

Tier 1: Preliminary Risk Assessment

Project Number: G0169

Project Name: The Coal Yard, Yoxford

Client: T M Morphey Yoxford

Date: February 2024



The Coal Yard, Yoxford

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1 Introduction

1.1 Project Background

Geotechnical and Contamination Consulting Limited (GAC Consulting) has been instructed by Bob Foulkes of Hollins Architects, Surveyors & Planning Consultants on behalf of T M Morphey Yoxford (the client) to conduct a Tier 1 Preliminary Risk Assessment for the proposed development project located at The Coal Yard, High Street, Yoxford, IP17 3HP.

The location of the proposed development is shown on the Site Location Plan (G0169-DR01) presented in the appendix.

1.2 Development Proposal

The development proposals are detailed in the Table below.

Table 1.2; Development Proposals					
Proposed Development	The proposed development consists of the demolition of the existing structure and construction of a replacement commercial office/showroom.				
Landuse Category*	Commercial				
BS8485 Building Type**	Type A				
Potable water supply	Mains supply				
Notes; * Standard land-uses as defined in Environment Agencies' SR3 (Environment Agency, 2009).					
** ; BS 8485:2015+A1:2019					

The existing and proposed layouts are shown in the appendix in drawings G0169-DR02 and G0169-DR03.

1.3 Project objectives

The objective of this investigation was to support discharge of condition 8 of planning approval DC/23/1727/FUL, Demolition of existing outbuilding and erection of new commercial unit. Specifically:

- To provide a Tier 1 Preliminary Risk Assessment (a desk study and risk assessment).
- To make appropriate recommendations regarding risk identification and reduction, the need for further assessment and remedial activity.

2 Lines of Evidence

The Preliminary Risk Assessment forms the first stage of an environmental assessment and aims to identify any potentially contaminative activities, either on-site or in the surrounding area, that may have occurred historically. The assessment is completed by identifying linkages between a viable source, via a given pathway, such as might impact a given receptor. Once a link is identified, a qualitative risk assessment is undertaken to determine if the risk is acceptably low or if some further action may be required to limit potential harm.

The Preliminary Risk Assessment is guided by the Environment Agencies' LCRM guidance, BS 10175 "Investigation of Potentially Contaminated Sites", CIRIA C552 "Contaminated Land Risk Assessment a Guide to Good Practice" and others.

A 'lines of evidence' approach is adopted whereby multiple sources are consulted, constituting the desk study element of the assessment, supplemented by a walkover of the site and surrounding area.



2.1 Environmental Database

Following a review of the available information, the site setting has been assessed as follows:

Table 2.1; Environmental Context				
Location	Grid Ref: Easting 639225 Northing 269380			
Elevation and topography	Between 15 and 16 m aOD.			
Lievation and topography	The site slopes gently down to the northeast.			
Geology	The site slopes gently down to the horaleast.			
Superficial Geology	Underlying the site			
Supermetal decitogy	Clay, silt, sand and gravel- Head			
	Mapped locally			
	Clay, silt, sand and gravel - Alluvium			
	Diamicton - Lowestoft Formation			
Bedrock Geology	Sand and gravel – Crag Group			
Mining	No mining activity has been recorded in the area.			
Radon	Less than 1% of buildings are affected by radon gas			
Hydrology	2000 than 170 of Sananings and affected by factoring as			
Surface Water Features	The River Yox is mapped 20 m east of the site, generally flowing southeast.			
Flooding	The site is not at risk from flooding from rivers or the sea.			
riodanig	The site is not at risk from nooding from twels of the sea.			
	The northeastern corner of the site falls within generic surface water flood			
	mapping and is shown as likely to flood as a result of extreme rainfall events.			
	This corner of the site is assessed as potentially at risk of 0.1 to 0.3 m			
	flooding with a 1 in 1000 year probability.			
	There is a low risk of flooding from groundwater.			
Hydrogeology				
Groundwater Source Protection	The site does not fall within a groundwater source protection zone.			
Zone (SPZ) and abstraction				
, , , , ,	No groundwater, surface water or potable water abstractions were recorded			
	within 250 m of the site.			
Aquifer designation	Various types of aquifers underlie the site, determined by the geology:			
	Head- Secondary Undifferentiated Aquifer			
	Alluvium - Secondary A Aquifer			
	Crag Group - Principal aquifer			
	The groundwater vulnerability mapping methodology (Environment			
	Agency, 2017); provides the following definition(s).			
	- Undifferentiated aquifer: 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			
	- 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.			
	- Principal aquifer: Highly permeable layers, providing a water			
	storage/supply on a strategic scale and essential base flow to			
	rivers.			
Groundwater Vulnerability	The site is designated as falling within an area of medium groundwater			
	vulnerability.			
	The following definition(s) are taken from the groundwater vulnerability			
	mapping methodology (Environment Agency, 2017):			



Table 2.1; Environmental Context					
	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.				
Groundwater depth	Groundwater is anticipated around 3 m bgl (circa 13 m aOD). Perched groundwater may be encountered within shallower soils.				
Groundwater flow direction	Unknown; groundwater may be flowing in any direction but is likely to be flowing generally east to southeast.				
Anticipated groundwater conductivity	Head -1.0E-5 to 1.0E-8 m/sec Crag Group - 1.0E-4 to 1.0E-7 m/sec				
Permits, Incidents, Licences and Re	egisters				
Permits and Authorisations	No significant permits or authorisations have been recorded.				
Pollution and contamination	No Pollution Incidents have been recorded within 250 m of the site. No Contaminated Land under Part 2A EPA has been recorded. No Licensed Discharges have been recorded within 250 m of the site.				
Historical industrial land uses					
On site	No historical industrial land uses were identified on site.				
Within 250 m	No historical industrial land uses were identified within 250 m of the site.				
Recent industrial land uses					
On site	No recent industrial land uses were identified on site.				
Within 250 m	 Three recent industrial land uses were identified within 250 m of the site: Coal Yard, located 3 m south of the site, Pumping Station, located 10 m northeast of the site, Pump, located 165 m south of the site. 				
Waste					
Waste exemptions	No waste or landfill sites have been identified within 250 m of the site.				

2.2 Previous Reports

We have not been made aware of any previous contaminated land reports that may provide information about the site or its immediate surroundings.

2.3 Site History

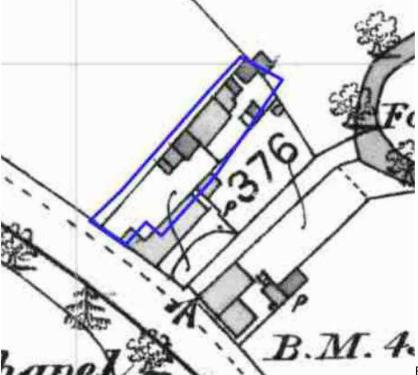
Following a review of historical mapping presented in the appendix, the site and surrounding area can be seen to have consisted of a predominantly agricultural area from the time of the original mapping (1883) to the current time. The site lay on the northern end of the village of Yoxford, with fields generally surrounding the property on all sides.

By the time of the 1946 mapping revision, several detached houses had been constructed on land to the north and south of the site, located between the road and the River Yox. Additional residential development had occurred by the 1980s.

The site lay on the northeastern side of what would become known as the High Street. By the time of the earliest mapping (1883) the site was already occupied by approximately 8 small structures, generally lining the northwestern boundary of the site.

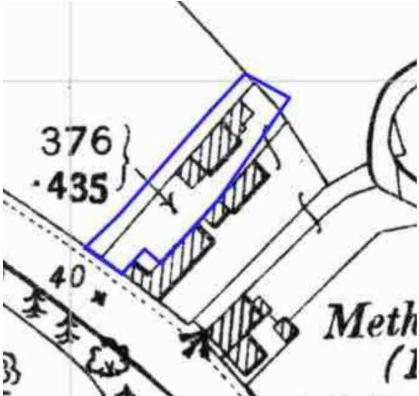
The Coal Yard, Yoxford





Excerpt from 1883 mapping

By the time of the 1903 mapping revision, two of the outbuildings on the southern part of the western boundary as well as two of the outbuildings on the northern part of the western boundary were no longer noted.



Excerpt from 1903 mapping

This layout remained throughout the mapping up to and including the 2003 revision.





Through satellite imagery (Google Earth Pro) this layout remained until between 2007 and 2019, whereupon only the central building, the subject of the proposed redevelopment, remained.



Google Earth Pro, 2019.

No significant changes to the site were noted since that time.



After the 1976 mapping revision, the site was labelled as a Coal Yard. The property is understood to have been has been in the client's family for at least the last 100 years and has operated as a coal yard throughout that time. The aerial photo (above), taken from the planning portal, shows coal stored to the south of one of the outbuildings on site. The date of the photo is unknown however from the satellite imagery, pre-dates the year 1999.





The following key dates have been identified:

• First development on-site

• Demolition of outbuildings on site

 Loose coal stopped being stored on site in preference to bagged coal stored on adjacent land to the northeast.

• Demolition of outbuildings on site

- Pre 1883

Between 1883 and 1903

Pre 1999

- Between 2003 and 2007

2.4 Site Reconnaissance Walkover

A walkover of the site was conducted on 31st January 2024 in order to establish the current condition of the site and surrounding land to aid in identifying source-pathway-receptor linkages. The data collected during the walkover is presented in the table below.

Table 2.4: Site Reconnaissance Walkover					
Current Site Use	A barn occupied the site which was otherwise used for parking and storage.				
	In recent years, the buildings have been used for general storage.				
	To the rear (north) of the barn, two storage units stood, providing dry storage for building materials.				
Housekeeping	The site was kept in a tidy condition.				
	A small amount of building material was stored outside the barn.				
Surfacing	Outside: Gravel surfacing throughout.				
	Inside the barn, the flooring consisted of either brick weave or concrete. The concrete was in reasonable condition considering the age of the building.				
	No staining was noted on hard flooring.				
Description of any Buildings	A single storey barn of timber frame construction with a single brick wall with the other three walls formed of wood panelling.				
	The roof was of corrugated metal. No guttering was in place.				
Materials Storage	The main part of the barn was used to store bagged split firewood as well as reclaimed wood and furniture with a small amount of plastic pipe and guttering.				
	The smaller part of the barn was used for storing more general building materials including wood, scaffolding, pipe lagging, plastic pipe, plastic hose, and Celotex type insulation board.				
	Outside the barn, reclaimed brick, clay roof tiles, breeze blocks, new brick stocks, as well as bagged sand, shingle and gravel were stored.				
	Two storage units were being used for dry storage with one unit containing fibreglass insulation and cement and the other unit storing cable, wood and tins of paint.				
Contaminative Sources	No sources of contamination were noted during the walkover either on or off site.				
	No staining of the flooring or walls was noted.				
	No odours were noted.				
	No tanks were seen or suspected to have been present historically.				
	No asbestos containing materials were observed on the site or in the building fabric.				
	No potentially contaminative materials storage was observed.				

3 Qualitative Environmental Risk Assessment

The qualitative risk assessment is completed by identifying potential contaminative sources, migratory pathways and potentially sensitive receptors.



In the context of this risk assessment, the site has not been zoned, with a single proposed land use applied to the site as a whole.

3.1 Source – Pathway – Receptor Identification

3.1.1 Potential Contamination Sources

After a review of various lines of evidence (e.g. historical mapping, environmental database, site reconnaissance and regulatory contact), potential sources of contamination have been identified. These sources are summarised in the table below. Repeated sources have been omitted.

The following potential sources have been identified:

- A thin layer of general made ground arising from demolition of the historical buildings.
 Demolition is believed to have occurred in two phases, between 1883 to 1903 and 2007 to 2019.
 Source ID S1.
- Coal Yard, located on site until around 1999, thereafter coal was handled and sold on adjacent land. Source ID S2.
- Pumping Station, located 10m northeast of the site. Source ID S3.
- Pump, located 165 m south of the site. Source ID S4.

By the nature of the activity and/or distance from the site, the likelihood that sources S3 or S4 have significantly impacted the site is considered de minimis and as such will not be considered further.

3.1.2 Potential Contaminants of Concern

Potential contaminants are listed based on the potential sources identified. The "key contaminants" are tabulated below and should be considered as part of the human health and environmental risk assessment.

Table 3.1.2; Contaminants of Concern								
Potentially	Source ID		Key Contaminants and Parameters to consider					
Impacted	S1 S2							
Media								
Soil	X		Metals (As, B, Be, Cd, Cr, Cu, Hg, Ni, Pb, Se, Zn, V)					
	X	X	Polycyclic Aromatic Hydrocarbons (speciated PAHs)					
Soil/Water		Х	Acids arising from the biological respiration of pyrite					
		^	within coal					
Soil/Water	Soil/Water X		Soluble metal sulphates e.g. magnesium sulphate					

3.1.3 Potential Pathways

Pathway identification is an essential element of the risk assessment process. Pathways represent the way a contaminant may move from a source area to impact a potential receptor. A pathway may involve a straightforward process, such as touching contaminated material (i.e. direct contact) or multiple complex stages involving physical state change, migration and physical processes. Conceptualising pathways can be important as remediation often involves pathway interference.

Based on the site setting presented in section 2, the potential source of contamination and the contaminants of potential concern, the following contaminative pathways are considered viable routes by which contaminants may impact human and environmental receptors:



The Coal Yard, Yoxford

Table 3.1.3; Potential Pathways				
Contaminated soil				
Ingestion of contaminated soil and dust (e.g. eating with dirty hands or biting fingernails)				
Ingestion of contaminated soil via eating homegrown vegetables				
Dermal absorption via contaminated soil on the skin (direct contact)				
Inhalation of contaminated dust				
Leaching and contaminated groundwater				
Ingestion of contaminated potable water via water supply pipes				
Ingestion of contaminated potable water via a source protection zone (SPZ)				
Surface run-off discharging into surface water bodies impacting aquatic environments				
Contaminated aquifer impacting aquatic environments				
Gas and Volatiles				
Inhalation of volatile compounds				
Explosion of volatile compounds				
Inhalation of hazardous permanent and trace gasses				
Explosion of flammable permanent gas (methane)				

3.1.4 Potential Receptors

The following receptors, shown in Table 3.1.4, have been identified as potentially sensitive to contamination:

Table 3.1.4; Potential Receptors	
Human Health Receptors	
Site occupants (commercial use), following construction.	Rh1
Neighbouring residents, during and following construction	Rh2
Temporary occupants and visitors, during and following construction.	Rh3
Groundworkers, during construction	Rh4
Potable water supply: Contaminated potable water (groundwater source protection zones)	Rh5
Environmental Receptors	
Aquatic Environments - Surface waters	Re1
Aquatic Environments - Aquifers	Re2
Flora and Fauna	Re3

The risk to temporary occupants and visitors to the site (Rh3) (e.g. trespassers) is difficult to precisely assess due to the short-term nature and unpredictable interaction with contamination sources. As a conservative assessment, visitors of the site are considered to be as susceptible as occupants.

The risk to groundworkers (Rh4) during construction has not been considered and should be addressed through separate health and safety risk assessment and management procedures.

Though phytotoxic contaminants (e.g. copper) may pose a risk to flora (Re3), no standards are known that specifically protect flora and fauna. For simplicity, flora and fauna receptors are assumed to be less sensitive than other receptors on the site (e.g. residents/employees).

3.2 Qualitative Risk Assessment

Qualitative risk assessment considers the likelihood and the consequence of a given source-pathway-receptor linkage being completed, in order to determine an overall risk category.

The assessment is adapted from the methodology set out in CIRIA 552 (<u>CIRIA, 2001</u>). The following definitions have been adopted:



Probability: The pr	obability of a source-pathway-receptor link being completed				
Unlikely	A source-pathway-receptor linkage is plausible; however, it is improbable that the linkage will be				
	completed within the design life of the development.				
Low Likelihood	It is less likely than likely that the source-pathway-receptor linkage will be completed within the				
	design life of the development.				
Likely	It is more likely than not that the source-pathway-receptor linkage will be completed within the				
	design life of the development.				
High Likelihood	The source-pathway-receptor linkage is either observed, very likely in the short term and almost				
	certain to occur within the design life of the development.				
Consequence: The	consequences if a source-pathway-receptor link were to be completed				
Less significant	Non-permanent human health effects.				
	Cosmetic damage to buildings, structures and services.				
	No or small financial loss/expenditure to resolve harm. Simple construction solutions may be				
	required to mitigate risk.				
	Environmental damage that is naturally reversible in the short term.				
Superficial	Superficial chronic human health effects				
	Easily repairable damage to buildings, structures and services.				
	Moderate financial loss or expenditure to resolve harm. Common engineering solutions may				
	be required to mitigate risk.				
	Environmental pollution that will not naturally recover in the short term.				
Serious	Chronic human health effects resulting in "significant" harm.				
	Substantial damage to buildings, structures and services.				
	High financial loss or expenditure to resolve harm. Complex engineering solutions may be				
	required to mitigate risk.				
	Environmental pollution that will not naturally recover even in the long term.				
Severe	Human health effects resulting in very serious harm, cancer or death.				
	Catastrophic damage to buildings, structures and services. Intensive and detailed study,				
	design and implementation of engineering solutions may be required.				
	Very high or unquantifiable financial loss or expenditure to resolve harm.				
	"Significant" environmental harm as defined by the Environmental Protection Act 1990.				
	Legal action, including fines and penalties, may be taken against responsible entities.				

