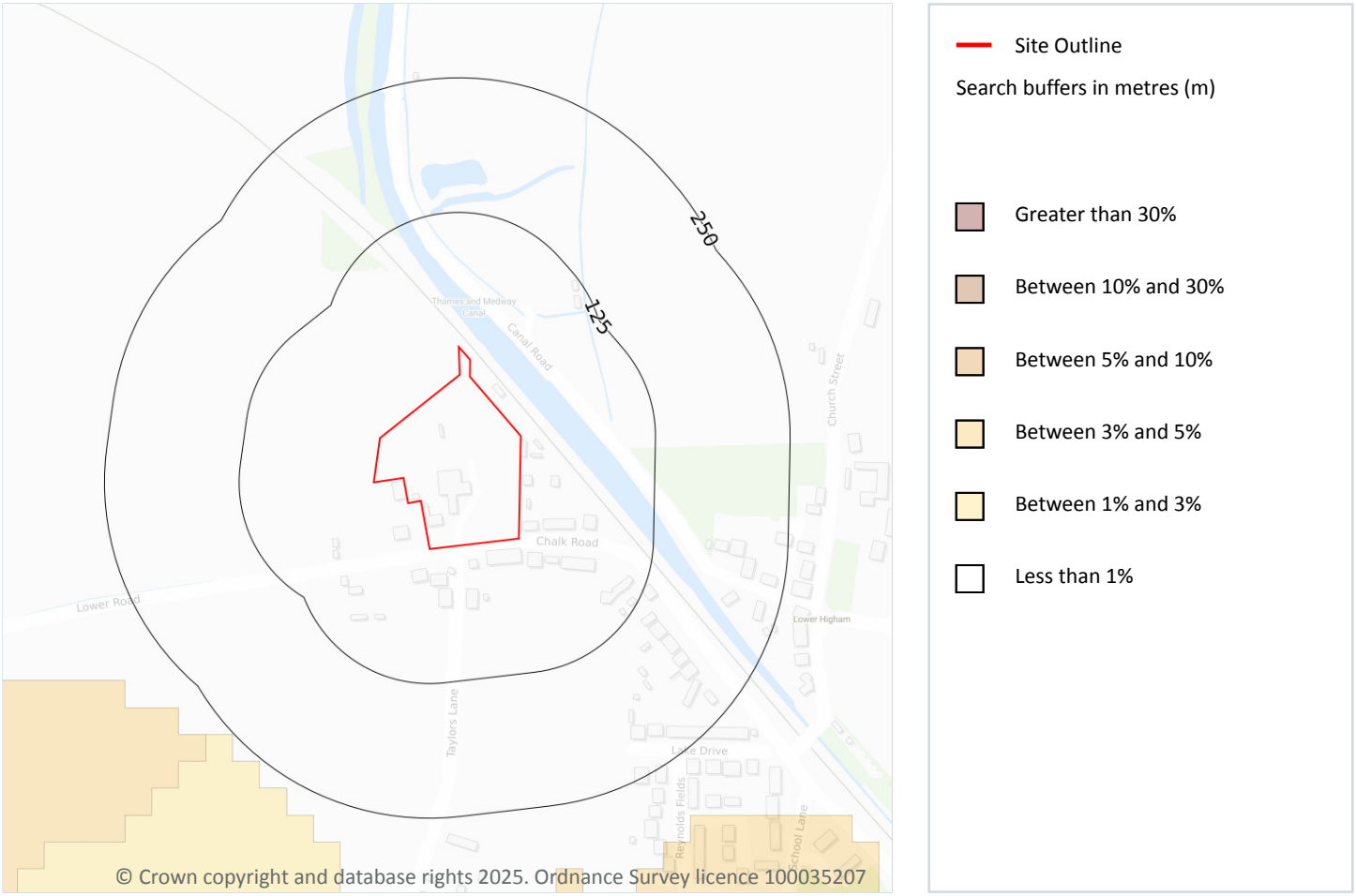
Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

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

This data is sourced from Groundsure.

20 Radon



20.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 131 >**

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

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

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m **8**

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
23m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
33m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

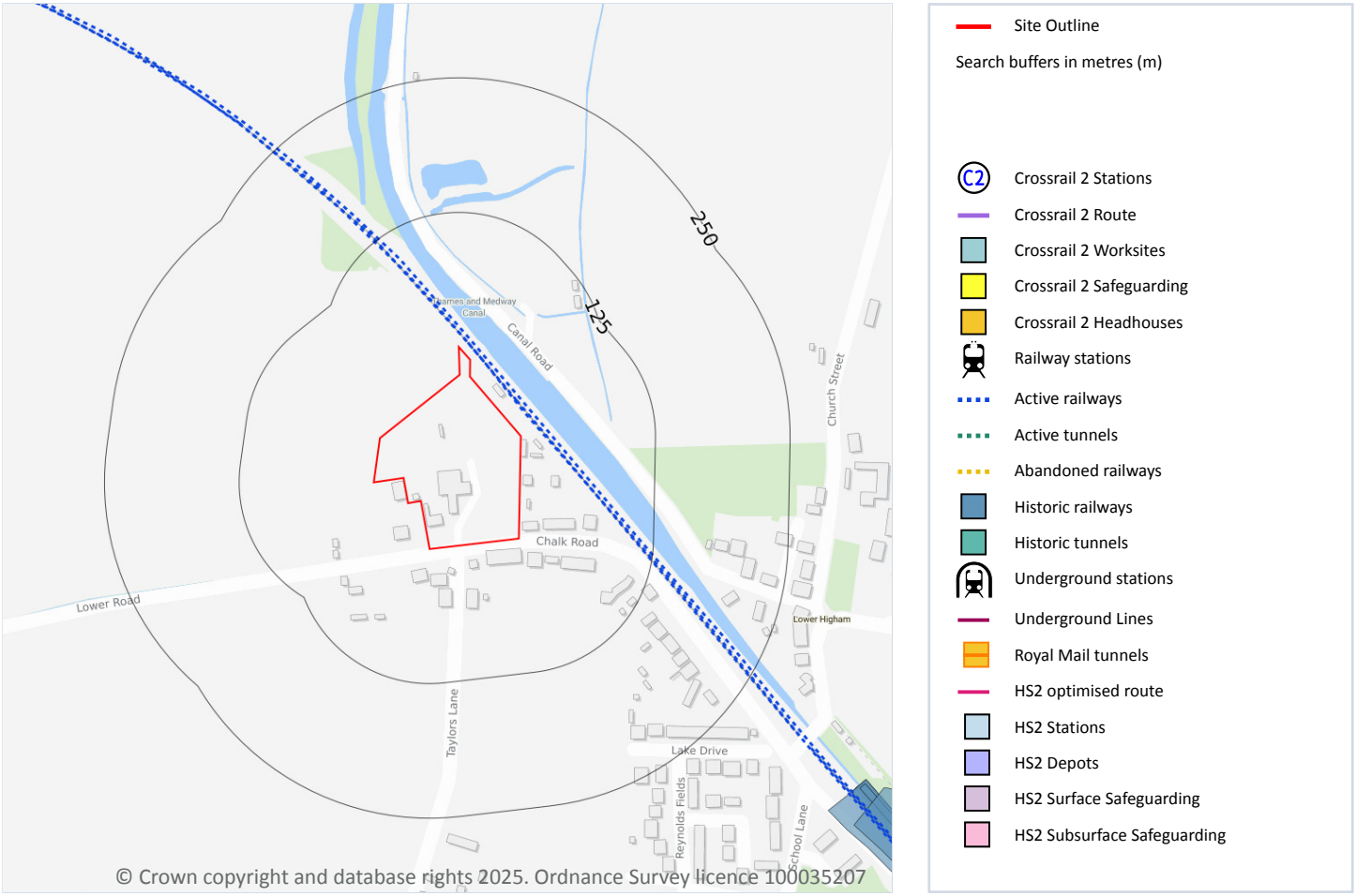
21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects



22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	5

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

Features are displayed on the Railway infrastructure and projects map on **page 135 >**

Location	Name	Type
9m N	North Kent Line	rail
9m N	Not given	Multi Track
9m N	Not given	Multi Track
12m N	North Kent Line	rail
18m NE	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

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

LONDON

RECORD OF WELL

For Institute use only Licence No.