Risk category defi	nitions
Low Risk	An S-P-R linkage is present: However, it is generally less likely to occur, and any consequence would be relatively mild.
	Breaking the S-P-R linkage might not be essential; however, doing so might be advantageous in reducing liability and commercial risk.
Moderate Risk	The probability of the linkage being completed may range from unlikely to highly likely while any consequences may be mild to severe.
	Further investigation is likely to be necessary in order to understand the risks better and determine whether mitigation measures are required.
High Risk	The probability of the S-P-R linkage being completed is more likely than not while the consequence may be significant.
	Mitigation measures will most likely be required to reduce or remove the risk. Further investigation and risk assessment will aid in determining the best course of action.
Very High Risk	There is a high likelihood that the S-P-R linkage has been or will be completed and that severe harm may result.
	Mitigation measures will almost certainly be needed to reduce or remove the risk. Further investigation and risk assessment will aid in determining the best course of action.

The definitions above are used within the following risk matrix to apply a risk category to each source-pathway-receptor linkage.

TIER 1: PRELIMINARY RISK ASSESSMENT G0169

The Coal Yard, Yoxford

	Consequence				
Probability	Less significant	Superficial	Serious	Severe	
Unlikely	Low risk	Low risk	Moderate risk	Moderate risk	
Low Likelihood	Low risk	Moderate risk	Moderate risk	Moderate risk	
Likely	Moderate risk	Moderate risk	High risk	High risk	
High Likelihood	Moderate risk	Moderate risk	High risk	Very high risk	

The risk posed to the identified sensitive receptors from potential sources of contamination is qualitatively assessed in Table 3.2 below. Qualitative risk assessment is by its nature, subjective, and as such, it is possible to argue a range of potential consequences and resultant risk categories. The assessment is completed based on our professional judgment and aims to provide a pragmatic assessment of realistic scenarios rather than assuming best or worse case forecasting.



TIER 1: PRELIMINARY RISK ASSESSMENT G0169 The Coal Yard, Yoxford

Table 3.2; Source-Pathway-Receptor qualitative risk assessment								
Impacted Media	Source ID	Pathways	S-P-R Inhibitor	Receptor	Probability	Consequence	Risk Category	
		Ingestion of contaminated soil and dust	Commercial landuse. Footprint of the building and hardstanding to provide a barrier to the S-P-R linkage.	Occupants (Rh1)	Low Likelihood	Superficial	Low risk	
Contaminated soil		Dermal absorption via contaminated soil		Occupants (Rh1)	Low Likelihood	Superficial	Low risk	
SOII		Inhalation of contaminated dust		Occupants (Rh1) Neighbours (Rh2)	Low Likelihood	Superficial	Low risk	
	S1, S2	Ingestion of contaminated potable water via water supply pipes	Commercial landuse	Occupants (Rh1)	Low Likelihood	Superficial	Low risk	
Leaching and contaminated groundwater		Surface run-off discharging into surface water bodies	Loose coal removed circa 1999	Aquatic environments (Re1)	Low Likelihood	Superficial	Low risk	
		Contaminated aquifer impacting aquatic environments		Aquatic environments (Re1)	Low Likelihood	Superficial	Low risk	

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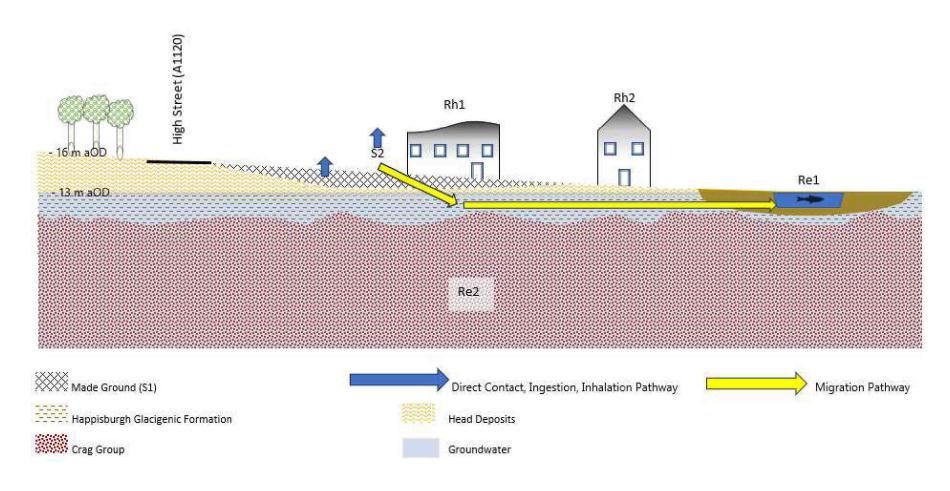
3.3 Conceptual Site Model: Schematic Cross-Section

The following figure aims to illustrate the site in cross-section and demonstrate the most significant source-pathway-receptor linkages, should the site be developed in its current state (without specific remediation or engineered mitigation)



Figure 3.3; Schematic Cross-Section

Off-site On-site	Off-site
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4 Conclusions and Recommendations

Four potential sources of contamination have been identified; general made ground (S1), historical coal yard (S2), pumping Station (S3) and a pump (S4).

By the nature of the activity and/or distance from the site, the likelihood that sources S3 or S4 have significantly impacted the site is considered de minimis.

The composition of made ground (S1) is unknown, by definition. However, given the age and likely construction of the demolished buildings, it is unlikely that significant concentrations of contamination are present that may pose a significant risk to sensitive receptors.

The site has historically been used as a coal yard with loose coal stored on site until around 1999. After that time, bagged coal was stored and sold from neighbouring land to the north of the site, owned by the client and their family.

Contaminants identified as being associated with coal include PAHs, soluble metal sulphates and acidification resulting from the biological breakdown of pyrite within the coal.

Given that loose coal has not been stored on the site since around 1999, the quantity of coal on site is considered to be minimal. Following redevelopment, any such material will be covered by the building footprint or hardstanding. The existing and proposed hard standing will act to interrupt the source pathway receptor linkage. As such, the risk to future employees following development for commercial use, is considered to be very low.

Acidification via the biological breakdown of pyrite within coal has the potential to acidify any aquifer/surface water such as the River Yox. However, given the fact that coal is no longer stored loose on site and has not been since around 1999, any such breakdown and resultant acidification will long have ceased. The risk to the aquifer/surface water is considered to be very low.

Similarly, any leaching of soluble metal sulphates will have ceased since the loose coal stopped being stored on site in bulk. Again, the risk to the aquifer/surface water is considered to be very low.

Based on the risk assessment completed in Table 3.2, all the potential source-pathway-receptor linkages are assessed as presenting a **low risk** to potential receptors.

As such, no significant risk is considered likely to impact future users from contaminated soils and no further action is considered necessary.

5 Limitations and Closing Statement

Unless otherwise stated, a radius of approximately 250m has been adopted as the physical limit of this environmental investigation. Sources of contamination dating from before the earliest source of information (historical mapping dating from 1884) have not been assessed. No comment is made as to the impact on the site from activities outside of the physical limit (surrounding area) or from sources predating the earliest available information.

This report is prepared for the sole use of the client, as stated above, in accordance with the scope agreed under separate cover. No responsibility or liability is accepted for the use of this report either in whole or in part by third parties. Written authorisation of reliance can be provided under separate cover upon request.

The conclusions presented herein are based on information gathered from multiple sources including but not limited to the client and their representatives, in-house and existing knowledge, third parties (including historical mapping, databased information and public and private online sources) and site visits. Though an effort has been made to use reputable sources and checks made on the validity of



information, the information used in this assessment is assumed to be accurate. In the event that the information used is inaccurate or misrepresented, we accept no responsibility for erroneous assessment. Should new information come to light that contradicts or enhances this assessment, we welcome the opportunity to complete a reassessment, to the satisfaction of all parties.

This report assumes the competency of the readership and is intended to facilitate sufficiently experienced and competent individuals and organisations to apply best practice within their professional field of expertise. It is not intended to act as a replacement for experience and competence. We are happy to revise any aspect of this report following discussion with appropriately experienced and competent specialists.

GACC assumes the readership understands and accepts the limitations of the scope of this investigation, including those imposed by time and budgetary considerations that may materially affect the methodology, conclusions and recommendations.

We trust the findings of this investigation meet the requirements of the project objectives, set out above, to be used in isolation or combination with other such reports to address any outstanding requirements of the project described herein.

For Geotechnical and Contamination Consulting



Philip Price, B.Sc. FGS, RSoBRA



The Coal Yard, Yoxford

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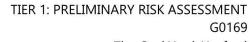
Environment Agency. (2019). Land contamination: risk management. (LCRM)



Abbreviations

ACM	Asbestos Containing Material
aOD	above Ordnance Datum
API	American Petroleum Institute
As	Arsenic
AST	Above Ground Storage Tank
В	Boron
Be	Beryllium
bgl	below ground level
BGS	British Geological Survey
BTEX	Benzene, Toluene, Ethylbenzene &
DIEX	Xylenes
Cd	Cadmium
CH4	Methane
CO	Carbon Monoxide
CO2	Carbon Dioxide
Cr	Chromium
CSM	Conceptual Site Model
Cu	Copper
CWG	Criteria Working Group
DCE	Dichloroethane
DNAPL	Dense non-aqueous phase liquid
DWS	Drinking Water Standards
Е	East
EA	Environment Agency
ESA	Environmental Site Assessment
EQS	Environmental Quality Standards
GI	Ground Investigation
H	Hydrogen
H2S	Hydrogen sulphide
Hg	Mercury
LNAPL	Light non-aqueous phase liquid
m	Metres
m/sec	metres per second
mb	millibar
MTBE	Methyl tert-butyl ether
N	North
N2	Nitrogen
NE	northeast
Ni	Nickle
NW	northwest
O2	Oxygen
OS	ordnance survey
PAH	Polycyclic aromatic hydrocarbons
Pb	Lead
PCB	Polychlorinated biphenyls
PCE	Perchloroethylene
PFHxS	Perfluorohexane Sulfonate
PFOA	Perfluorooctanesulfonic acid
PFOS	Perfluorooctanesulfonate
PID	Photo Ionisation Detector
PSC	Potential Sources of Contamination
PRA	Preliminary Risk Assessment
111/7	Fremminary Nisk Assessment

.	D. Lee
Rn	Radon
S	south
SE	southeast
Se	Selenium
SOM	Soil organic matter
TIC	Tentatively Identified Compounds
TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbon
TPOs	Tree Protection Order
US EPA	United States
	Environmental Protection Agency
UST	Underground Storage Tank
٧	Vanadium
VOA	Volatile organic analysis
VOC	Volatile organic compounds
W	west
Zn	Zinc





The Coal Yard, Yoxford

Appendices

Drawings

Site Location Plan
Development Plan – Existing Layout
Development Plan – Proposed Development Plan
Site Reconnaissance Walkover and Photographs
Databased Information
Groundsure Enviro+Geo Insight
Historical Maps
Historical Ordnance Survey Maps

G0169-DR01 G0169-DR02 G0169-DR03



Drawings

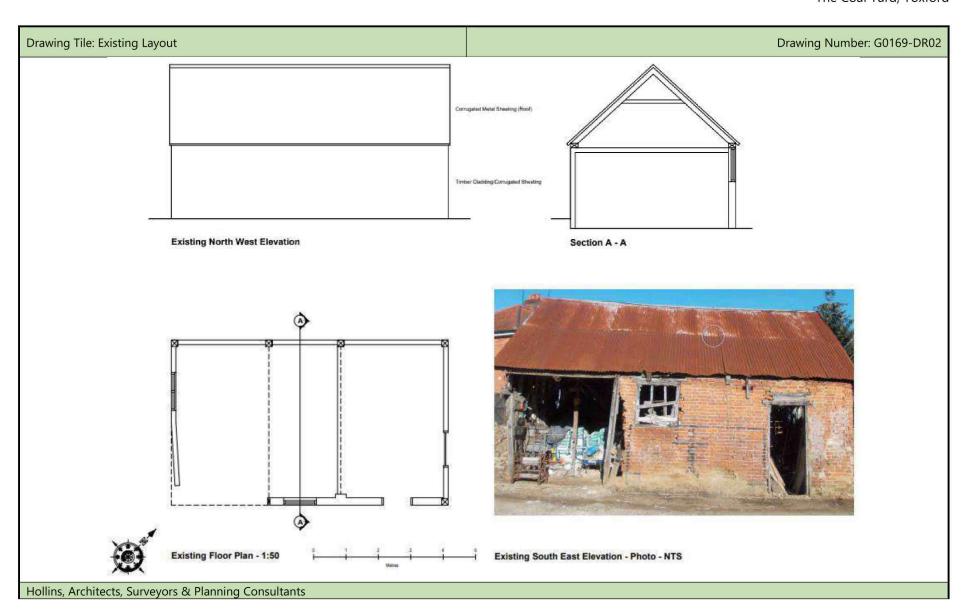


TIER 1: PRELIMINARY RISK ASSESSMENT G0169 The Coal Yard, Yoxford

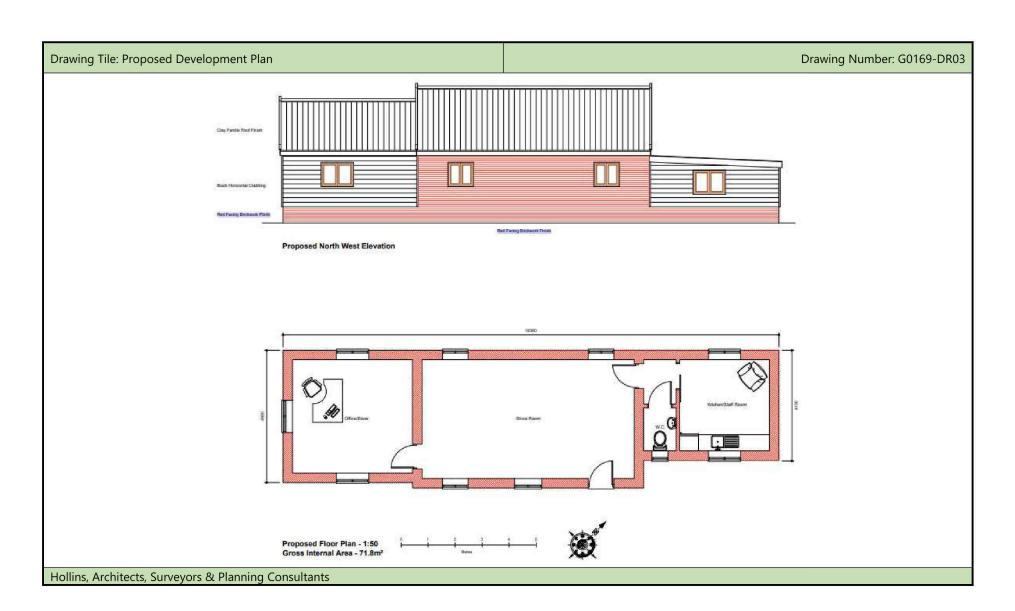




TIER 1: PRELIMINARY RISK ASSESSMENT G0169 The Coal Yard, Yoxford



TIER 1: PRELIMINARY RISK ASSESSMENT G0169 The Coal Yard, Yoxford





Site Reconnaissance Walkover and Photographs







Photo 1 – Facing northeast towards the site.



Photo 2 – Southeast elevation of the barn.







Photo 3 – Southeastern and northeastern elevation of the barn.



Photo 4 – Inside the main room in the barn showing wood and bagged cut firewood.



Photo 5 – Reclaimed brick and block stored outside the southwest elevation of the barn.



Photo 6 – Reclaimed clay roof tiles stored behind the northwest elevation of the barn.





Photo 7 – Dry storage inside the green storage container.



Photo 8 – Dry storage inside the blue storage container.



Databased Information



Enviro+Geo

639225, 269383,

Order Details

Date: 23/01/2024

Your ref: G0169

Our Ref: GS-RGC-1EZ-VAJ-FW4

Site Details

Location: 639225 269380

Area: 0.06 ha

Authority: East Suffolk Council ↗



Summary of findings

p. 2 > Aerial image

p.9 >

OS MasterMap site plan

p.14 > groundsure.com/insightuserguide ↗





Ref: GS-RGC-1EZ-VAJ-FW4 Your ref: G0169

Grid ref: 639225 269380

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
<u>15</u> >	<u>1.1</u> >	<u>Historical industrial land uses</u> >	0	0	0	18	-
16	1.2	Historical tanks	0	0	0	0	Ξ
<u>17</u> >	<u>1.3</u> >	<u>Historical energy features</u> >	0	0	0	1	~
17	1.4	Historical petrol stations	0	0	0	0	Ψ,
17	1.5	Historical garages	0	0	0	0	-
18	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
<u>19</u> >	<u>2.1</u> >	<u>Historical industrial land uses</u> >	0	0	0	25	Ē
20	2.2	Historical tanks	0	0	0	0	~
<u>21</u> >	<u>2.3</u> >	<u>Historical energy features</u> >	0	0	0	1	*
21	2.4	Historical petrol stations	0	0	0	0	~
21	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
J							
22	3.1	Active or recent landfill	0	0	0	0	=
			0	0	0	0	-
22	3.1	Active or recent landfill					-
22	3.1	Active or recent landfill Historical landfill (BGS records)	0	0	0	0	-
22 22 23	3.1 3.2 3.3	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records)	0	0	0	0	-
22 22 23 23	3.1 3.2 3.3 3.4	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records)	0	0 0	0	0 0	-
22 22 23 23 23	3.1 3.2 3.3 3.4 3.5	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites	0 0 0	0 0 0	0 0 0	0 0 0	-
22 22 23 23 23 23	3.1 3.2 3.3 3.4 3.5 3.6	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	- - - - - 500-2000m
22 22 23 23 23 23 23 >	3.1 3.2 3.3 3.4 3.5 3.6 3.7 >	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions >	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0	0 0 0 0	-
22 22 23 23 23 23 23 Page	3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use >	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	-
22 22 23 23 23 23 23 > Page	3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section 4.1 >	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use > Recent industrial land uses >	0 0 0 0 0 0 On site	0 0 0 0 0 0 0-50m	0 0 0 0 0 50-250m	0 0 0 0 2 250-500m	-
22 22 23 23 23 23 23 > Page 25 > 26	3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section 4.1 > 4.2	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use > Recent industrial land uses > Current or recent petrol stations	0 0 0 0 0 On site	0 0 0 0 0 0 0-50m	0 0 0 0 0 50-250m	0 0 0 0 2 250-500m	-

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Contact us with any questions at:



Ref: GS-RGC-1EZ-VAJ-FW4

Your ref: G0169 Grid ref: 639225 269380

<u>40</u> >	<u>6.1</u> >	Water Network (OS MasterMap) >	0	1	7	~	-
Page	Section	<u>Hydrology</u> >	On site	0-50m	50-250m	250-500m	500-2000m
39	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	+
39	5.9	Source Protection Zones	0	0	0	0	*
38	5.8	Potable abstractions	0	0	0	0	0
<u>38</u> >	<u>5.7</u> >	<u>Surface water abstractions</u> >	0	0	0	0	1
<u>36</u> >	<u>5.6</u> >	Groundwater abstractions >	0	0	0	0	6
35	5.5	Groundwater vulnerability- local information	None (with	in 0m)			
35	5.4	Groundwater vulnerability- soluble rock risk	None (with	in 0m)			
<u>34</u> >	<u>5.3</u> >	<u>Groundwater vulnerability</u> >	Identified (within 50m)			
<u>33</u> >	<u>5.2</u> >	Bedrock aquifer >	Identified (within 500m)		
<u>31</u> >	<u>5.1</u> >	Superficial aquifer >	Identified (within 500m)		
Page	Section	<u>Hydrogeology</u> >	On site	0-50m	50-250m	250-500m	500-2000m
30	4.21	Pollution inventory radioactive waste	0	0	0	0	-
29	4.20	Pollution inventory waste transfers	0	0	0	0	-
29	4.19	Pollution inventory substances	0	0	0	0	#:
29	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
29	4.17	List 2 Dangerous Substances	0	0	0	0	=
29	4.16	List 1 Dangerous Substances	0	0	0	0	~
28	4.15	Pollutant release to public sewer	0	0	0	0	_
28	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
<u>28</u> >	4.13 >	Licensed Discharges to controlled waters >	0	0	0	1	-
28	4.12	Radioactive Substance Authorisations	0	0	0	0	=
27	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	_
27	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	
27	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
27 27	4.7 4.8	Regulated explosive sites Hazardous substance storage/usage	0	0	0	0	-
26	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	~
	21727						





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Grid ref: 639225 269380

<u>41</u> >	<u>6.2</u> >	<u>Surface water features</u> >	0	1	3	~	~
<u>41</u> >	<u>6.3</u> >	WFD Surface water body catchments >	1	ec.	=	-	~
<u>42</u> >	<u>6.4</u> >	WFD Surface water bodies >	0	1	0	=	F
<u>42</u> >	<u>6.5</u> >	WFD Groundwater bodies >	1	-		-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
<u>43</u> >	<u>7.1</u> >	Risk of flooding from rivers and the sea >	High (withi	n 50m)			
44	7.2	Historical Flood Events	0	0	0	-	=
44	7.3	Flood Defences	0	0	0	-	~
44	7.4	Areas Benefiting from Flood Defences	0	0	0	×	*
44	7.5	Flood Storage Areas	0	0	0	-	-
<u>45</u> >	<u>7.6</u> >	Flood Zone 2 >	Identified (within 50m)			
<u>46</u> >	<u>7.7</u> >	Flood Zone 3 >	Identified (within 50m)			
Page	Section	Surface water flooding >					
<u>47</u> >	<u>8.1</u> >	Surface water flooding >	1 in 30 yea	r, 0.3m - 1.0r	n (within 50	m)	
Page	Section	Groundwater flooding >					
Page 49 >	Section 9.1 >	Groundwater flooding > Groundwater flooding >	Low (within	n 50m)			
			Low (within	n 50m) 0-50m	50-250m	250-500m	500-2000m
<u>49</u> >	<u>9.1</u> >	Groundwater flooding >			50-250m	25 0-500m	500-2000m
<u>49</u> >	<u>9.1</u> >	Groundwater flooding > Environmental designations >	On site	0-50m			
49 > Page	9.1 > Section 10.1	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI)	On site	0-50m	0	0	0
49 > Page 50	9.1 > Section 10.1 10.2	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites)	On site 0	0-50m 0	0	0	0
49 > Page 50 51	9.1 > Section 10.1 10.2 10.3	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC)	On site 0 0 0	0-50m 0 0	0 0	0 0	0 0
49 > Page 50 51 51	9.1 > Section 10.1 10.2 10.3 10.4	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA)	On site 0 0 0 0	0-50m 0 0	0 0 0	0 0 0	0 0 0
49 > Page 50 51 51 51	9.1 > Section 10.1 10.2 10.3 10.4 10.5	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR)	On site 0 0 0 0 0	0-50m 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
49 > Page 50 51 51 51 51 52	9.1 > Section 10.1 10.2 10.3 10.4 10.5 10.6	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR)	On site 0 0 0 0 0 0	0-50m 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0
49 > Page 50 51 51 51 52 52 >	9.1 > Section 10.1 10.2 10.3 10.4 10.5 10.6 10.7 >	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Designated Ancient Woodland >	On site 0 0 0 0 0 0 0 0	0-50m 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0
49 > Page 50 51 51 51 52 52 > 52	9.1 > Section 10.1 10.2 10.3 10.4 10.5 10.6 10.7 >	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Designated Ancient Woodland > Biosphere Reserves	On site 0 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 4
49 > Page 50 51 51 51 52 52 > 52 53	9.1 > Section 10.1 10.2 10.3 10.4 10.5 10.6 10.7 > 10.8 10.9	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Designated Ancient Woodland > Biosphere Reserves Forest Parks	On site 0 0 0 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 4
49 > Page 50 51 51 51 52 52 > 52 53 53	9.1 > Section 10.1 10.2 10.3 10.4 10.5 10.6 10.7 > 10.8 10.9 10.10	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Designated Ancient Woodland > Biosphere Reserves Forest Parks Marine Conservation Zones	On site 0 0 0 0 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 4 0





Ref: GS-RGC-1EZ-VAJ-FW4

Your ref: G0169 Grid ref: 639225 269380

			_	-			
53	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
54	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
54	10.15	Nitrate Sensitive Areas	0	0	0	0	0
<u>54</u> >	<u>10.16</u> >	Nitrate Vulnerable Zones >	2	0	0	0	3
<u>55</u> >	<u>10.17</u> >	SSSI Impact Risk Zones >	1	*	=	ë	ë
56	10.18	SSSI Units	0	0	0	0	0
Page	Section	<u>Visual and cultural designations</u> >	On site	0-50m	50-250m	250-500m	500-2000m
57	11.1	World Heritage Sites	0	0	0	~	~
58	11.2	Area of Outstanding Natural Beauty	0	0	0	=	*
58	11.3	National Parks	0	0	0	-	-
<u>58</u> >	<u>11.4</u> >	<u>Listed Buildings</u> >	0	1	7	Ψ.	#.
<u>59</u> >	<u>11.5</u> >	Conservation Areas >	1	0	0	~	-
59	11.6	Scheduled Ancient Monuments	0	0	0	-	-
60	11.7	Registered Parks and Gardens	0	0	0	_	~
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>61</u> >	<u>12.1</u> >	Agricultural Land Classification >	Grade 2 (w	ithin 250m)			
62	12.2	Open Access Land	0	0	0	*	*
<u>62</u> >	<u>12.3</u> >	<u>Tree Felling Licences</u> >	0	0	1	-	-
<u>62</u> >	<u>12.4</u> >	Environmental Stewardship Schemes >	0	1	0	=	E
<u>63</u> >	<u>12.5</u> >	Countryside Stewardship Schemes >	0	1	1	~	~
Page	Section	<u>Habitat designations</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>64</u> >	<u>13.1</u> >	Priority Habitat Inventory >	0	1	5	-	-
65	13.2	Habitat Networks	0	0	0	=	#
65	13.3	Open Mosaic Habitat	0	0	0	~	~
65	13.4	Limestone Pavement Orders	0	0	0	=	-
Page	Section	<u>Geology 1:10,000 scale</u> >	On site	0-50m	50-250m	250-500m	500-2000m
66 >		401 4 11 11111	[a] a a : £: a a] /:	within 500m	1		
<u>66</u> >	<u>14.1</u> >	10k Availability >	identified (WILIIIII 300III	1		
67	<u>14.1</u> >	Artificial and made ground (10k)	0	0	0	0	-
						0	



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Grid ref: 639225 269380

68	14.4	Landslip (10k)	0	0	0	0	_
69	14.5	Bedrock geology (10k)	0	0	0	0	æ
69	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	<u>Geology 1:50,000 scale</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>70</u> >	<u>15.1</u> >	50k Availability >	Identified (within 500m)		
71	15.2	Artificial and made ground (50k)	0	0	0	0	-
71	15.3	Artificial ground permeability (50k)	0	0	-	-	-
<u>72</u> >	<u>15.4</u> >	Superficial geology (50k) >	2	0	5	3	~
<u>73</u> >	<u>15.5</u> >	Superficial permeability (50k) >	Identified (within 50m)			
73	15.6	Landslip (50k)	0	0	0	0	~
74	15.7	Landslip permeability (50k)	None (with	in 50m)			
<u>75</u> >	<u>15.8</u> >	Bedrock geology (50k) >	1	0	0	0	~
<u>76</u> >	<u>15.9</u> >	Bedrock permeability (50k) >	Identified (within 50m)			
76	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
77	16.1	BGS Boreholes	0	0	0	~	-
Page	Section	Natural ground subsidence >					
<u>78</u> >	<u>17.1</u> >	Shrink swell clays >	Very low (w	vithin 50m)			
<u>79</u> >	<u>17.2</u> >	Running sands >	Low (withir	1 50m)			
<u>81</u> >	<u>17.3</u> >	Compressible deposits >	Moderate (within 50m)			
<u>83</u> >	<u>17.4</u> >	Collapsible deposits >	Very low (w	vithin 50m)			
<u>84</u> >	<u>17.5</u> >	<u>Landslides</u> >	Very low (w	vithin 50m)			
<u>85</u> >	<u>17.6</u> >	Ground dissolution of soluble rocks >	Negligible (within 50m)			
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
<u>87</u> >	<u>18.1</u> >	BritPits >	0	0	0	4	_
88	18.2	Surface ground workings	0	0	0	~	-
89	18.3	Underground workings	0	0	0	0	0
89	18.4	Underground mining extents	0	0	0	0	~
89	18.5	Historical Mineral Planning Areas	0	0	0	0	9





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Grid ref: 639225 269380

89	18.6	Non-coal mining	0	0	0	0	0
89	18.7	JPB mining areas	None (within 0m)				
90	18.8	The Coal Authority non-coal mining	0	0	0	0	Ξ
90	18.9	Researched mining	0	0	0	0	-
90	18.10	Mining record office plans	0	0	0	0	ë.
90	18.11	BGS mine plans	0	0	0	0	~
91	18.12	Coal mining	None (with	in 0m)			
91	18.13	Brine areas	None (with	in 0m)			
91	18.14	Gypsum areas	None (with	in 0m)			
91	18.15	Tin mining	None (with	in 0m)			
91	18.16	Clay mining	None (with	in 0m)			
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
92	19.1	Natural cavities	0	0	0	0	Æ
92	19.2	Mining cavities	0	0	0	0	0
92	19.3	Reported recent incidents	0	0	0	0	=
92	19.4	Historical incidents	0	0	0	0	-
93	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
<u>94</u> >	<u>20.1</u> >	Radon >	Less than 1	% (within Or	n)		
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
<u>96</u> >	<u>21.1</u> >	BGS Estimated Background Soil Chemistry >	2	1	-	=	=
96	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
96	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
97	22.1	Underground railways (London)	0	0	0	-	-
97	22.2	Underground railways (Non-London)	0	0	0	-	-
97	22.3	Railway tunnels	0	0	0	=	-
97	22.4	Historical railway and tunnel features	0	0	0	-	~
97	22.5	Royal Mail tunnels	0	0	0	£	4.







Ref: GS-RGC-1EZ-VAJ-FW4

Your ref: G0169 Grid ref: 639225 269380

98	22.6	Historical railways	0	0	0	-	-
98	22.7	Railways	0	0	0	~	~
98	22.8	Crossrail 1	0	0	0	0	¥
98	22.9	Crossrail 2	0	0	0	0	~
98	22.10	HS2	0	0	0	0	-





Recent aerial photograph

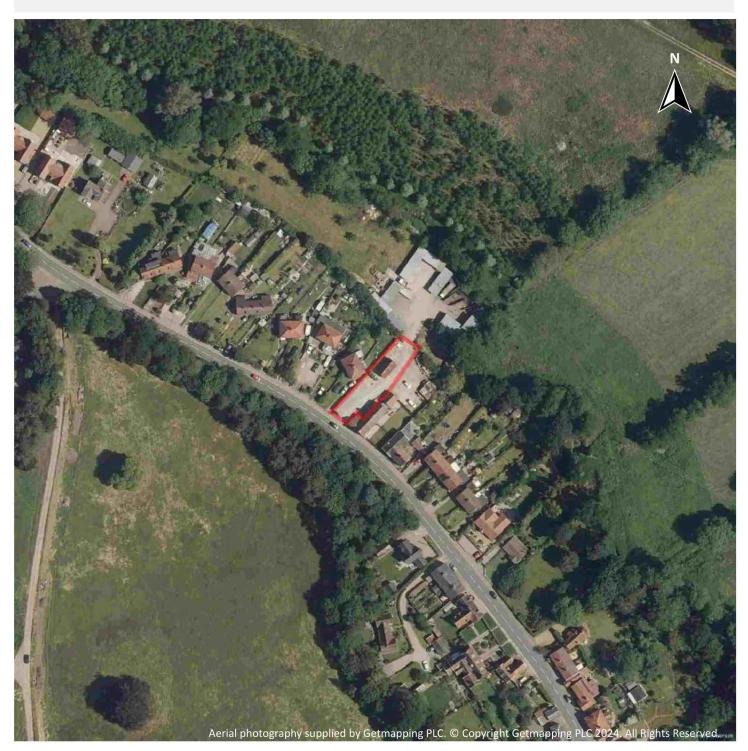


Capture Date: 02/06/2021





Recent site history - 2019 aerial photograph

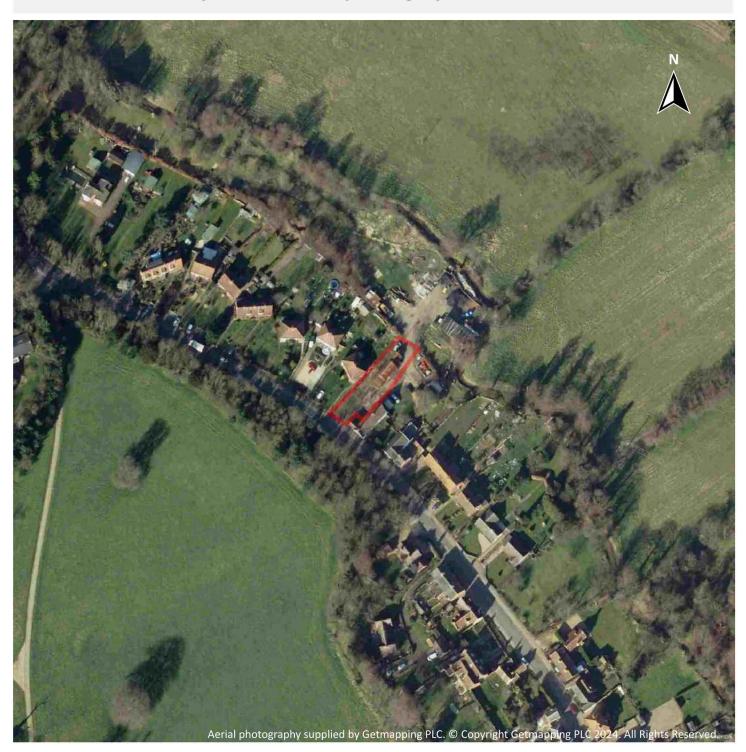


Capture Date: 04/07/2019





Recent site history - 2007 aerial photograph



Capture Date: 12/03/2007





Recent site history - 2000 aerial photograph



Capture Date: 08/06/2000





Recent site history - 1999 aerial photograph

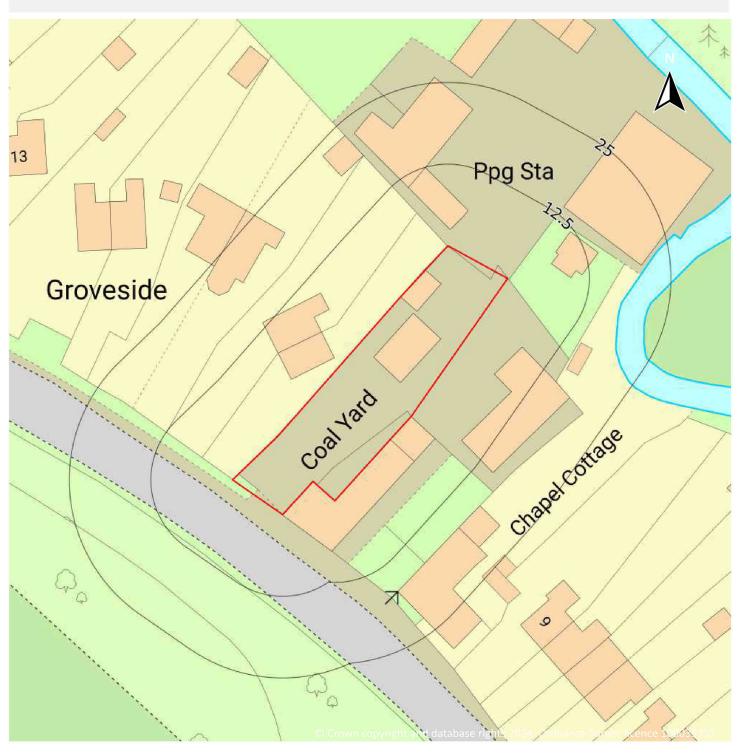


Capture Date: 19/06/1999





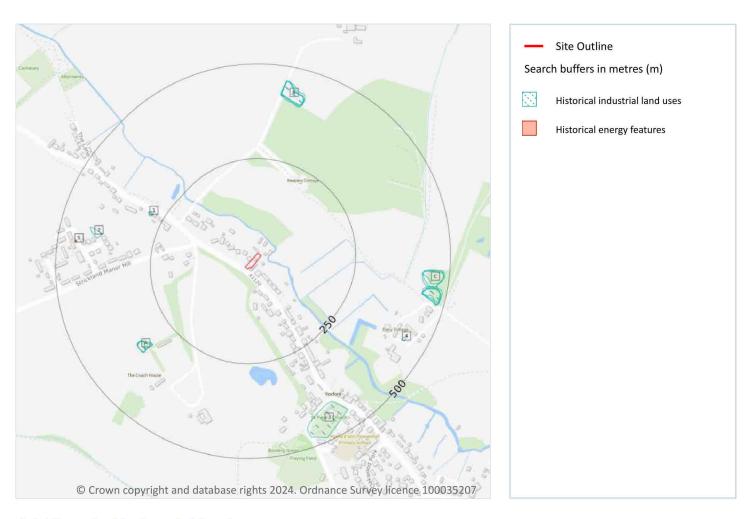
OS MasterMap site plan







1 Past land use



1.1 Historical industrial land uses

Records within 500m 18

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	278m NW	Unspecified Tank	1883	2319478