NN.....

272/376 TQ 77 SW/17

272/376

At BUCKLAND FARM

Town or Village LOWER HIGHAM

County KENT.

EXACT SITE OF WELL

Six-inch National Grid sheet and reference TQ.77SW.....711.730.....

For SOUTHERN WATER AUTHORITY

State whether owner, tenant, builder, contractor, consultant, etc.: TENANT

Address (if different from above) 43-51 LOWER STONE STREET MAIDSTONE KENT ME15 6NE

Level of ground surface above sea level (O.D.) ..... ft (.....m)

*DELETE AS NECESSARY

If well top is not at ground level state how far above:* ~~below~~ .....ft (.....0.5..... m)

SHAFT.....ft (.....m); diameter.....ft (.....m);

HEADINGS (please attach details—dimensions and directions)

BORE.....ft (.....62.....m); diameter: at top.....in (.....200.....mm);

at bottom.....in (.....200.....mm)

Full details of permanent lining tubes (position, length, inner and outer diameters, plain slotted etc.):

34.5m of 200mm plain lining tube: from 0.5m above G.L. to 31m below G.L. A.B.S. Plastic and from 31 to 34m below G.L. Steel

TEST CONDITIONS

Water struck at depths of ..... ft (.....37.5 & 53.0.....m) below well top

Rest level of water.....ft (.....1.5.....m) ~~above~~ below* well top. Suction at..... ft (.....m)

Yield on.....hours'* days'* test pumping at.....galls per ..... (..... l/s) with

depression to.....ft (.....m) below well top. Recovery to rest level in ..... mins* hours*

Capacity of pump.....g.p.h. (.....l/s)

Date of measurements.....

NORMAL CONDITIONS

DESCRIPTION OF PERMANENT PUMPING EQUIPMENT:

Make and/or type ..... Motive power.....

Capacity.....galls (.....m^3) per hour. Suction at ..... ft (.....m)

below well top. Amount pumped.....galls (.....m^3) per day. Estimated

consumption .....galls (.....m^3) per week

Well made by LE GRAND (WELL-DRILLING & ENG.) CO. LTD Date of sinking... FEBRUARY 1982.....

ADDITIONAL NOTES ANALYSIS (please attach copy if available)

LOG OF STRATA OVERLEAF

Received from LE GRAND.....

.....

.....

Date.....

Observation well.....

Recorder.....

ER log.....

Site marked on

1" map

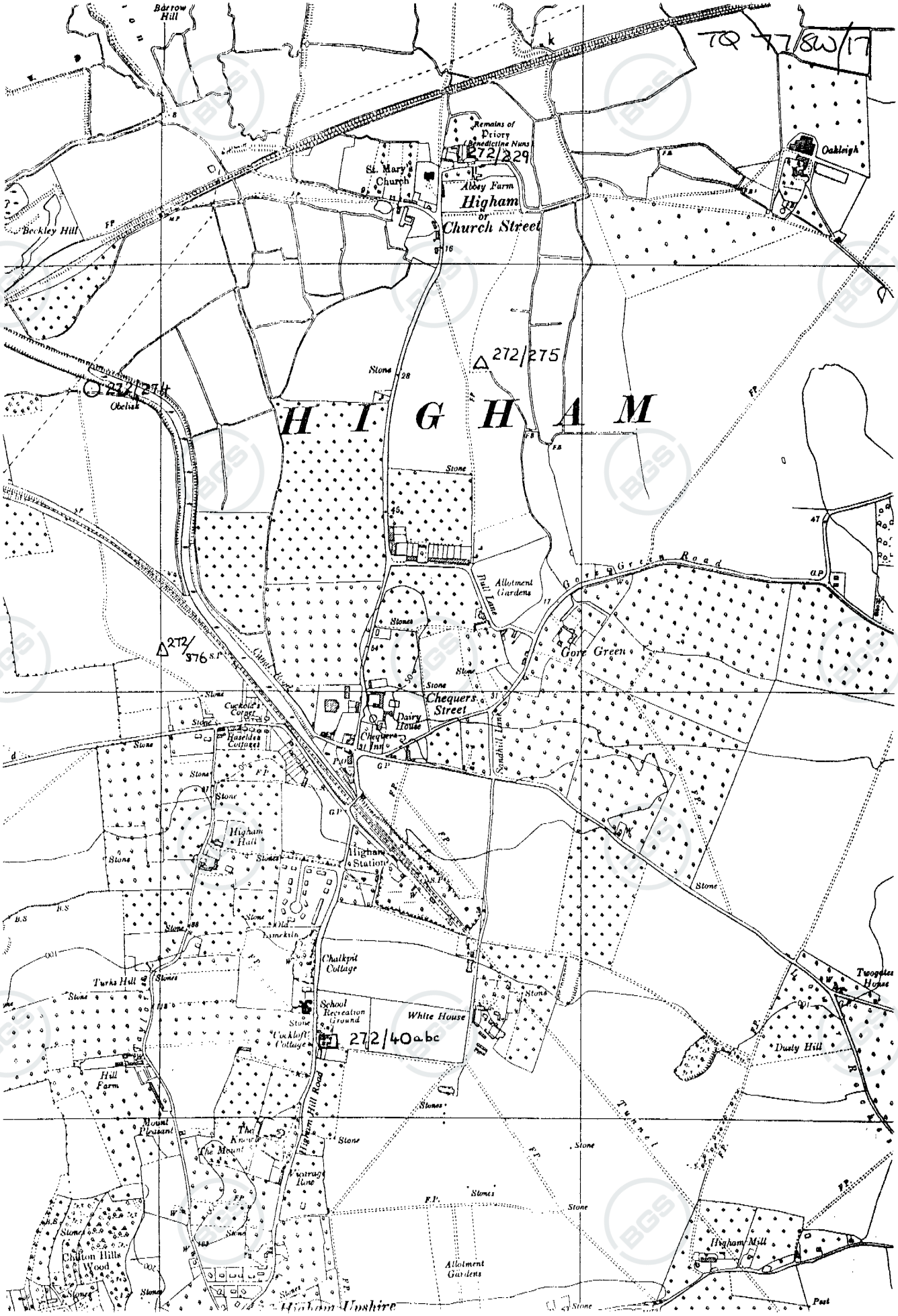
INSTITUTE OF GEOLOGICAL SCIENCES

TQ 77 SW/17

For Institute use only

GEOLOGICAL CLASSIFICATION	NATURE OF STRATA *If measurements start below ground surface, state how far.*	THICKNESS Feet	Inches	Metres	DEPTH Feet	Inches	Metres
MADE GROUND	LOAMY TOPSOIL			0.3			0.3
	MADE GROUND			1.0			1.3
	LIGHT GREY MOTTLED SAND			5.7			7.0
THANET BEDS	LIGHT GREY/GREEN SAND WITH SOME LIGHT BROWN SAND			5.0			12.0
	GREY/GREEN SAND			3.0			15.0
	DARK GREY/GREEN SAND			14.0			29.0
UPPER CHALK	SOFT PUTTY CHALK			0.5			29.5
	FIRM CHALK			4.5			34.0
	SOFT PUTTY CHALK WITH LUMPS OF HARDER CHALK AND BANDS OF FLINTS.			3.0			37.0
	FIRM CHALK WITH FLINTS.			25.0			62.0