ID	Location	Land use	Dates present	Group ID
А	318m SW	Unspecified Pit	1952 - 1957	2335357
А	320m SW	Unspecified Pit	1905	2332107
Α	331m SW	Unspecified Pit	1946	2342909
2	386m W	Old Gravel Pit	1883	2317368
В	400m N	Sand Pit	1952 - 1957	2342042
В	402m N	Sand Pit	1905	2339813
В	404m N	Sand Pit	1883	2342606
В	407m N	Sand Pit	1946	2330218
3	410m SE	Grave Yard	1883	2317688
С	428m E	Sand Pit	1952 - 1957	2327643
С	429m E	Sand Pit	1905 - 1946	2326350
С	430m E	Sand Pit	1883	2345080
4	432m SE	Unspecified Tank	1905	2319477
С	436m E	Unspecified Pit	1946	2331943
С	436m E	Unspecified Ground Workings	1952 - 1957	2333940
С	437m E	Unspecified Pit	1905	2338625
С	437m E	Unspecified Pit	1883	2335096

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

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

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

ID	Location	Land use	Dates present	Group ID
5	449m W	Electricity Substation	1989	296320

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m 0

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

This data is sourced from Ordnance Survey / Groundsure.

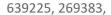
1.5 Historical garages

Records within 500m 0

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

This data is sourced from Ordnance Survey / Groundsure.







1.6 Historical military land

Records within 500m 0

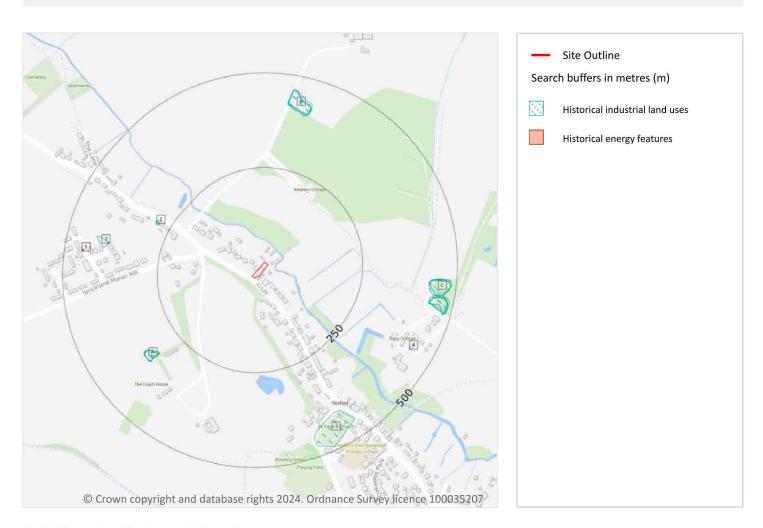
Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

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





2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m 25

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 19 >

ID	Location	Land Use	Date	Group ID
1	278m NW	Unspecified Tank	1883	2319478
А	318m SW	Unspecified Pit	1952	2335357
А	318m SW	Unspecified Pit	1957	2335357





ID	Location	Land Use	Date	Group ID
A	320m SW	Unspecified Pit	1905	2332107
Α	320m SW	Unspecified Pit	1905	2332107
Α	331m SW	Unspecified Pit	1946	2342909
2	386m W	Old Gravel Pit	1883	2317368
В	400m N	Sand Pit	1952	2342042
В	400m N	Sand Pit	1957	2342042
В	402m N	Sand Pit	1905	2339813
В	404m N	Sand Pit	1883	2342606
В	407m N	Sand Pit	1946	2330218
3	410m SE	Grave Yard	1883	2317688
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С	428m E	Sand Pit	1957	2327643
С	429m E	Sand Pit	1905	2326350
С	430m E	Sand Pit	1883	2345080
С	430m E	Sand Pit	1946	2326350
4	432m SE	Unspecified Tank	1905	2319477
С	436m E	Unspecified Pit	1946	2331943
С	436m E	Unspecified Ground Workings	1952	2333940
С	436m E	Unspecified Ground Workings	1957	2333940
С	437m E	Unspecified Pit	1905	2338625
С	437m E	Unspecified Pit	1905	2338625
С	437m E	Unspecified Pit	1883	2335096

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

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 1

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

Features are displayed on the Past land use - un-grouped map on page 19 >

ID	Location	Land Use	Date	Group ID
5	449m W	Electricity Substation	1989	296320

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m 0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m 0

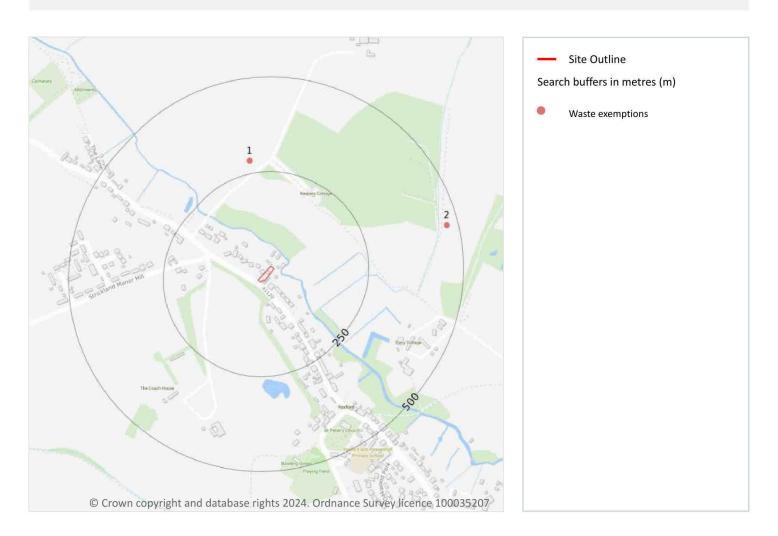
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.





3 Waste and landfill



3.1 Active or recent landfill

Records within 500m 0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

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.





Ref: GS-RGC-1EZ-VAJ-FW4 Your ref: G0169

Grid ref: 639225 269380

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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

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

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

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

3.6 Licensed waste sites

Records within 500m 0

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

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

3.7 Waste exemptions

Records within 500m 2

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

Features are displayed on the Waste and landfill map on page 22 >

ID	Location	Site	Reference	Category	Sub-Category	Description
1	284m N	-	WEX318033	Storing waste exemption	On a farm	Storage of sludge

info@groundsure.com 7

01273 257 755



Contact us with any questions at: Date: 23 January 2024





Ref: GS-RGC-1EZ-VAJ-FW4 **Your ref**: G0169

Grid ref: 639225 269380

ID	Location	Site	Reference	Category	Sub-Category	Description
2	469m E	-	WEX318028	Storing waste exemption	On a farm	Storage of sludge

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





4 Current industrial land use





4.1 Recent industrial land uses

Records within 250m 3

Current potentially contaminative industrial sites.

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

ID	Location	Company	Address	Activity	Category
1	3m S	T M Morphey	Coal Yard, High Street, Yoxford, Suffolk, IP17 3HP	Fuel Distributors and Suppliers	Household, Office, Leisure and Garden
2	10m NE	Pumping Station	Suffolk, IP17	Water Pumping Stations	Industrial Features
3	165m S	Pump	Suffolk, IP17	Water Pumping Stations	Industrial Features



Contact us with any questions at: Date: 23 January 2024



This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m 0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m 0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m 0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m 0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m 0

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

This data is sourced from the Health and Safety Executive.





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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

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 1

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

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

ID	Location	Address	Details	
4	417m SW	14 ADDITIONAL HOUSES AT YOXFORD, YOXFORD, SAXMUNDHAM, IP17 3HX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW4NF72X Permit Version: 1 Receiving Water: River Yox	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 11/05/1956 Effective Date: 11/05/1956 Revocation Date: 14/10/1992

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.





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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

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m 0

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

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

4.19 Pollution inventory substances

Records within 500m 0

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

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

4.20 Pollution inventory waste transfers

Records within 500m 0

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

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





4.21 Pollution inventory radioactive waste

Records within 500m 0

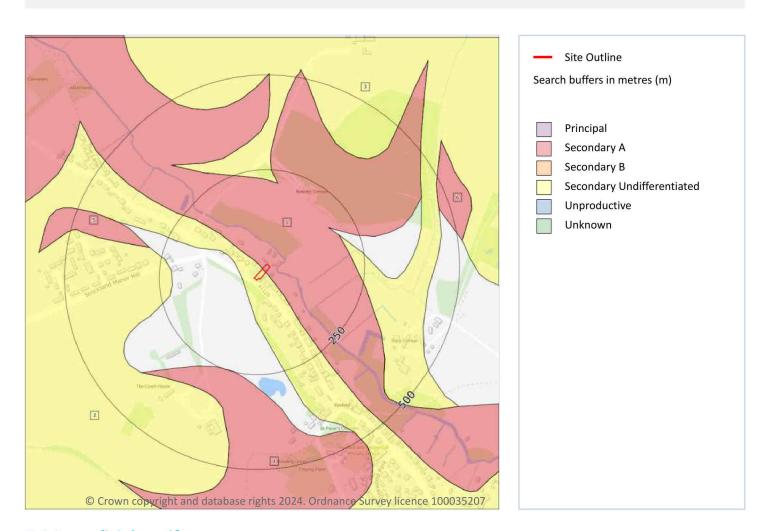
The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

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





5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m 6

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 31 >

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	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





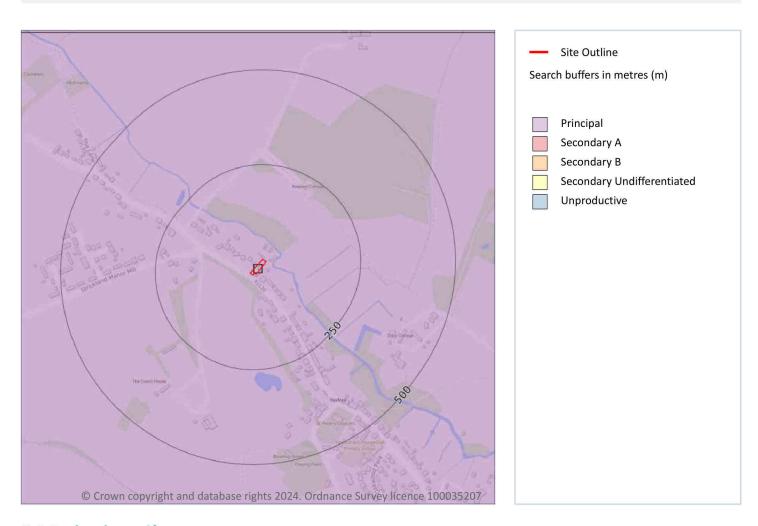
ID	Location	Designation	Description
3	200m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	249m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	287m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
6	471m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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





Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m 1

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on page 33 >

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

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

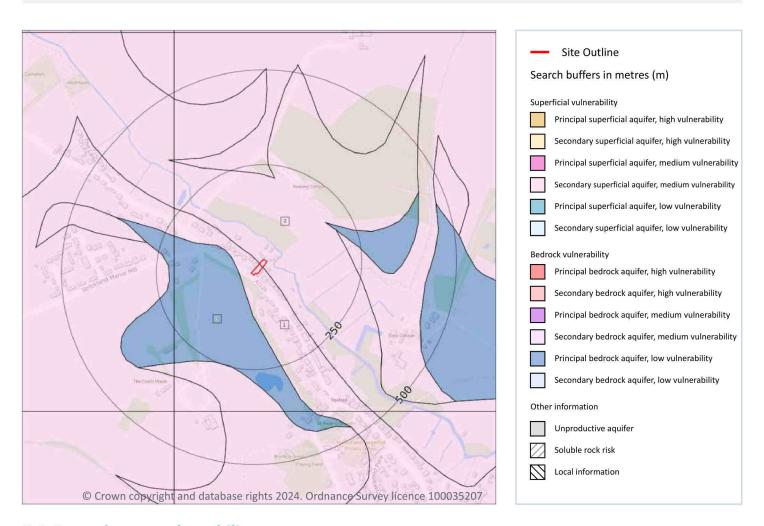




Ref: GS-RGC-1EZ-VAJ-FW4 **Your ref**: G0169

Grid ref: 639225 269380

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m 3

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

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

Features are displayed on the Groundwater vulnerability map on page 34 >





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Principal Flow mechanism: Intergranular
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Principal Flow mechanism: Intergranular
3	30m SW	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification:	Leaching class: Intermediate Infiltration value: 40- 70%	Vulnerability: - Aquifer type: - Thickness: >10m Patchiness value: >90%	Vulnerability: Low Aquifer type: Principal Flow mechanism:

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site 0

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

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

5.5 Groundwater vulnerability- local information

Records on site 0

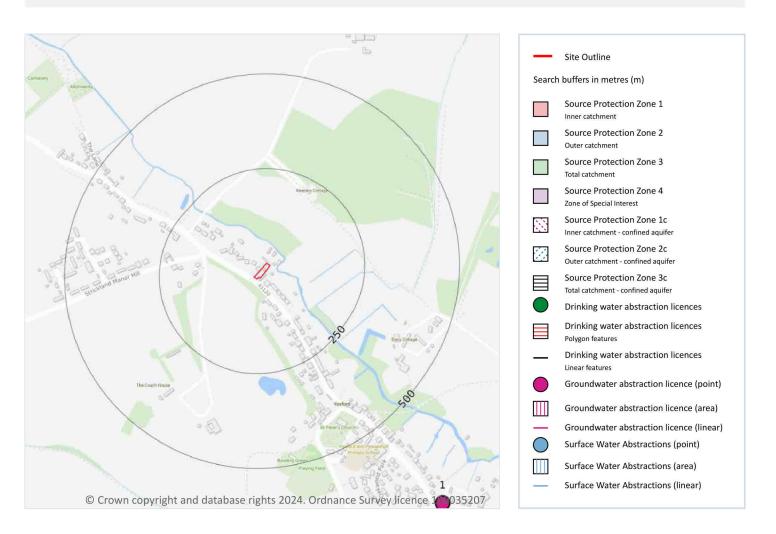
This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506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

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





Abstractions and Source Protection Zones



5.6 Groundwater abstractions

Records within 2000m 6

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 36 >





ID	Location	Details	
1	763m SE	Status: Historical Licence No: 7/35/03/*G/0032 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT THE LIMES,YOXFORD Data Type: Point Name: WRAGG Easting: 639700 Northing: 268770	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -
-	1347m SW	Status: Historical Licence No: 7/35/03/*G/0023 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT WOLSEY HOUSE FM,YOXF'D Data Type: Point Name: WOLSEY HOUSE FARM (PROPERTIES) LTD Easting: 638130 Northing: 268550	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 23/05/2000 Version End Date: -
-	1372m SE	Status: Historical Licence No: 7/35/03/*G/0035 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT ROOKERY PARK, YOXFORD Data Type: Point Name: HAMBLING & SON Easting: 640100 Northing: 268310	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/05/1966 Version End Date: -
-	1417m W	Status: Historical Licence No: 7/35/03/*G/0019 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT PARK FM,SIBTON Data Type: Point Name: GRAY Easting: 637890 Northing: 269900	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/01/1966 Version End Date: -
	1810m N	Status: Historical Licence No: 7/35/03/*G/0007 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT N BOUNDARY FM,YOXFORD Data Type: Point Name: NUNN Easting: 639160 Northing: 271210	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1965 Version End Date: -





ID	Location	Details	
¥	1957m E	Status: Historical Licence No: 7/35/03/*G/0076 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT DARSHAM Data Type: Point Name: THE TRUSTEES OF TRUSSON'S MERE Easting: 641200 Northing: 269300	Annual Volume (m³): 3600 Max Daily Volume (m³): 19.9 Original Application No: - Original Start Date: 25/01/1995 Expiry Date: - Issue No: 101 Version Start Date: 05/03/2002 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m 1

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 36 >

ID	Location	Details	
8.	1266m SE	Status: Active Licence No: 7/35/03/*S/0050 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: MINSMERE R AT TRUSTANS FM, DARS Data Type: Line Name: THICKITT Easting: 640340 Northing: 268760	Annual Volume (m³): 6364 Max Daily Volume (m³): 182 Original Application No: ES2639 Original Start Date: 01/02/1967 Expiry Date: - Issue No: 102 Version Start Date: 08/08/2003 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m 0

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

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





5.9 Source Protection Zones

Records within 500m 0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

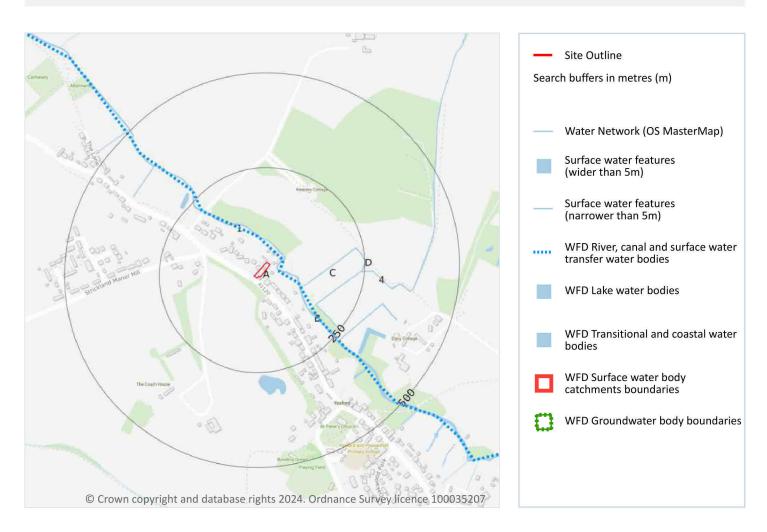
Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

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





6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m 8

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 40 >

ID	Location	Type of water feature	Ground level	Permanence	Name
1	20m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Yox





ID	Location	Type of water feature	Ground level	Permanence	Name
В	102m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Yox
С	102m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
В	160m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	228m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	241m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
В	248m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
В	248m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Yox

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

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 40 >

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.



questions at: Date: 23 January 2024



Features are displayed on the Hydrology map on page 40 >

ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment
Α	On site	River	Minsmere Old River	GB105035046270	Suffolk Coastal	Suffolk East

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

6.4 WFD Surface water bodies

Records identified 1

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

Features are displayed on the Hydrology map on page 40 >

ID	Location	Туре	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
2	30m E	River	Minsmere Old River	GB105035046270 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site 1

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

Features are displayed on the Hydrology map on page 40 >

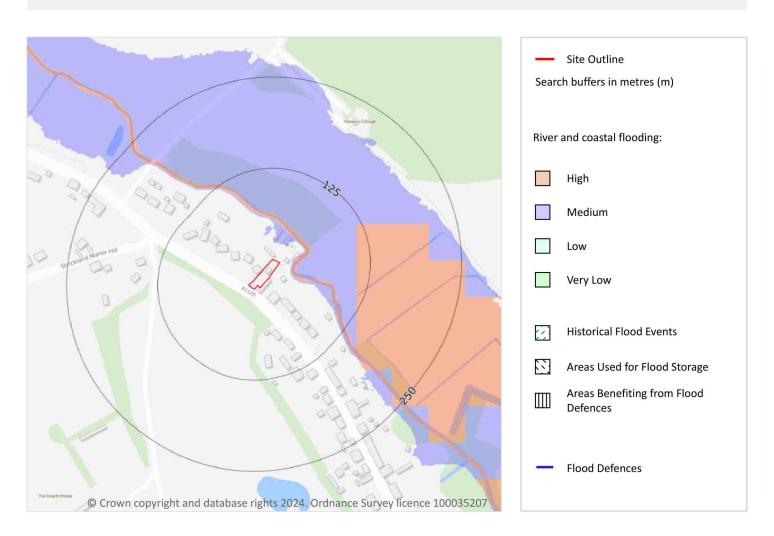
ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
Α	On site	Waveney and East Suffolk Chalk & Crag	GB40501G400600 ⊅	Poor	Poor	Poor	2019

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





7 River and coastal flooding



7.1 Risk of flooding from rivers and the sea

Records within 50m 4

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 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 43 >





Distance	Flood risk category	
On site	N/A	
0 - 50m	High	

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

7.2 Historical Flood Events

Records within 250m 0

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

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

7.3 Flood Defences

Records within 250m 0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m 0

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

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

7.5 Flood Storage Areas

Records within 250m 0

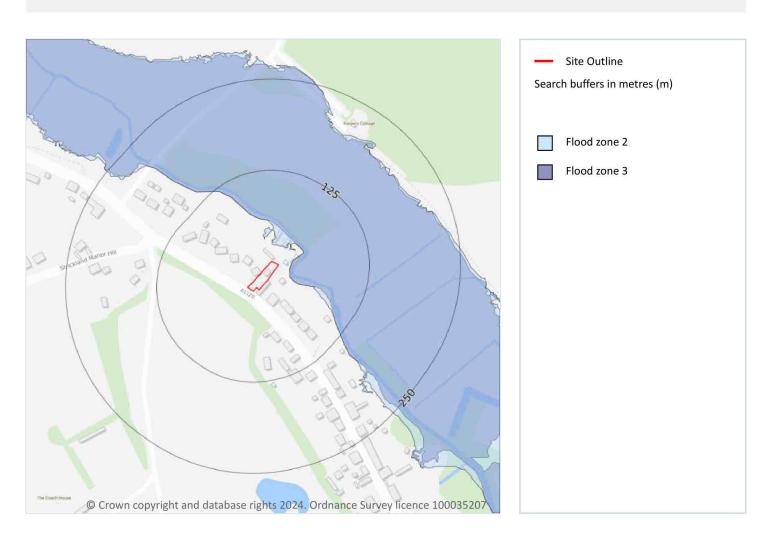
Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

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





River and coastal flooding - Flood Zones



7.6 Flood Zone 2

Records within 50m 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 43 >

Location	Туре
17m E	Zone 2 - (Fluvial /Tidal Models)

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



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7.7 Flood Zone 3

Records within 50m

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 43 >

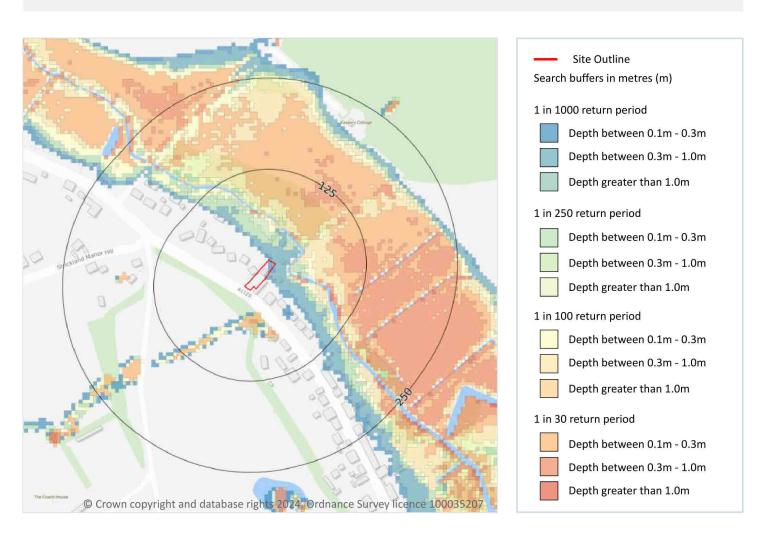
Туре
Zone 3 - (Fluvial Models)

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





8 Surface water flooding



8.1 Surface water flooding

Highest risk on site 1 in 1000 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 47 >

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

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

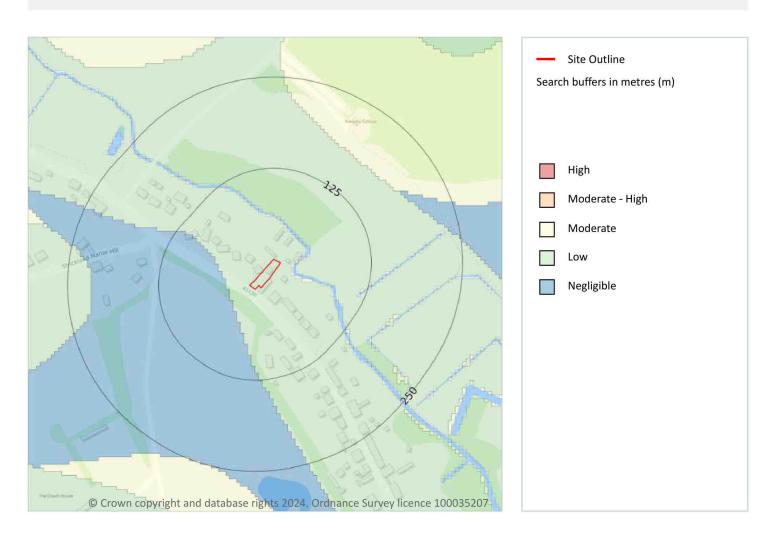
Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.





9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site	Low
Highest risk within 50m	Low

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

Features are displayed on the Groundwater flooding map on page 49 >

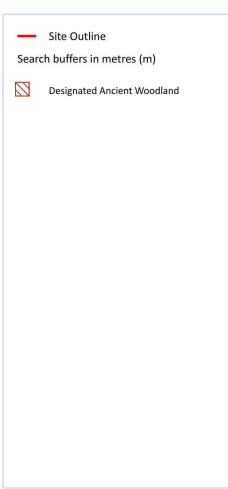
This data is sourced from Ambiental Risk Analytics.





10 Environmental designations





10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m 0

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

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





10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m 0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m 0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m 0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m 0

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

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





10.6 Local Nature Reserves (LNR)

Records within 2000m 0

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

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

10.7 Designated Ancient Woodland

Records within 2000m 4

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 50 >

ID	Location	Name	Woodland Type
1	635m N	Unknown	Ancient & Semi-Natural Woodland
2	1127m N	Unknown	Ancient & Semi-Natural Woodland
-	1632m N	Unknown	Ancient Replanted Woodland
-	1882m NE	Sillets Wood	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m 0

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

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





Ref: GS-RGC-1EZ-VAJ-FW4 Your ref: G0169

Grid ref: 639225 269380

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10.9 Forest Parks

Records within 2000m

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

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

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

10.11 Green Belt

Records within 2000m 0

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

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

10.12 Proposed Ramsar sites

Records within 2000m 0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m 0

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

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





10.14 Potential Special Protection Areas (pSPA)

Records within 2000m 0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m 0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m 5

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

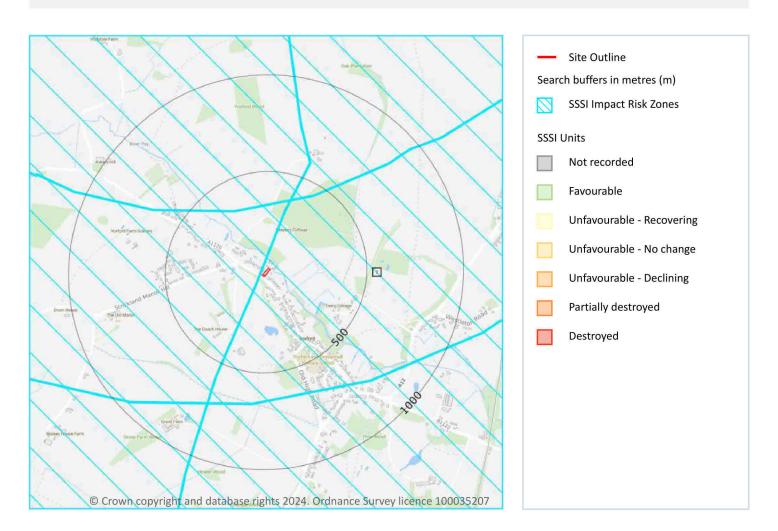
Location	Name	Туре	NVZ ID	Status
On site	Leiston Beck and Minsmere Old River NVZ	Surface Water	415	Existing
On site	Yoxford	Groundwater	166	Existing
1632m N	Blyth NVZ	Surface Water	417	Existing
1742m SW	Fromus NVZ	Surface Water	412	Existing
1742m SW	Sandlings and Chelmsford	Groundwater	78	Existing

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





SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site 1

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

Features are displayed on the SSSI Impact Zones and Units map on page 55 >





ID	Location	Type of developments requiring consultation
1 1	On site	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 footprint exceeds 1ha. Residential - Residential development of 50 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. 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 of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream. Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements.
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This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m 0

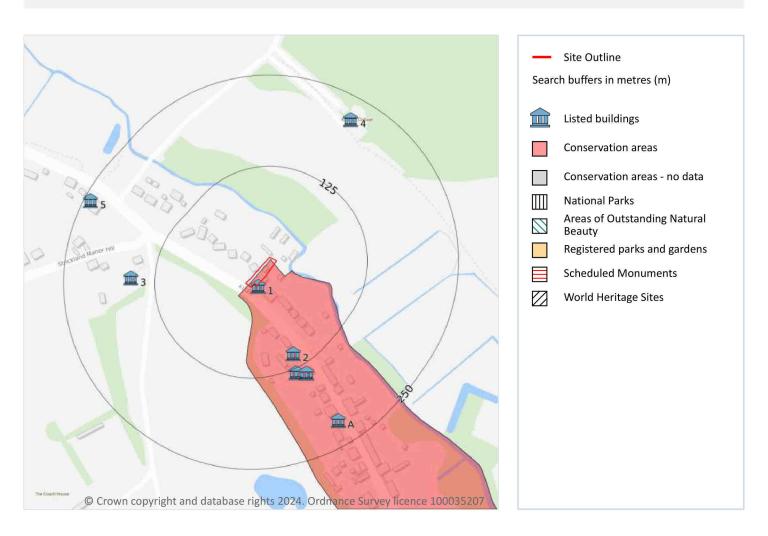
Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

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





11 Visual and cultural designations



11.1 World Heritage Sites

Records within 250m 0

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

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





11.2 Area of Outstanding Natural Beauty

Records within 250m 0

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

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

11.3 National Parks

Records within 250m

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 8

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 57 >

ID	Location	Name		Reference Number	Listed date
1	2m S	Two Cottages 15 North West Of Chapel Cottage (Occupied By Mr P Morphey)		1377258	27/07/1984
2	106m S	Caxtons	11	1300643	25/10/1951
В	131m S	Hope House	II	1030632	25/10/1951
В	138m SE	Wisbech Cottage		1200684	25/10/1951
3	158m W	Plantation Cottage		1300572	27/07/1984



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ID	Location	Name		Reference Number	Listed date
Α	216m SE	Minsmere House	11	1030631	07/12/1966
4	219m NE	Keepers Cottage Cockfield Hall	11	1030624	27/07/1984
5	241m NW	Yoxford Place	П	1200784	25/10/1951

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 57 >

ID	Location	Name	District	Date of designation
Α	On site	Yoxford	Suffolk Coastal	1973

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

11.6 Scheduled Ancient Monuments

Records within 250m

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.

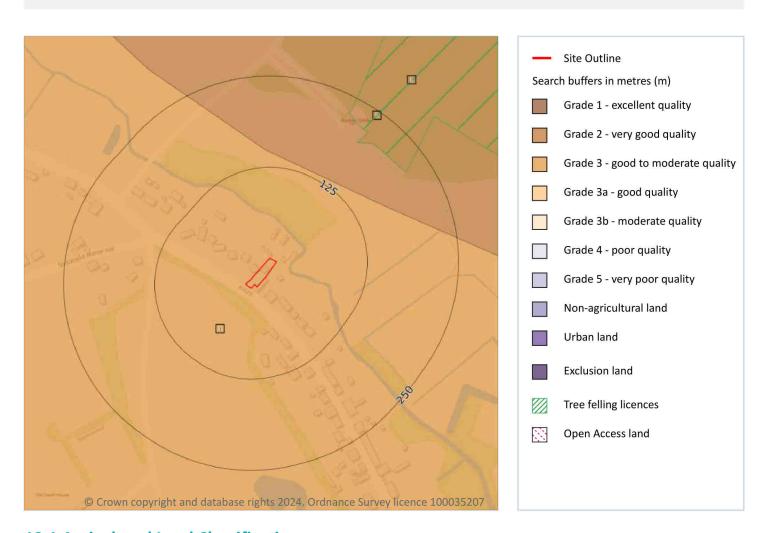


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12 Agricultural designations



12.1 Agricultural Land Classification

Records within 250m 2

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

Features are displayed on the Agricultural designations map on page 61 >

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





ID	Location	Classification	Description
2	132m NE	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m 0

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

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

12.3 Tree Felling Licences

Records within 250m 1

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

Features are displayed on the Agricultural designations map on page 61 >

ID	Location	Description	Reference	Application date
3	199m NE	Selective Fell/Thin (Conditional)	017/309/12-13	10/07/2013

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m 1

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
42m NE	AG00644412	Entry Level Stewardship	01/09/2013	31/08/2018

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m 2

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

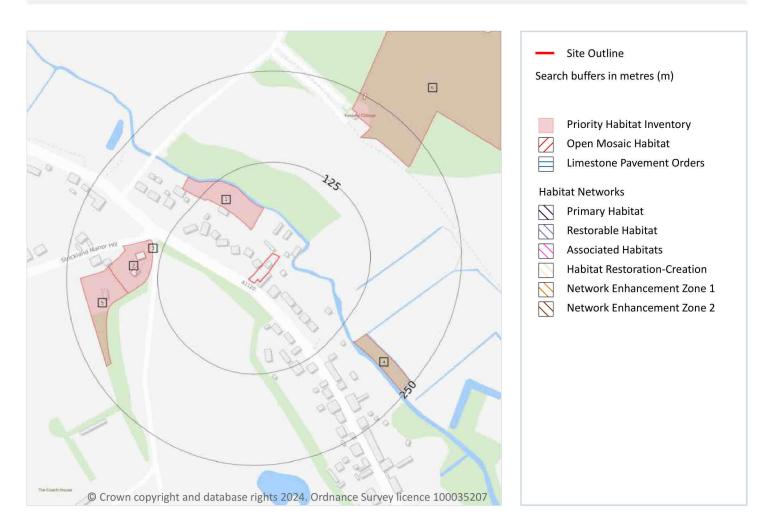
Location	Reference	Scheme	Start Date	End Date
22m E	1262501	Countryside Stewardship (Higher Tier)	01/01/2022	31/12/2031
205m NE	1052321	Countryside Stewardship (Higher Tier)	01/01/2021	31/12/2030

This data is sourced from Natural England.