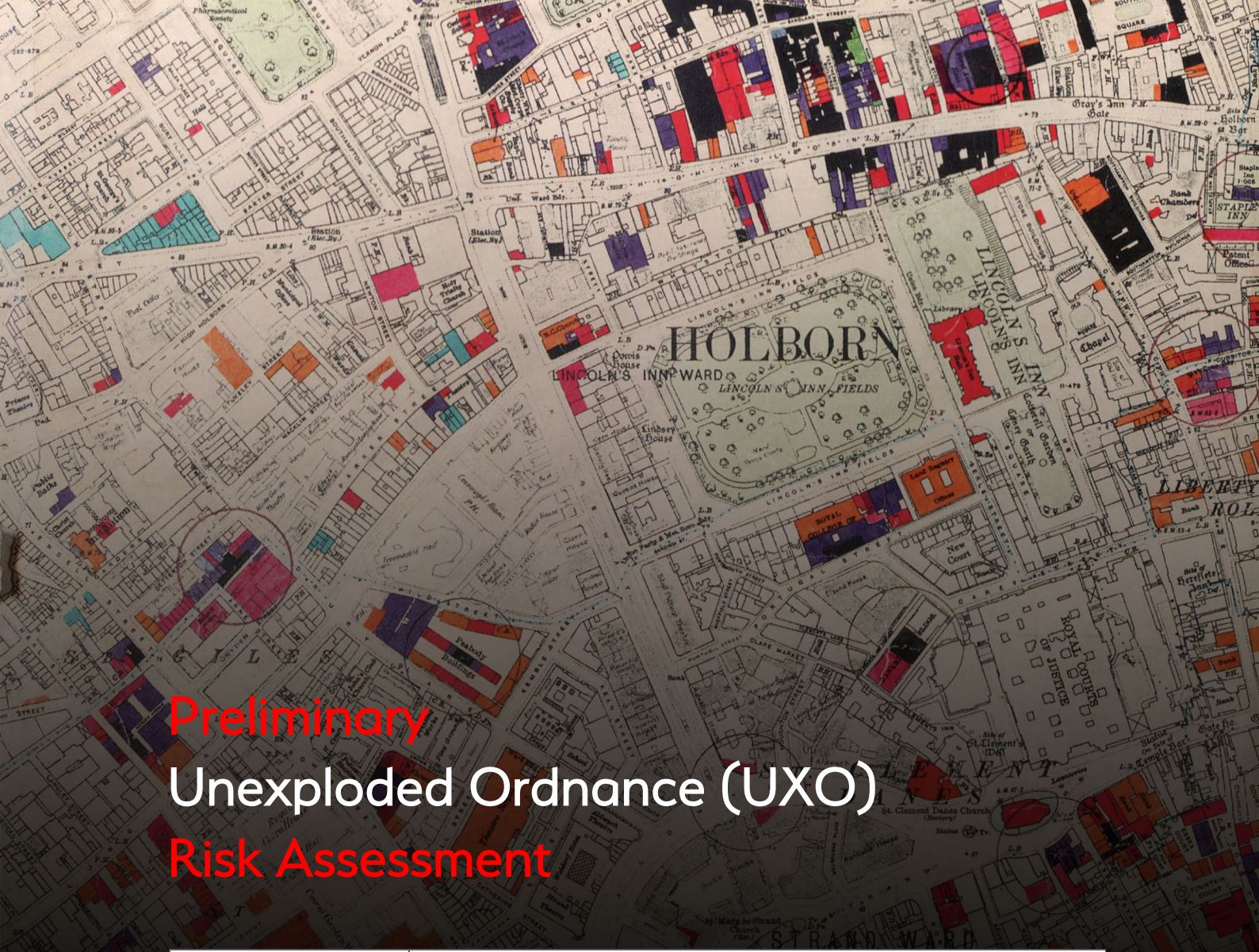
RPL 17.8.82


TQ 77 SW 17
H I G H A M
Barrow Hill
Remains of Priory (Benedictine Nuns)
272/229
St. Mary's Church
Abbey Farm
Higham or Church Street
Oakleigh
Beckley Hill
272/275
Obelisk
Stone
Green Road
Allotment Gardens
Hall Lane
Gore Green
272/376
Upper Road
Chequers Street
Chequers Inn
Dairy House
Sandhill Lane
Cuckold's Corner
Haselden Cottages
Higham Hall
Higham Station
Chalkpit Cottage
Turks Hill
School Recreation Ground
White House
272/40abc
Cuckstool Cottage
Hill Farm
Mount Pleasant
The Knowle
The Mount
Higham Hill Road
Twoggles House
Dusty Hill
Tunnel
Chilton Hills Wood
Allotment Gardens
Higham Mill
Higham Upshire

MEC
Consulting Group

APPENDICES

APPENDIX E



Preliminary
Unexploded Ordnance (UXO)
Risk Assessment

Project Name	Chalk Road, Higham
Client	MEC Consulting Group Ltd
Site Address	Chalk Road, Higham, ME3 7JY
Report Reference	PA21697-00
Date	20th March 2025
Author	JBM
Quality Assurance	HW

1st Line Defence
3 Maple Park, Essex Road, Hoddesdon. EN11 0EX
Tel +44 (0) 1992 245 020 Email info@1stlinedefence.co.uk
Web www.1stlinedefence.co.uk Company Reg No. 07717863

1ST LINE DEFENCE

Assessment Objective

This preliminary unexploded ordnance (UXO) risk assessment is a qualitative screening exercise to assess the likely potential of encountering UXO at the Chalk Road, Higham site. The assessment involves the consideration of the basic factors that affect the potential for UXO to be present at a site as outlined in Stage One of the UXO risk management process.

Background

This assessment uses the sources of information available in-house to 1st Line Defence Ltd to enable the placement of a development site in context with events that may have led to the presence of German air-delivered or Allied military UXO. The report will identify any immediate necessity for risk mitigation or additional research in the form of a Detailed UXO Risk Assessment. It makes use of 1st Line Defence's extensive historical archives, library and unique geo-databases, as well as internet resources, and is researched and compiled by UXO specialists and graduate researchers.

The assessment directly follows CIRIA C681 guidelines "Unexploded Ordnance, a Guide for the Construction Industry". The document will therefore assess the following factors:

- Basic Site Data
- Previous Military Use
- Indicators of potential aerial delivered UXO threat
- Consideration of any Mitigating Factors
- Extent of Proposed Intrusive Works
- Any requirement for Further Work

It should be noted that the vast majority of construction sites in the UK will have a low or negligible risk of encountering UXO and should be able to be screened out at this preliminary stage. The report is meant as a common sense 'first step' in the UXO risk management process. The content of the report and conclusions drawn are based on basic, preliminary research using the information available to 1st Line Defence at the time this report was produced. It should be noted that the only way to entirely negate risk from UXO to a project would be to support the works proposed with appropriate UXO risk mitigation measures. It is rarely possible to state that there is absolutely 'no' risk from UXO to a project.