13 Habitat designations



13.1 Priority Habitat Inventory

Records within 250m 6

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 64 >

ID	Location	Main Habitat	Other habitats
1	43m N	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
2	135m W	No main habitat but additional habitats present	Main habitat: DWOOD (INV > 50%)
3	137m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	150m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



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ID	Location	Main Habitat	Other habitats
5	167m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	199m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m 0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m 0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m 0

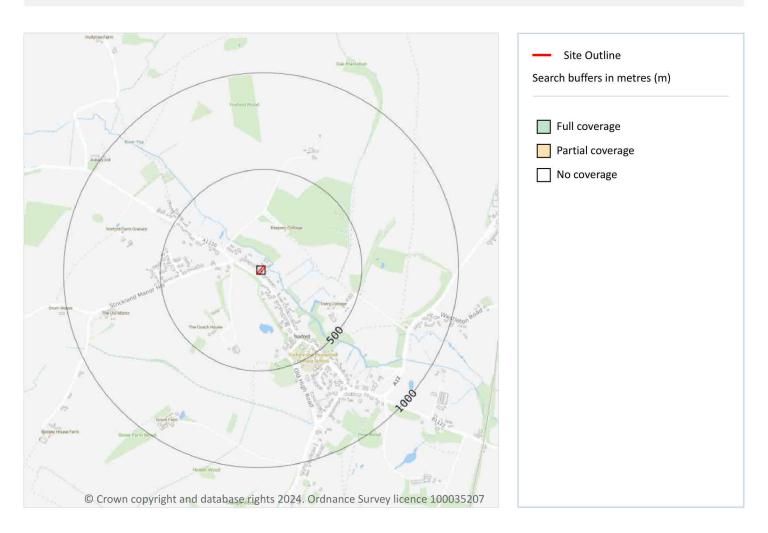
Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened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

This data is sourced from Natural England.





14 Geology 1:10,000 scale - Availability



14.1 10k Availability

Records within 500m

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 66 >

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.



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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.





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.





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

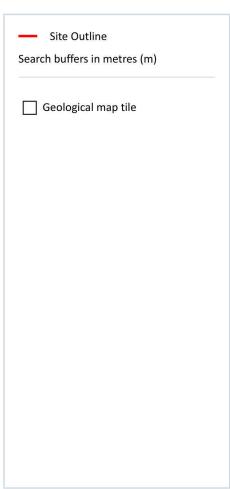
Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.





15 Geology 1:50,000 scale - Availability





15.1 50k Availability

Records within 500m 1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on page 70 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	EW191_saxmundham_v4





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

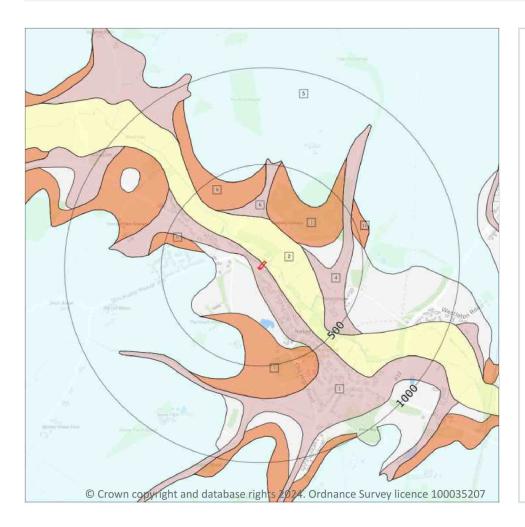
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

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 10

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 72 >

ID	Location	LEX Code	Description	Rock description
1	On site	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
2	On site	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
	177m NE	LOFT-XSV	LOWESTOFT FORMATION	SAND AND GRAVEL





ID	Location	LEX Code	Description	Rock description
4	200m NE	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
5	217m W	LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON
6	217m N	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
7	249m S	LOFT-XSV	LOWESTOFT FORMATION	SAND AND GRAVEL
8	287m W	LOFT-XSV	LOWESTOFT FORMATION	SAND AND GRAVEL
9	302m N	LOFT-XSV	LOWESTOFT FORMATION	SAND AND GRAVEL
10	471m E	LOFT-XSV	LOWESTOFT FORMATION	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	Intergranular	High	Very Low
On site	Mixed	High	Very Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

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

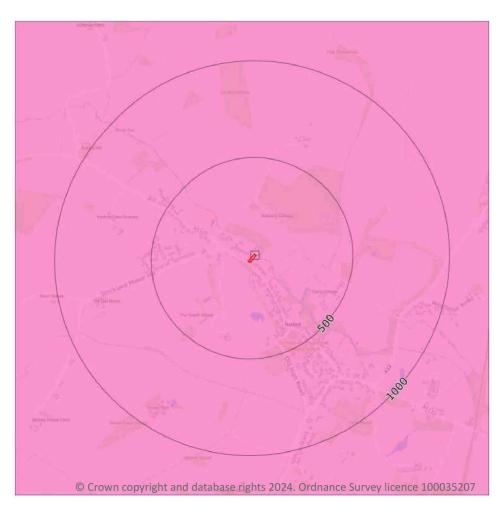
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.





Geology 1:50,000 scale - Bedrock



Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)

Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m 1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on page 75 >

ID	Location	LEX Code	Description	Rock age
1	On site	CRAG-S	CRAG GROUP - SAND	-

This data is sourced from the British Geological Survey.





15.9 Bedrock permeability (50k)

Records within 50m

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	High

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m 0

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





16 Boreholes

16.1 BGS Boreholes

Records within 250m 0

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

This data is sourced from the British Geological Survey.





17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m 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 78 >

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.
30m SW	Negligible	Ground conditions predominantly non-plastic.





Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m 3

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 79 >

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
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.
30m SW	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



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 81 >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.





Ref: GS-RGC-1EZ-VAJ-FW4 **Your ref**: G0169

Grid ref: 639225 269380

This data is sourced from the British Geological Survey.





Natural ground subsidence - Collapsible deposits



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 83 >

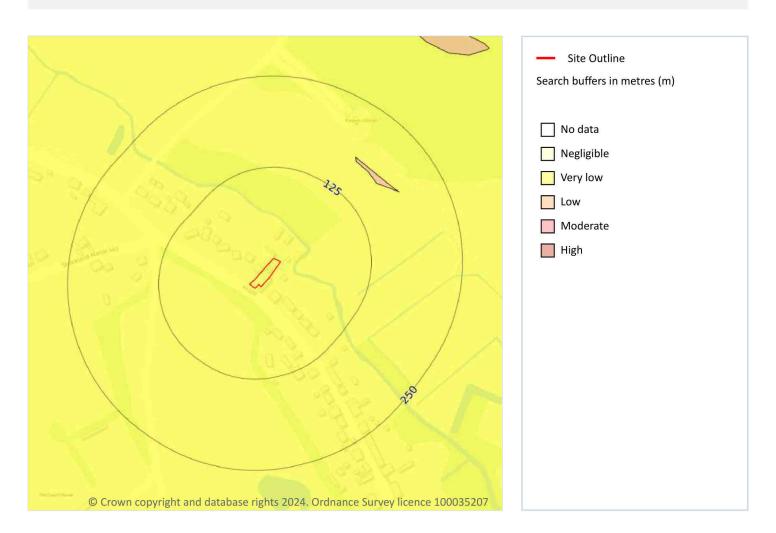
Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m 1

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

Features are displayed on the Natural ground subsidence - Landslides map on page 84 >

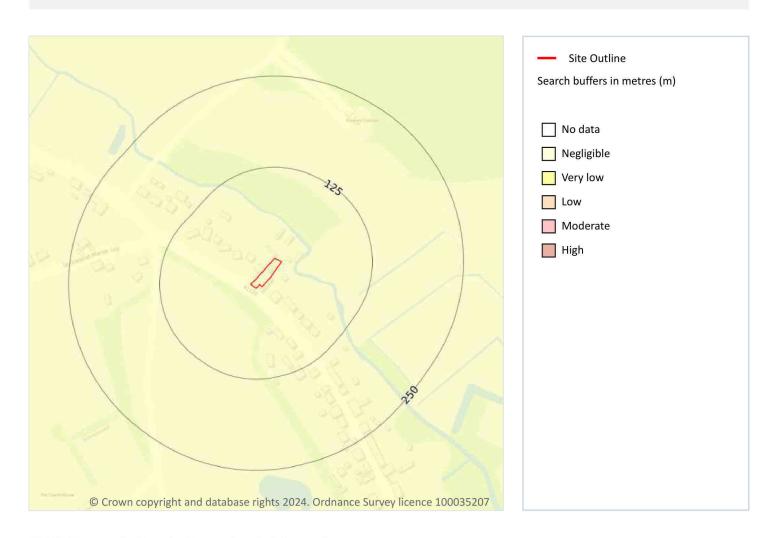
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m 1

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

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

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.





Ref: GS-RGC-1EZ-VAJ-FW4 Your ref: G0169

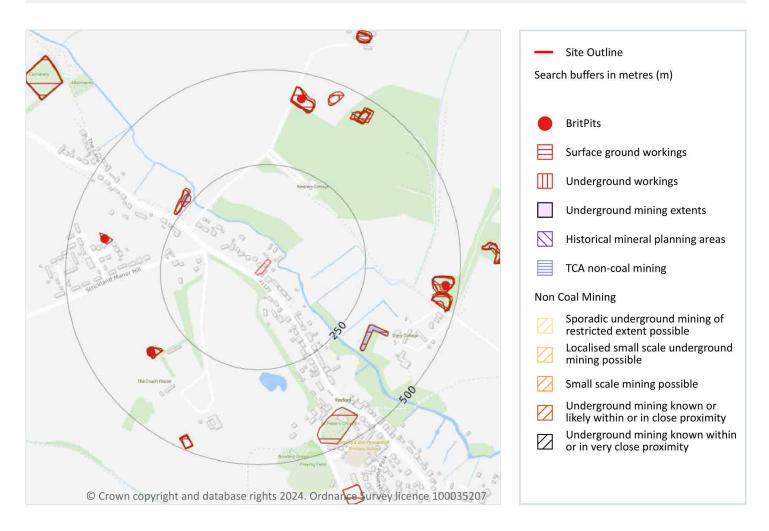
Grid ref: 639225 269380

This data is sourced from the British Geological Survey.





18 Mining and ground workings



18.1 BritPits

Records within 500m 4

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

Features are displayed on the Mining and ground workings map on page 87 >





ID	Location	Details	Description
С	344m SW	Name: Grove Park Pit Address: Yoxford, SAXMUNDHAM, Suffolk Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
D	407m W	Name: Elmsley Gravel Pit Address: Yoxford, SAXMUNDHAM, Suffolk Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	431m N	Name: Hill Farm Sand Pit Address: Yoxford, SAXMUNDHAM, Suffolk Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
F	464m E	Name: Cockfield Hall Sand Pit Address: Yoxford, SAXMUNDHAM, Suffolk Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m 0

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.

This is data is sourced from Ordnance Survey/Groundsure.





18.3 Underground workings

Records within 1000m 0

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

This is data is sourced from Ordnance Survey/Groundsure.

18.4 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

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

This data is sourced from the British Geological Survey.

18.7 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

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.

19.5 National karst database

Records within 500m 0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

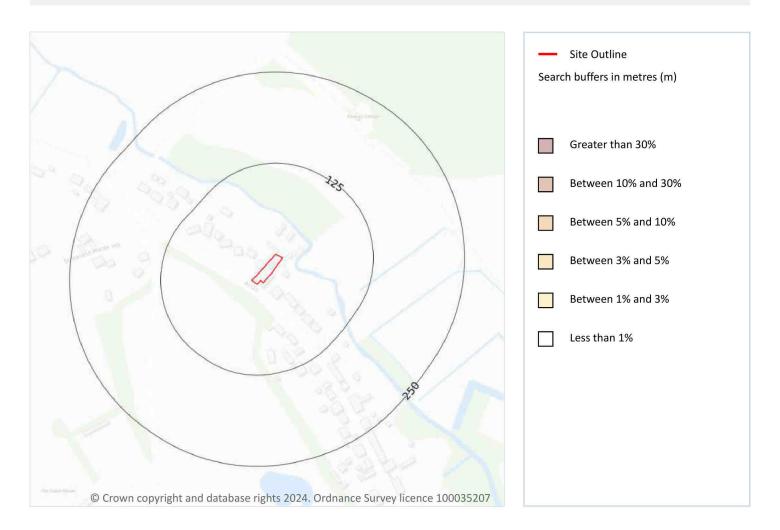
The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.





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 94 >

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

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
30m SW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	20 - 40 mg/kg	15 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 km²).

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 km².

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 0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m 0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m 0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m 0

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





This data is sourced from HS2 ltd.





Data providers

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

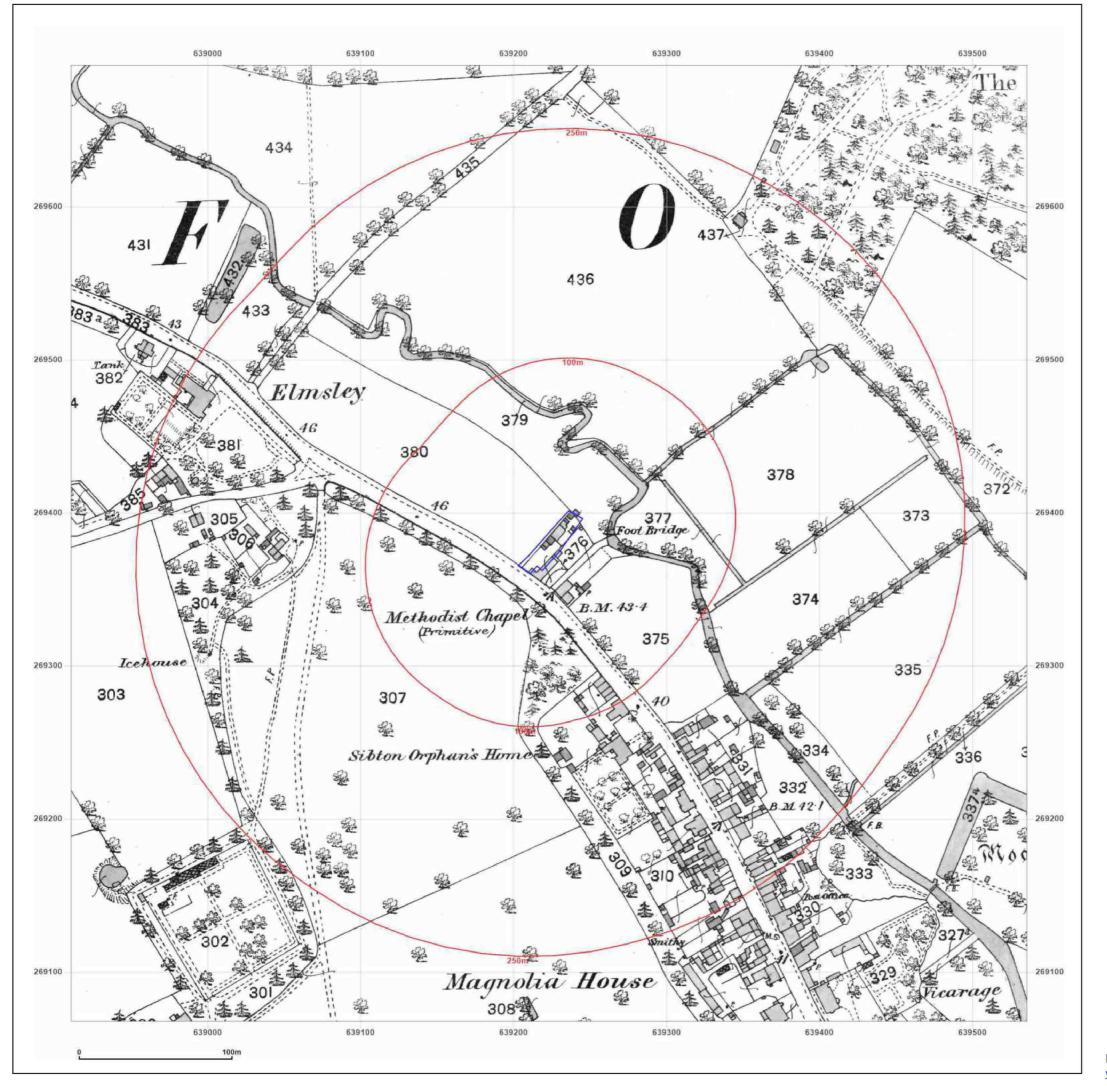
Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: $\underline{www.groundsure.com/terms-and-conditions-april-2023/ 7}$.