Site Boundary

Risk Assessment Considerations	
Site location and description/current use	The site is located in Higham, in Gravesham, Kent. Recent aerial imagery indicates that the site comprises a commercial rural premises including a stable, as well as adjacent undeveloped land. It is bound to the north-east by railway lines, to the east by residential properties, to the south by Chalk Road, to the south-west by a residential property, and to the west and north-west by undeveloped land. The site is approximately centred on the OS grid reference: **TQ 71136 73011.**
Are there any indicators of current/historical military activity on/close to the site?	In-house records do not indicate that the site footprint had any former military use. No features such as WWII defensive positions, encampments or firing ranges are recorded to have been located at the site. In addition, no information of ordnance being stored, produced, or disposed of within the proposed site boundary could be found. The closest recorded Heavy Anti-Aircraft (HAA) battery was situated approximately 2.3km south-east of the site. The conditions in which unexploded anti-aircraft ordnance may have fallen unrecorded within the proposed site are generally analogous to that of aerially delivered German bombs.
What was the pre- and post-WWII history of the site?	Pre-WWII OS mapping dated 1931 indicates that the site comprises undeveloped land, crosses by a path, in the vicinity of *Cuckold's Corner*. The site is bound to the north-east by the *North Kent Line* of the *Southern Railway*, to the east by undeveloped land, to the south by *Chalk Road*, opposite which are residential properties, and to the west by undeveloped land including an *Orchard*. Post-WWII OS mapping indicates that several structures have been constructed in the south-west corner of the site, with the site otherwise large unchanged. The site is bound to the north-east by two small structures and railway lines, to the east by residential properties, to the south by *Chalk Lane*, to the south-west by a residential property and a greenhouse, and to the west and north-west by undeveloped land.
Was the area subject to bombing during WWII?	During WWII, the site was located within the Rural District of Strood which according to official Home Office bombing statistics sustained an overall low-moderate density of bombing, with an average of 42.2 items of ordnance recorded per 1,000 acres. This included 1,804 high explosive (HE) bombs, 24 parachute mines, 55 oil bombs, 117 phosphorus bombs, 14 'fire pots', 37 V-1 Pilotless Aircraft, and nine V-2 Long-Range Rockets, comprising 2,060 items across 48,811 acres. Small-scale bomb mapping for the county of Kent plots an HE bomb in the vicinity of the site, although considering the small scale of this map, the precise location of this bomb could not be established at this preliminary stage. Larger-scale local Medway Group bomb mapping plots several HE bombs in the local area, although the site itself does not appear to have been affected.
Is there any evidence of bomb damage on/close to the site?	On this occasion, low-resolution post-WWII aerial photography of the site was available for consultation, in which no potential indicators of bomb damage such as cratering, scattered earth, or damaged buildings are clearly apparent within or adjacent to the site boundary.
To what degree would the site have been subject to access?	Although the site appears to have been undeveloped during the war, its proximity to railway lines, residential properties and a road is anticipated to have provided a reasonably high level of local access and monitor, increasing the likelihood of evidence of UXO being discovered and reported.

To what degree has the site been developed post-WWII?	Comparison of historical and recent aerial imagery indicates that most of the development on site was constructed post-war.
What is the nature and extent of the intrusive works proposed?	Proposed works are believed to include trial pitting and soil infiltration testing.

Summary and Conclusions

During WWII, the site was located within the Rural District of Strood which according to official Home Office bombing statistics sustained an overall low-moderate density of bombing, with an average of 42.2 items of ordnance recorded per 1,000 acres. Small-scale bomb mapping for the county of Kent plots an HE bomb in the vicinity of the site, although considering the small scale of this map, the precise location of this bomb could not be established at this preliminary stage. Larger-scale local Medway Group bomb mapping plots several HE bombs in the local area, although the site itself does not appear to have been affected.

On this occasion, low-resolution post-WWII aerial photography of the site was available for consultation, in which no potential indicators of bomb damage such as cratering, scattered earth, or damaged buildings are clearly apparent within or adjacent to the site boundary.

Although the site appears to have been undeveloped during the war, its proximity to railway lines, residential properties and a road is anticipated to have provided a reasonably high level of local access and monitor, increasing the likelihood of evidence of UXO being discovered and reported.

Recommendations

As the site was predominantly undeveloped during WWII, the potential risk from UXO cannot be discounted entirely. However, given the findings of this preliminary report, the risk from UXO is not considered to be significantly elevated above the 'background risk' of finding UXO in this part of the UK. Whilst it would be possible to conduct a Detailed UXO Risk Assessment for this site, it is not anticipated that any further findings would significantly alter the risk of encountering unexploded ordnance. It is therefore recommended that **no further research** is undertaken.

If the client has any anecdotal or empirical evidence of UXO risk on site, please contact 1st Line Defence.

It should be noted that although the risk from unexploded ordnance on this site has been assessed as low, this does not mean there is 'no' risk of encountering UXO. This preliminary report has been undertaken with due diligence, and all reasonable care has been taken to access and analyse relevant historical information. By necessity, when dealing with historical evidence, and when making assessments of UXO risk, various assumptions have to be made which we have discussed and justified within this report. Our reports take a common-sense and practical approach to the assessment of UXO risk, and we strive to be reasonable and pragmatic in our conclusions. As referenced, it would be possible to undertake further research into this site, but based on the evidence to hand, this is not deemed strictly necessary, and no reasonably justifiable requirement for proactive on-site mitigation has been identified.

It should however be stressed that if any suspect items are encountered during the proposed works, 1st Line Defence should be contacted for advice/assistance, and to re-assess the risk as necessary. Furthermore, we would recommend that ground personnel are always made aware of the potential for encountering UXO, what to look out for and what to do in the unlikely event that a suspect item is encountered, and that a UXO Risk Management Plan is put together for the proposed works. We would be happy to provide a template and guidance for this – contact us on 01992 245020. Should the scope of works change or additional works be proposed, 1st Line Defence should be contacted to re-evaluate the risk.

1st Line Defence

Unit 3, Maple Park
Essex Road, Hoddesdon
Hertfordshire EN11 0EX

Call +44 (0) 1992 245 020
Email info@1stlinedefence.co.uk
Web www.1stlinedefence.co.uk