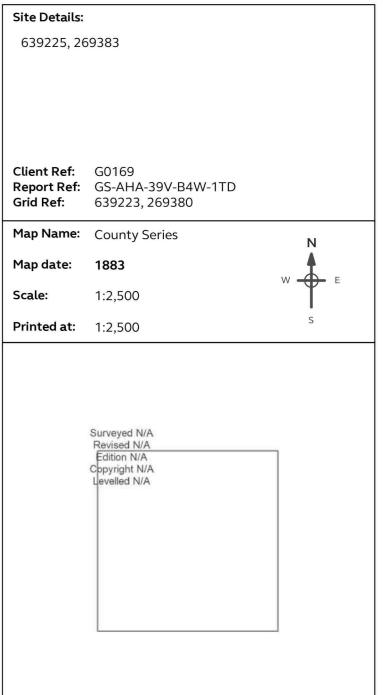




Historical Maps





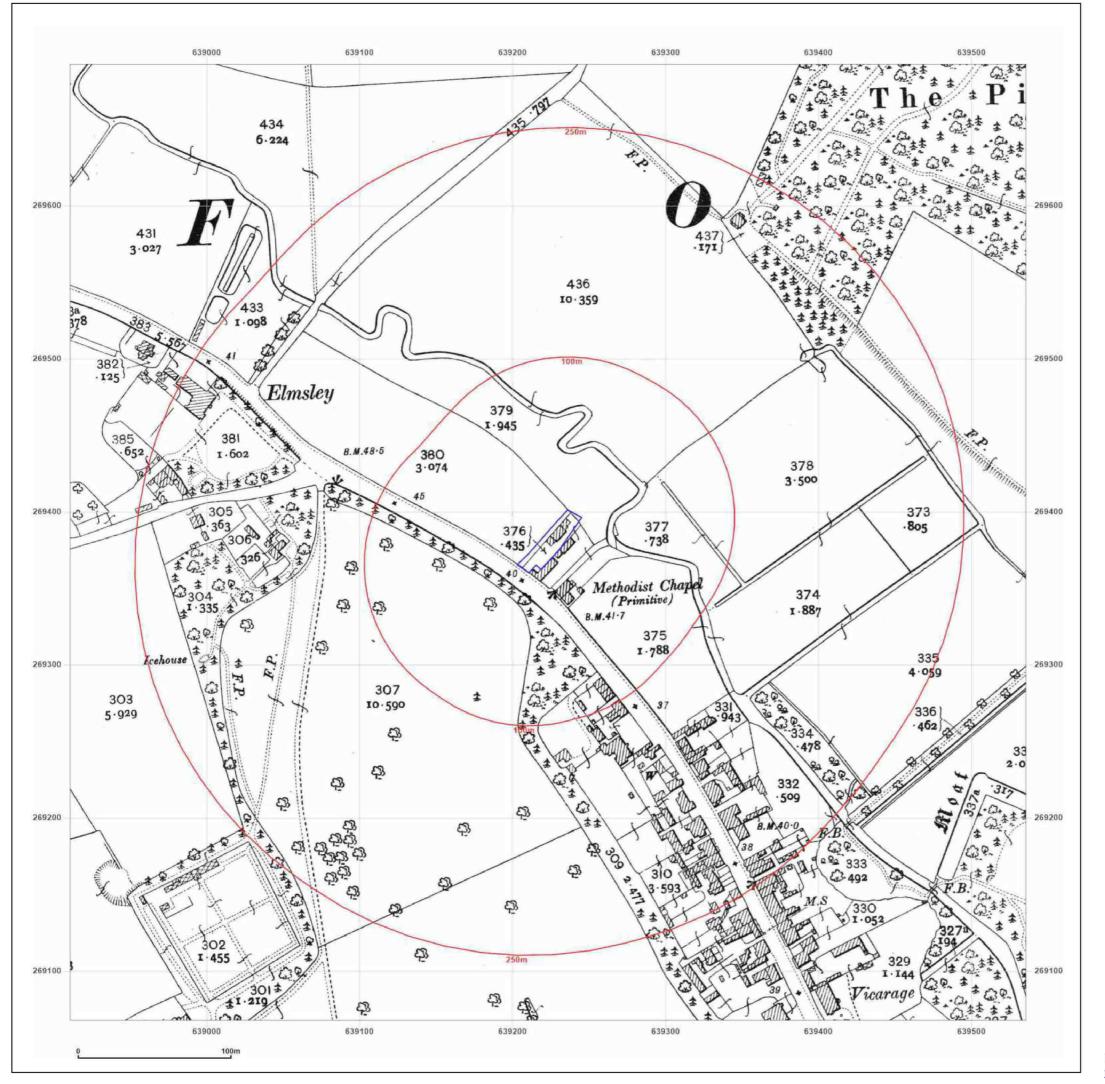




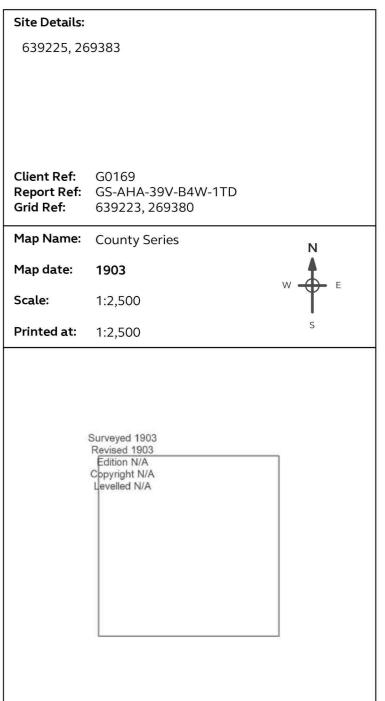
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Production date: 23 January 2024

Map legend available at:





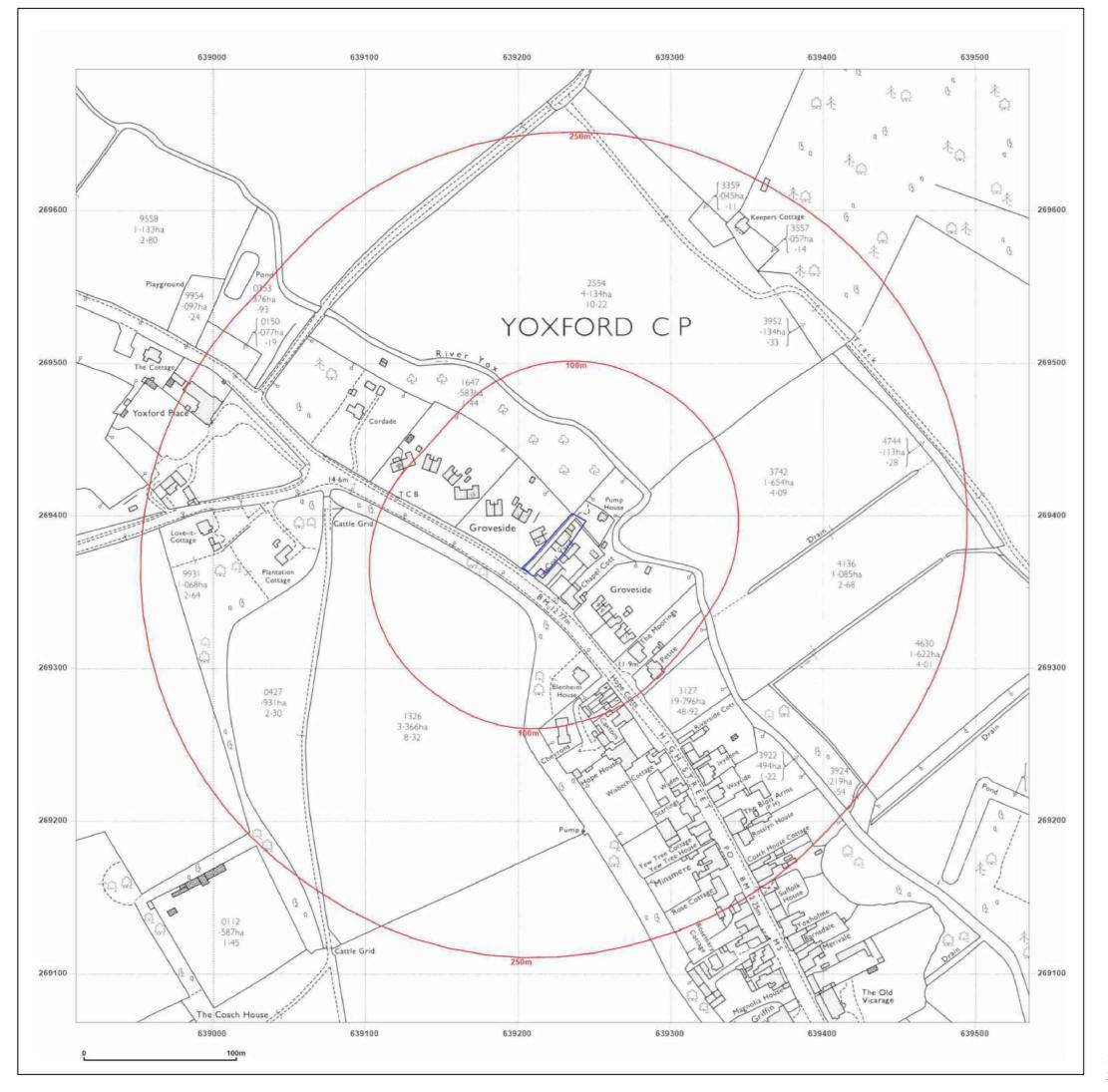




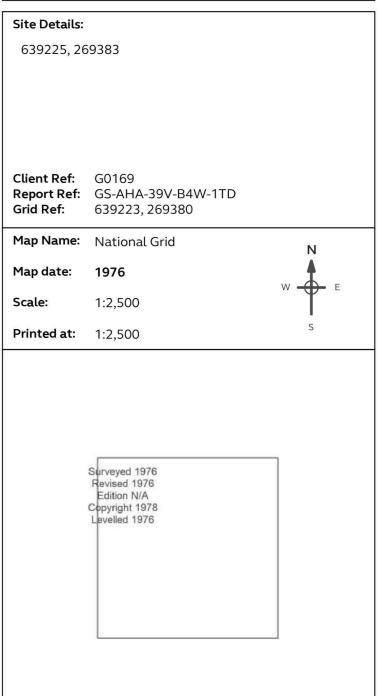
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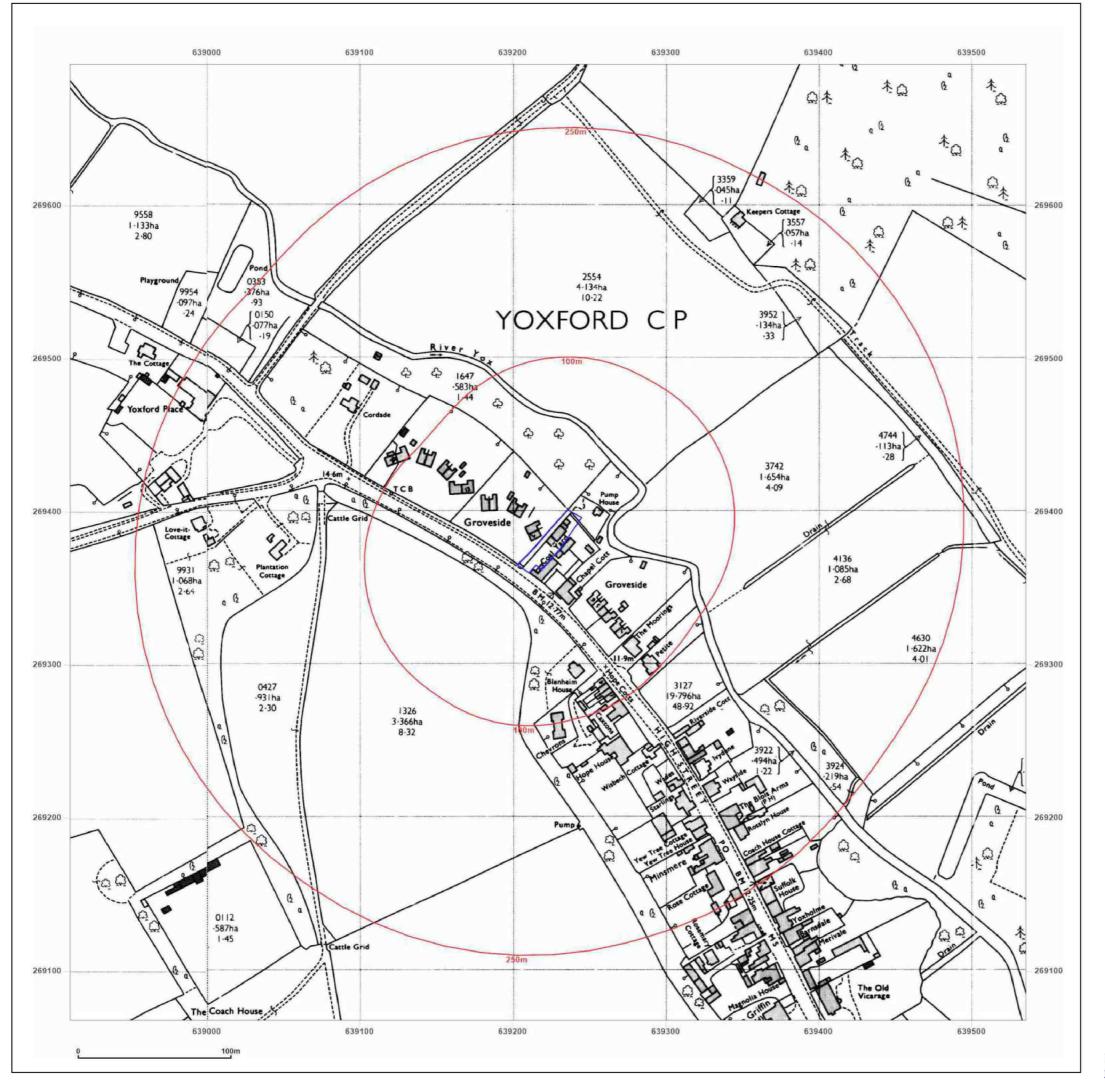




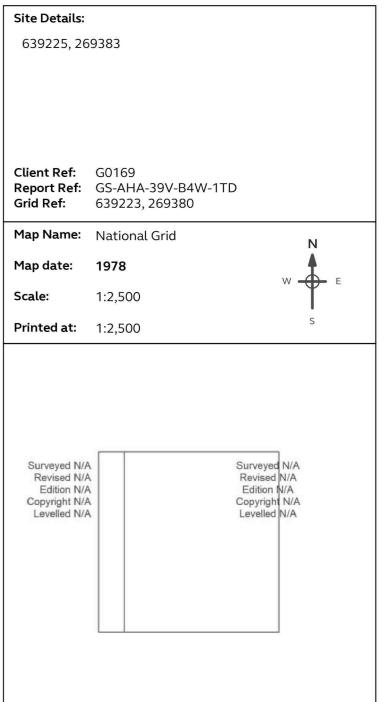
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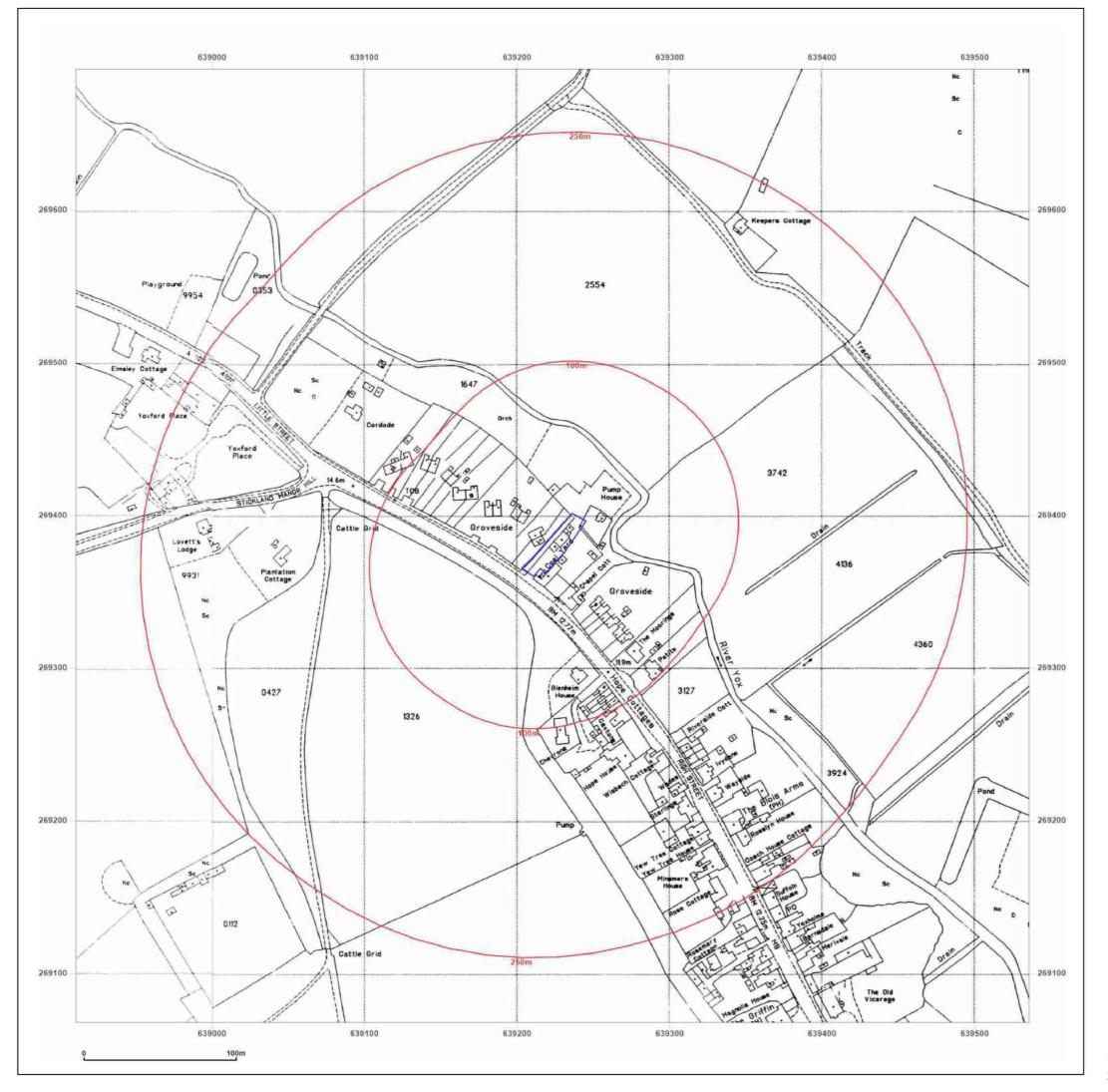