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APPENDICES

APPENDIX F

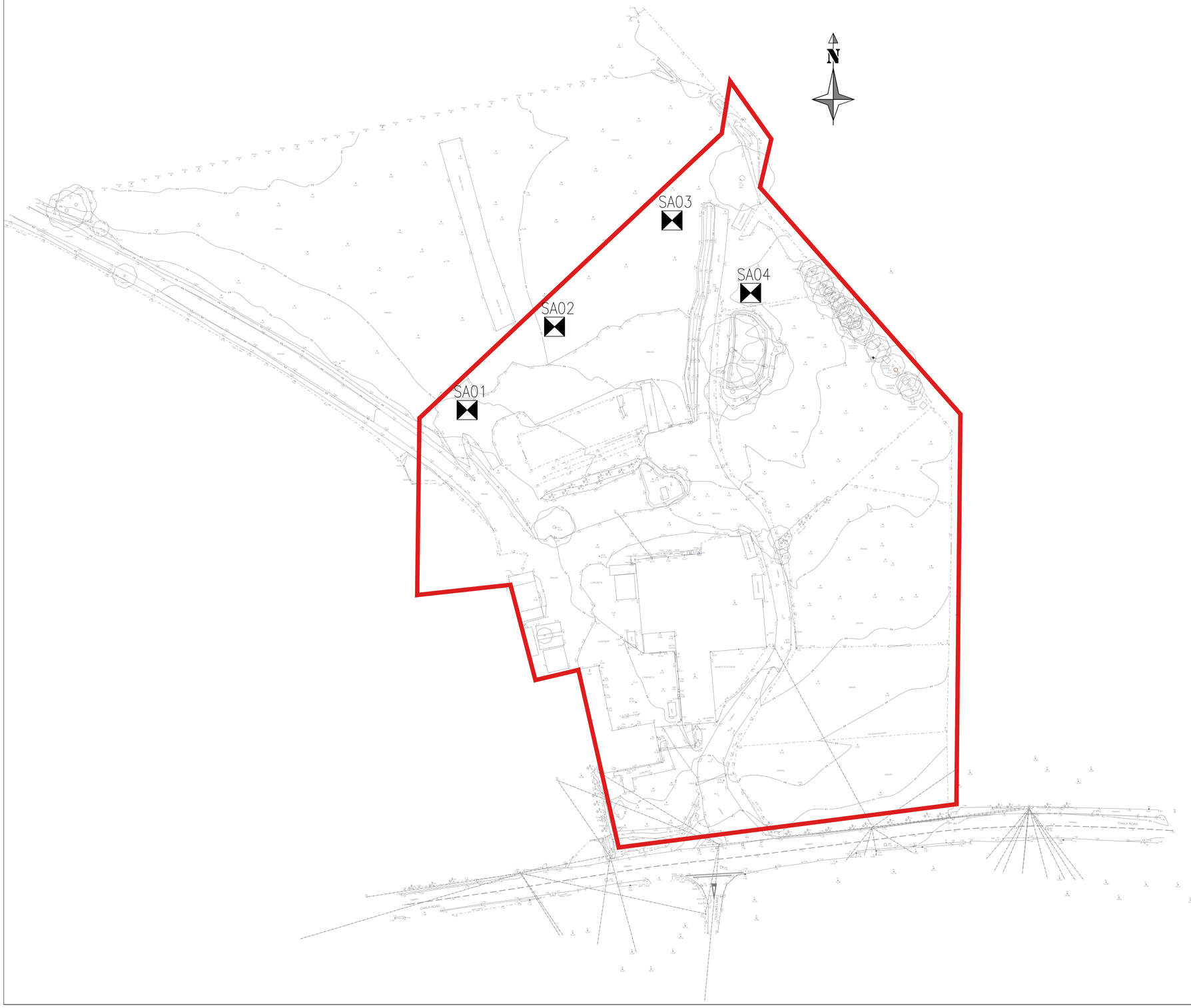
The Old Chapel, Station Road, Hugglescote, Leicestershire LE67 2GB
Telephone 01530 264753
Email group@m-ec.co.uk
www.m-ec.co.uk

Doc. Ref.	29524-CALC-0401
Sheet	1 of 10
Engineer	AL
Date	16.04.25
Revision	-

SOIL INFILTRATION CALCULATIONS FRONT SHEET

SCHEME	Chalk Road, Higham
CLIENT	Richborough
ASPECTS OF SCHEME TO BE DESIGNED	Soil Infiltration Rate Testing
CODES OF PRACTICE, DESIGN SPECIFICATIONS & BRITISH STANDARDS	Soil Infiltration Rate testing and calculations completed in general accordance with BRE Digest 365 utilising the gravel fill pit method.
NOTES	The soil infiltration rate test results reported below applies to the specific test depth range as stated on the calculation sheet. Testing was undertaken in four locations (SA01-SA04) and within the Thanet Formation. The locations of the soil infiltration test pits are shown on the exploratory hole location plan. Insufficient soakage was recorded within the four soakaway locations tested to enable the calculation of a representative infiltration rate in accordance with BRE 365. Seepages of groundwater were also recorded in SA03 at 1.80m bgl and SA04 at 2.00m bgl. Based on the results and the presence of shallow groundwater, it is considered that a soakaway drainage system will not provide a consistent and viable drainage option at the locations tested.

INDEX



GENERAL NOTES

1. DO NOT SCALE THIS DRAWING.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS, ARCHITECTS AND SPECIALIST DESIGN DRAWINGS AND DETAILS.
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
4. THIS DRAWING IS FOR STRATEGY PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.

KEY

SA01 SOIL INFILTRATION TEST PIT LOCATION

SITE BOUNDARY

REV:	AMENDMENTS:	DRN:	CHK:	APP:	DATE:
-	FIRST ISSUE.	JM	CW	DT	11/04/25

PROJECT:
CHALK ROAD
HIGHAM

DRAWING TITLE:
EXPLORATORY HOLE
LOCATION PLAN

CLIENT:
RICHBOROUGH ESTATES LTD

DRAWING NUMBER:
29524_04_140_01

REVISION:	SHEET SIZE:	SCALE:
-	A1	1:500

STATUS:
FOR INFORMATION / APPROVAL

MEC
Consulting Group
Birmingham | Brighton | Leicester

Telephone: 01530 264 753
Email: group@m-ec.co.uk
Website: www.m-ec.co.uk

MEC Consulting Group Ltd
The Old Chapel, Station Road, Hugglescote, Leicestershire, LE67 2GB
Telephone 01530 264753 email group@m-ec.co.uk

Scheme	**Chalk Road, Higham**	**Page No.**	3
Client	**Richborough**	**Calcs by**	AL
Job ref.	**29524**	**Checked By**	DT
		Date	16/04/24

Soil Infiltration Test - Gravel Filled Method

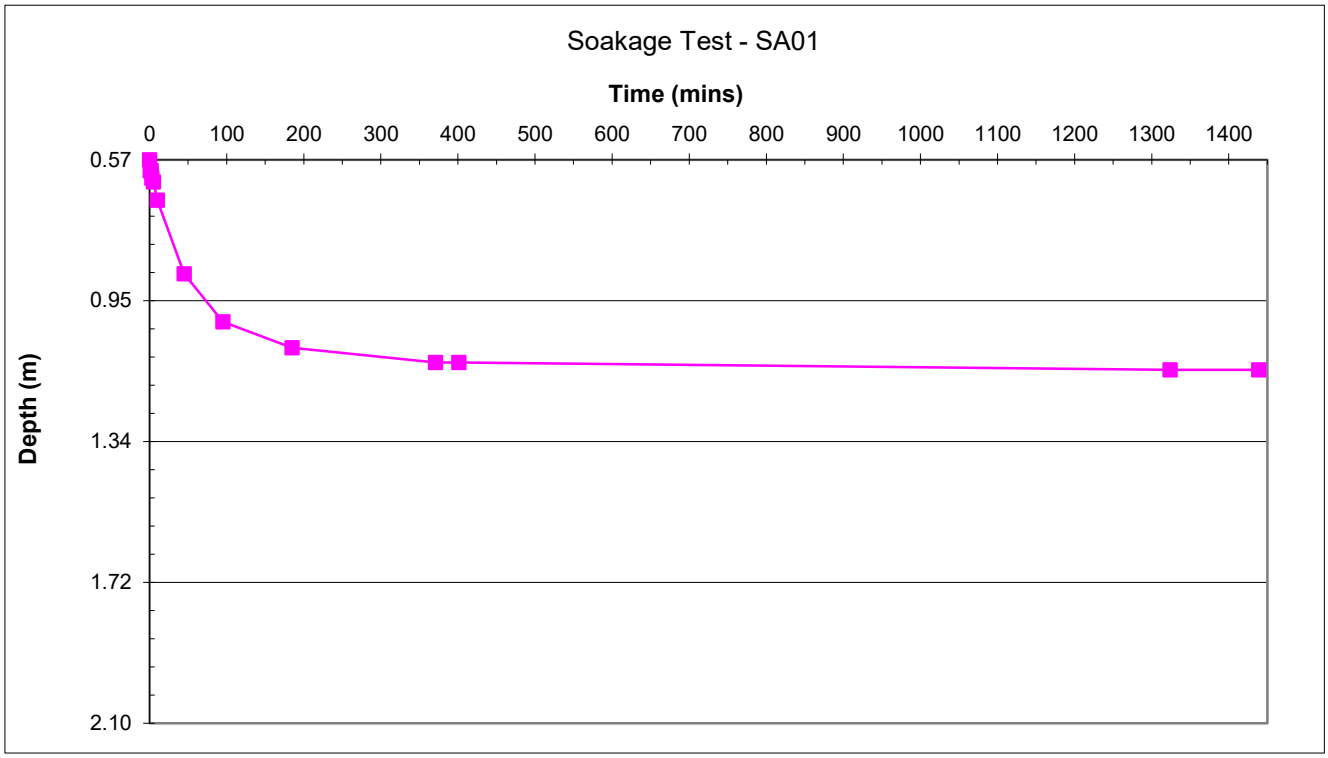
(In general accordance with BRE Digest 365, 2016, Soakaway Design)

Soakaway pit ref.	**SA01**	**Test** 1
Length	**1.70** m	
Width	**0.45** m	
Depth	**2.10** m	
Ground water level	**N/A** m	
Ground conditions	**0.00-0.30m**	**MADE GROUND: Grass over dark brown sandy, silty clay topsoil with occasional gravel sized fragments of quartzite, chert and brick, and rare cobble sized fragments of brick.**
	0.30-2.10m	**Brown becoming orangish brown, silty CLAY. (THANET FORMATION)**

Time (mins)	Depth to water (m bgl)
0	0.57
1	0.60
2	0.60
3	0.62
5	0.63
10	0.68
45	0.88
95	1.01
185	1.08
371	1.12
401	1.12
1324	1.14
1439	1.14

Effective storage depth =	1.53	m
75% effective storage depth =	1.15	m
(ie depth below GL) =	0.95	m
25% effective storage depth =	0.38	m
(ie depth below GL) =	1.72	m
effective storage depth 75%-25% =	0.77	m
Time to fall to 75% effective depth =	70	mins
Time to fall to 25% effective depth =	N/A	mins
Void Ratio =	40%	
V (75%-25%) =	0.23	m^3
a (50%) =	4.05	m^2
t (75%-25%) =	N/A	mins

Insufficient soakage to derive an infiltration rate.



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Telephone 01530 264753 email group@m-ec.co.uk

Scheme	**Chalk Road, Higham**	**Page No.**	4
Client	**Richborough**	**Calcs by**	AL
Job ref.	**29524**	**Checked By**	DT
		Date	16/04/24

Soil Infiltration Test - Gravel Filled Method

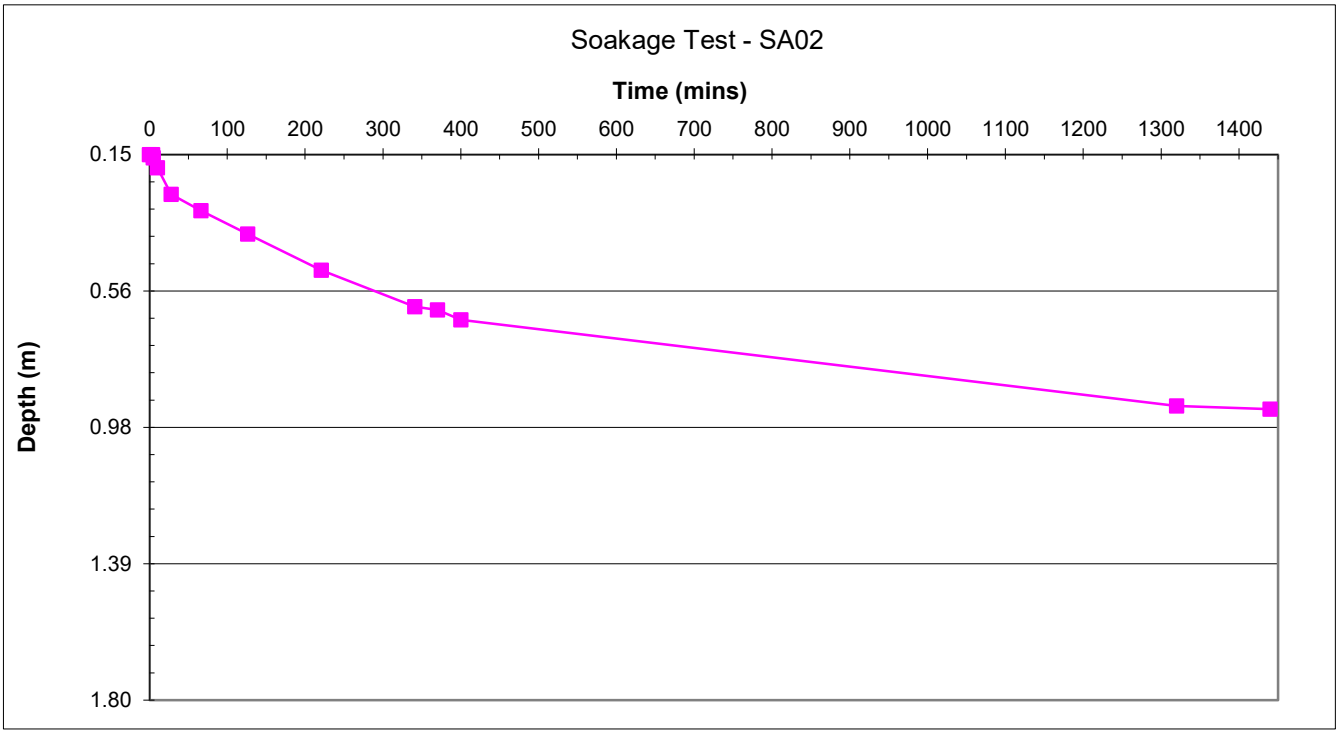
(In general accordance with BRE Digest 365, 2016, Soakaway Design)

Soakaway pit ref.	**SA02**	**Test** 1
Length	**1.90** m	
Width	**0.45** m	
Depth	**1.80** m	
Ground water level	**N/A** m	
Ground conditions	**0.00-0.35m**	**MADE GROUND: Grass over dark brown sandy, silty clay topsoil with occasional gravel sized fragments of quartzite, chert, and brick, and rare cobble sized fragments of brick.**
	0.35-1.80m	**Brown to yellowish brown, slightly sandy, slightly gravelly, silty CLAY. Gravels comprise, subrounded, fine to medium, chert. (THANET FORMATION)**

Time (mins)	Depth to water (m bgl)
0	0.15
4	0.15
5	0.16
10	0.19
28	0.27
66	0.32
126	0.39
221	0.50
341	0.61
370	0.62
400	0.65
1320	0.91
1440	0.92

Effective storage depth =	1.65	m
75% effective storage depth =	1.24	m
(ie depth below GL) =	0.56	m
25% effective storage depth =	0.41	m
(ie depth below GL) =	1.39	m
effective storage depth 75%-25% =	0.83	m
Time to fall to 75% effective depth =	290	mins
Time to fall to 25% effective depth =	N/A	mins
Void Ratio =	40%	
V (75%-25%) =	0.28	m^3
a (50%) =	4.73	m^2
t (75%-25%) =	N/A	mins

Insufficient soakage to derive an infiltration rate.



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Scheme	**Chalk Road, Higham**	**Page No.**	5
Client	**Richborough**	**Calcs by**	AL
Job ref.	**29524**	**Checked By**	DT
		Date	16/04/25

Soil Infiltration Test - Gravel Filled Method

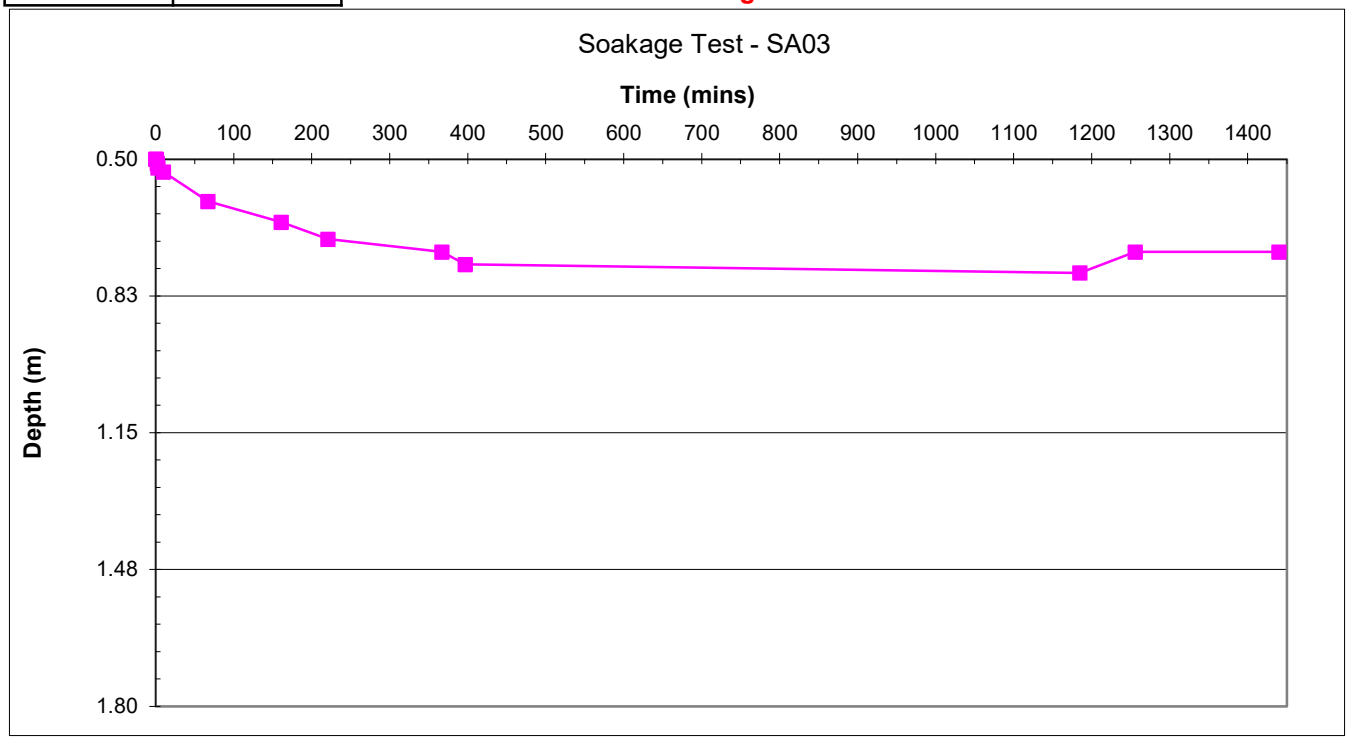
(In general accordance with BRE Digest 365, 2016, Soakaway Design)

Soakaway pit ref.	**SA03**	**Test** 1
Length	**1.90** m	
Width	**0.45** m	
Depth	**1.80** m	
Ground water level	**1.80** m	
Ground conditions	**0.00-0.30m**	**Grass over dark brown, sandy, silty clay TOPSOIL with gravel sized fragments of quartzite and chert.**
	0.30-1.80m	**Yellowish brown becoming orangish and greyish brown, slightly sandy, slightly gravelly, silty CLAY. Gravels comprise subangular to subrounded, fine to medium chert. (THANET FORMATION)**

Time (mins)	Depth to water (m bgl)
0	0.5
1	0.50
2	0.51
3	0.52
10	0.53
67	0.60
161	0.65
221	0.69
367	0.72
397	0.75
1185	0.77
1256	0.72
1440	0.72

Effective storage depth =	1.30	m
75% effective storage depth =	0.98	m
(ie depth below GL) =	0.83	m
25% effective storage depth =	0.33	m
(ie depth below GL) =	1.48	m
effective storage depth 75%-25% =	0.65	m
Time to fall to 75% effective depth =	N/A	mins
Time to fall to 25% effective depth =	N/A	mins
Void Ratio =	40%	
V (75%-25%) =	0.22	m^3
a (50%) =	3.91	m^2
t (75%-25%) =	N/A	mins

Insufficient soakage to derive an infiltration rate.



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Scheme	**Chalk Road, Higham**	**Page No.**	6
Client	**Richborough**	**Calcs by**	AL
Job ref.	**29524**	**Checked By**	DT
		Date	16/04/25

Soil Infiltration Test - Gravel Filled Method

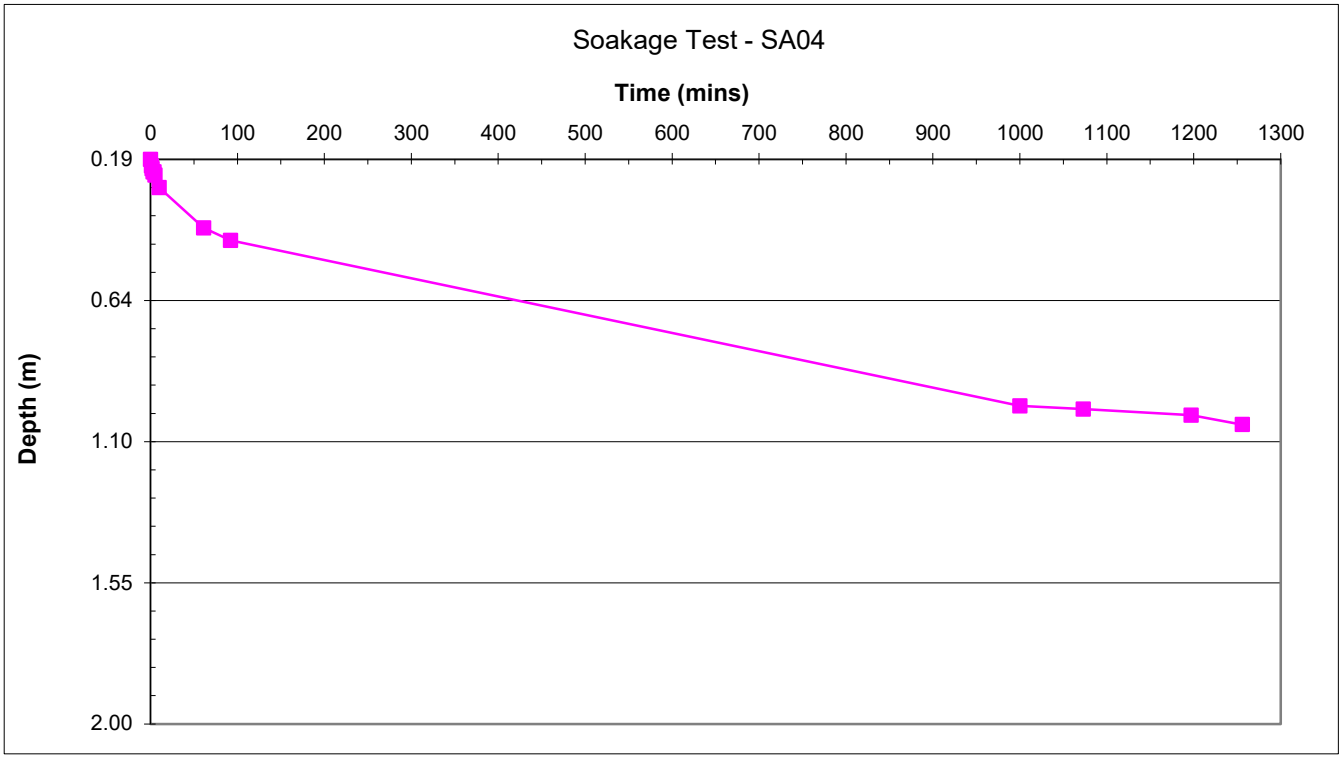
(In general accordance with BRE Digest 365, 2016, Soakaway Design)

Soakaway pit ref.	**SA04**	**Test** 1
Length	**2.10** m	
Width	**0.45** m	
Depth	**2.00** m	
Ground water level	**2.00** m	
Ground conditions	**0.00-0.45m**	**MADE GROUND: Grass over brown, silty, sandy gravel sized fragments of chert, brick, and concrete, with cobble sized fragments of brick and concrete.**
	0.45-2.00m	**Light brown, slightly sandy, silty CLAY with some fine rootlets. (THANET FORMATION)**

Time (mins)	Depth to water (m bgl)
0	0.19
1	0.21
2	0.22
3	0.23
4	0.23
5	0.24
10	0.28
61	0.41
92	0.45
1000	0.98
1073	0.99
1197	1.01
1256	1.04

Effective storage depth =	1.81	m
75% effective storage depth =	1.36	m
(ie depth below GL) =	0.64	m
25% effective storage depth =	0.45	m
(ie depth below GL) =	1.55	m
effective storage depth 75%-25% =	0.91	m
Time to fall to 75% effective depth =	415	mins
Time to fall to 25% effective depth =	N/A	mins
Void Ratio =	40%	
V (75%-25%) =	0.34	m^3
a (50%) =	5.56	m^2
t (75%-25%) =	N/A	mins

Insufficient soakage to derive an infiltration rate.



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Exploratory Hole ID:	SA01
	Sheet 1 of 1

Project:	Chalk Road	Project No. 29524	Start Date: 10/04/2025	End Date: 10/04/2025	Plant Used: JCB 3CX
Location:	Higham	Logged By: CC	Easting and Northing Co-ordinates: 571073.82 173031.72		Elevation (m AOD): 5.00
Client:	Richborough	Approved By: DT			

Strata Description	Legend	Depth (m)	Level (m AOD)	Samples Type	Samples Depth	Tests	Groundwater (m)
MADE GROUND: Grass over dark brown sandy, silty clay topsoil with occasional gravel sized fragments of quartzite, chert and brick, and rare cobble sized fragments of brick.		0.30	4.70				
Brown becoming orangish brown, silty CLAY. THANET FORMATION							
Becoming greyish black below 2.00m bgl							
End of Trial Pit		2.10	2.90				

Remarks:

Exploratory hole location scanned with Cable Avoidance Tool and Signal Generator.
Descriptions based on visual inspection by a Geo-environmental engineer.
Groundwater was not encountered.
Visual or olfactory evidence of contamination was not observed.
Co-ordinates and elevations estimated from the topographical survey.

Stability: Stable

Dimensions:

Length: 1.70m
Width: 0.45m
Depth: 2.10m

Key:

B - Bulk Sample
D - Disturbed Sample
ES - Environmental Sample
W - Water Sample
PID - PID Reading
HSV - Hand Shear Vane Reading

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Exploratory Hole ID:	**SA02**
	Sheet 1 of 1

Project:	Chalk Road	Project No. 29524	Start Date: 10/04/2025	End Date: 10/04/2025	Plant Used: JCB 3CX
Location:	Higham	Logged By: CC	Easting and Northing Co-ordinates: 571095.24 173052.12		Elevation (m AOD): 4.40
Client:	Richborough	Approved By: DT			

Strata Description	Legend	Depth (m)	Level (m AOD)	Samples Type	Samples Depth	Tests	Groundwater (m)
MADE GROUND: Grass over dark brown sandy, silty clay topsoil with occasional gravel sized fragments of quartzite, chert, and brick, and rare cobble sized fragments of brick.							
		0.35	4.05				
Brown to yellowish brown, slightly sandy, slightly gravelly, silty CLAY. Gravels comprise, subrounded, fine to medium, chert. THANET FORMATION							
End of Trial Pit		1.80	2.60				

Remarks:

Exploratory hole location scanned with Cable Avoidance Tool and Signal Generator.
Descriptions based on visual inspection by a Geo-environmental engineer.
Groundwater was not encountered.
Visual or olfactory evidence of contamination was not observed.
Co-ordinates and elevations estimated from the topographical survey.

Stability: Stable

Dimensions:

Length: 1.90m
Width: 0.45m
Depth: 1.80m

Key:

B - Bulk Sample
D - Disturbed Sample
ES - Environmental Sample
W - Water Sample
PID - PID Reading
HSV - Hand Shear Vane Reading

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Exploratory Hole ID:	SA03
	Sheet 1 of 1

Project:	Chalk Road	Project No. 29524	Start Date: 10/04/2025	End Date: 10/04/2025	Plant Used: JCB 3CX
Location:	Higham	Logged By: CC	Easting and Northing Co-ordinates: 571124.03 173078.17		Elevation (m AOD): 4.20
Client:	Richborough	Approved By: DT			

Strata Description	Legend	Depth (m)	Level (m AOD)	Samples Type	Samples Depth	Tests	Groundwater (m)
Grass over dark brown, sandy, silty clay TOPSOIL with gravel sized fragments of quartzite and chert.		0.30	3.90				
Yellowish brown becoming orangish and greyish brown, slightly sandy, slightly gravelly, silty CLAY. Gravels comprise subangular to subrounded, fine to medium chert. THANET FORMATION							
End of Trial Pit		1.80	2.40				1.80 ▼

Remarks:

Exploratory hole location scanned with Cable Avoidance Tool and Signal Generator.
Descriptions based on visual inspection by a Geo-environmental engineer.
Groundwater seepage at 1.80m bgl.
Visual or olfactory evidence of contamination was not observed.
Co-ordinates and elevations estimated from the topographical survey.

Stability: Stable

Dimensions:

Length: 1.90m
Width: 0.45m
Depth: 1.80m

Key:

B - Bulk Sample
D - Disturbed Sample
ES - Environmental Sample
W - Water Sample
PID - PID Reading
HSV - Hand Shear Vane Reading

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Exploratory Hole ID:	SA04
	Sheet 1 of 1

Project:	Chalk Road	Project No. 29524	Start Date: 10/04/2025	End Date: 10/04/2025	Plant Used: JCB 3CX
Location:	Higham	Logged By: CC	Easting and Northing Co-ordinates: 571143.28 173060.40		Elevation (m AOD): 4.55
Client:	Richborough	Approved By: DT			

Strata Description	Legend	Depth (m)	Level (m AOD)	Samples Type	Samples Depth	Tests	Groundwater (m)
MADE GROUND: Grass over brown, silty, sandy gravel sized fragments of chert, brick, and concrete, with cobble sized fragments of brick and concrete.							
		0.45	4.10				
Light brown, slightly sandy, silty CLAY with some fine rootlets. THANET FORMATION							
End of Trial Pit		2.00	2.55				2.00 ▼

Remarks:

Exploratory hole location scanned with Cable Avoidance Tool and Signal Generator.
Descriptions based on visual inspection by a Geo-environmental engineer.
Groundwater seepage encountered at 2.00m bgl.
Visual or olfactory evidence of contamination was not observed.
Co-ordinates and elevations estimated from the topographical survey.

Stability: Stable

Dimensions:

Length: 2.10m
Width: 0.45m
Depth: 2.00m

Key:

B - Bulk Sample
D - Disturbed Sample
ES - Environmental Sample
W - Water Sample
PID - PID Reading
HSV - Hand Shear Vane Reading

- CIVIL ENGINEERING
- TRANSPORT
- FLOOD RISK & DRAINAGE
- STRUCTURES
- GEO-ENVIRONMENTAL
- ACOUSTIC AIR
- UTILITIES
- GEOMATICS
- LIGHTING
- EXPERT WITNESS

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