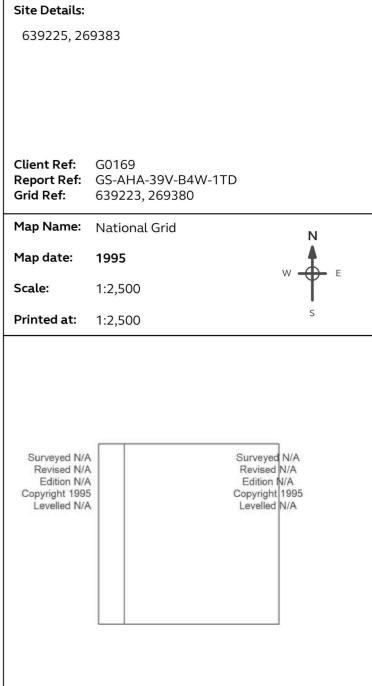
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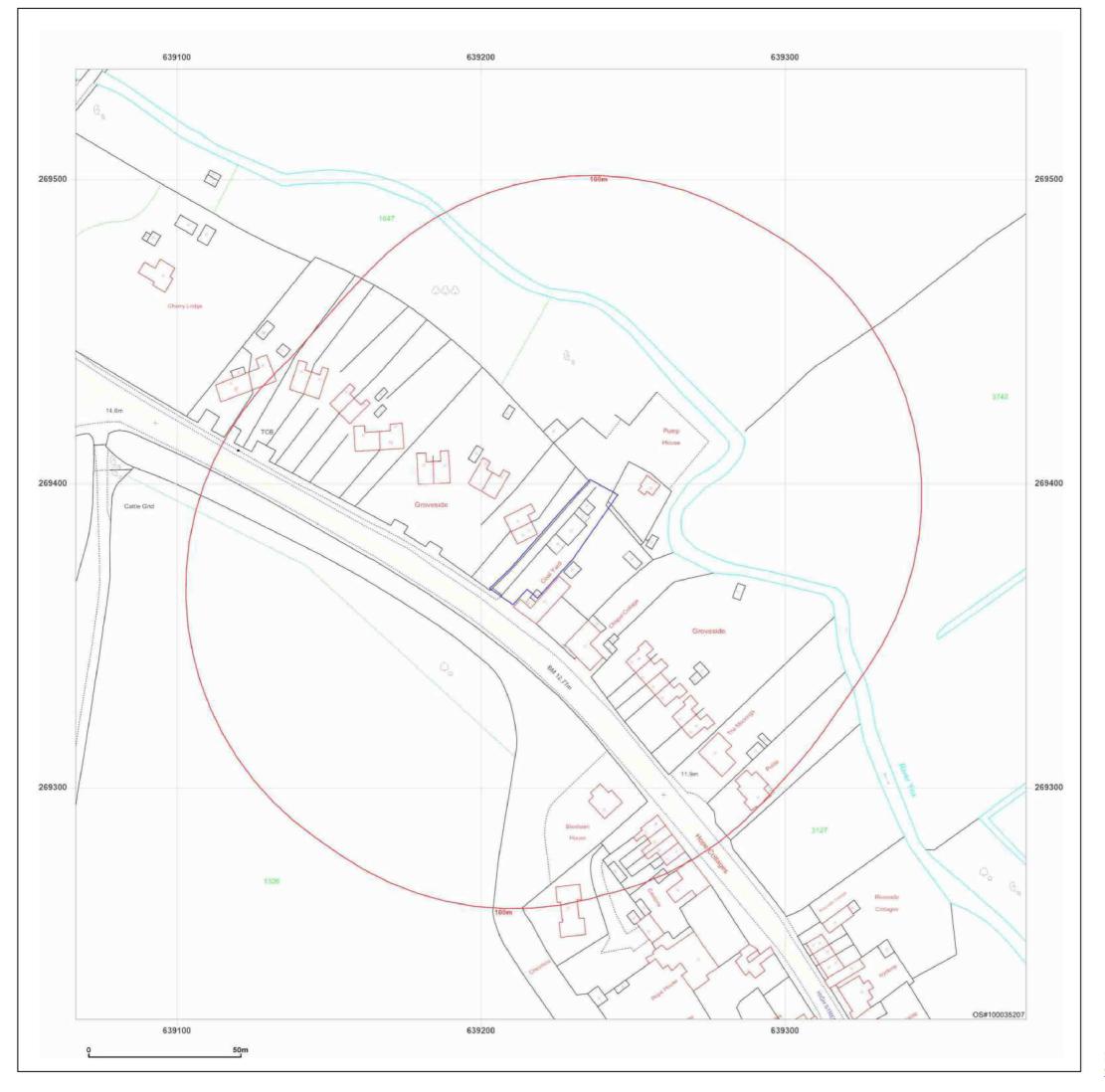




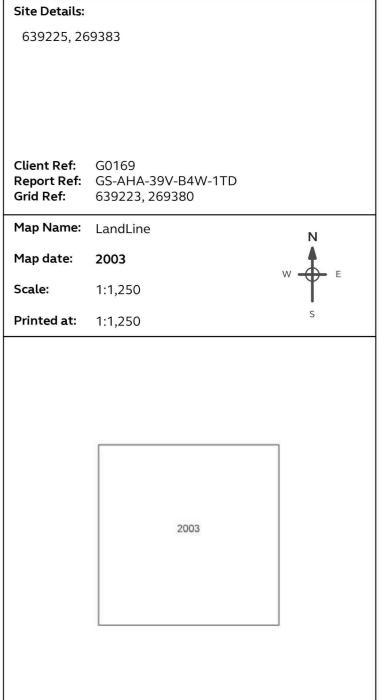
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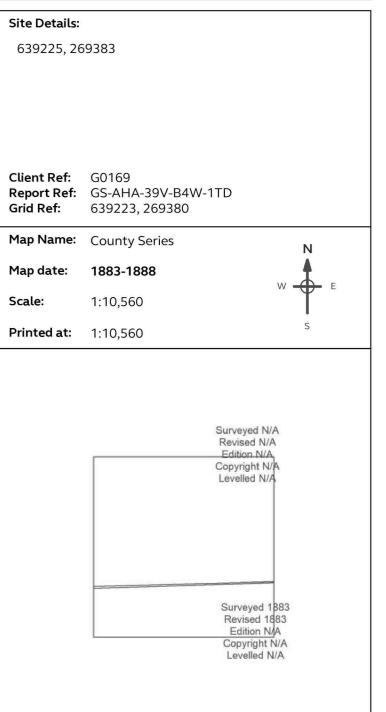
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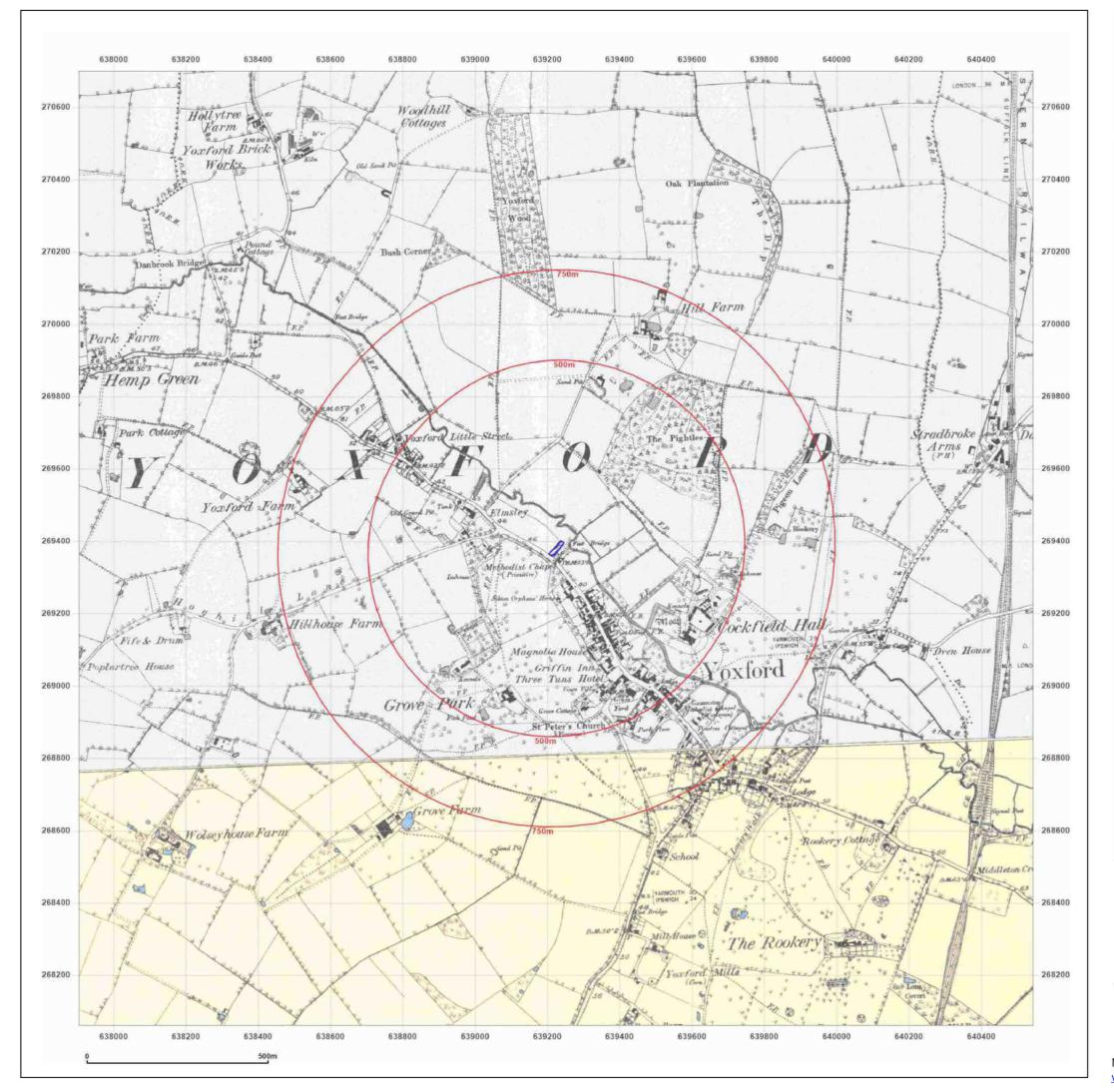




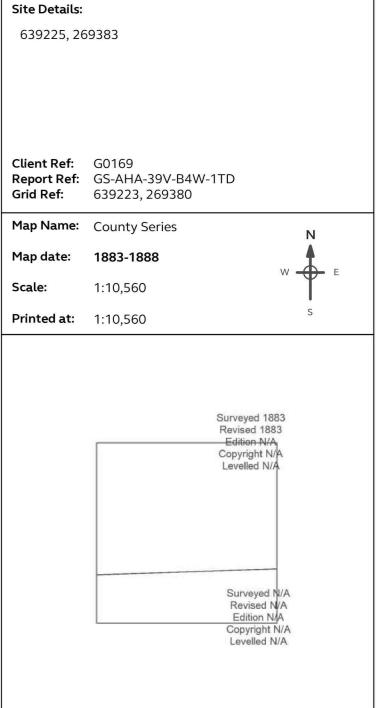
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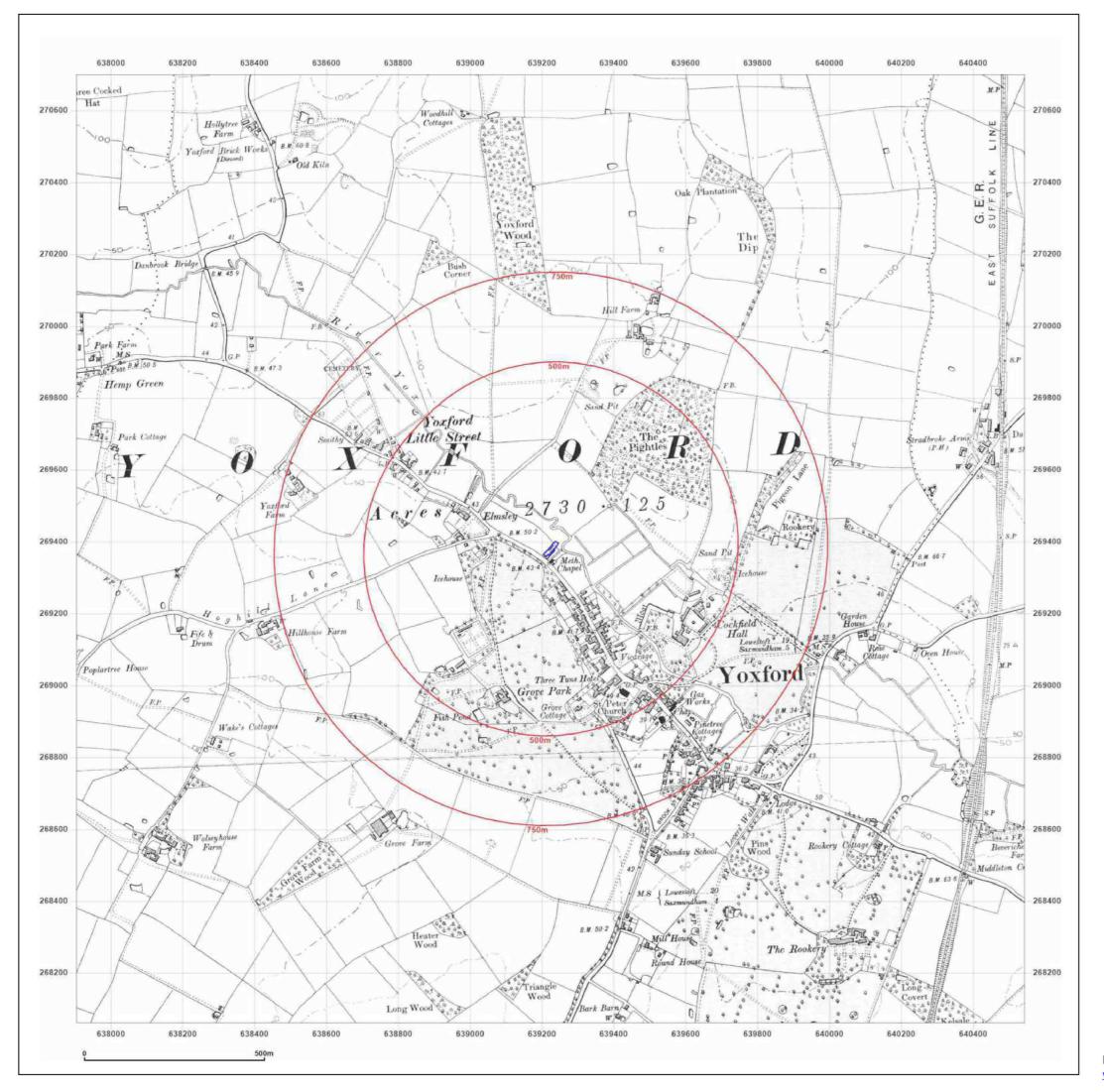




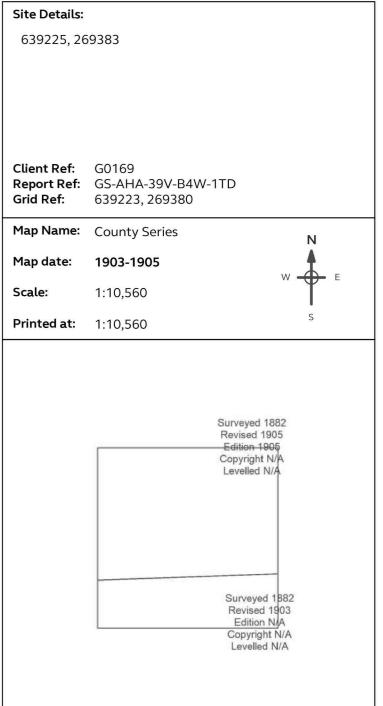
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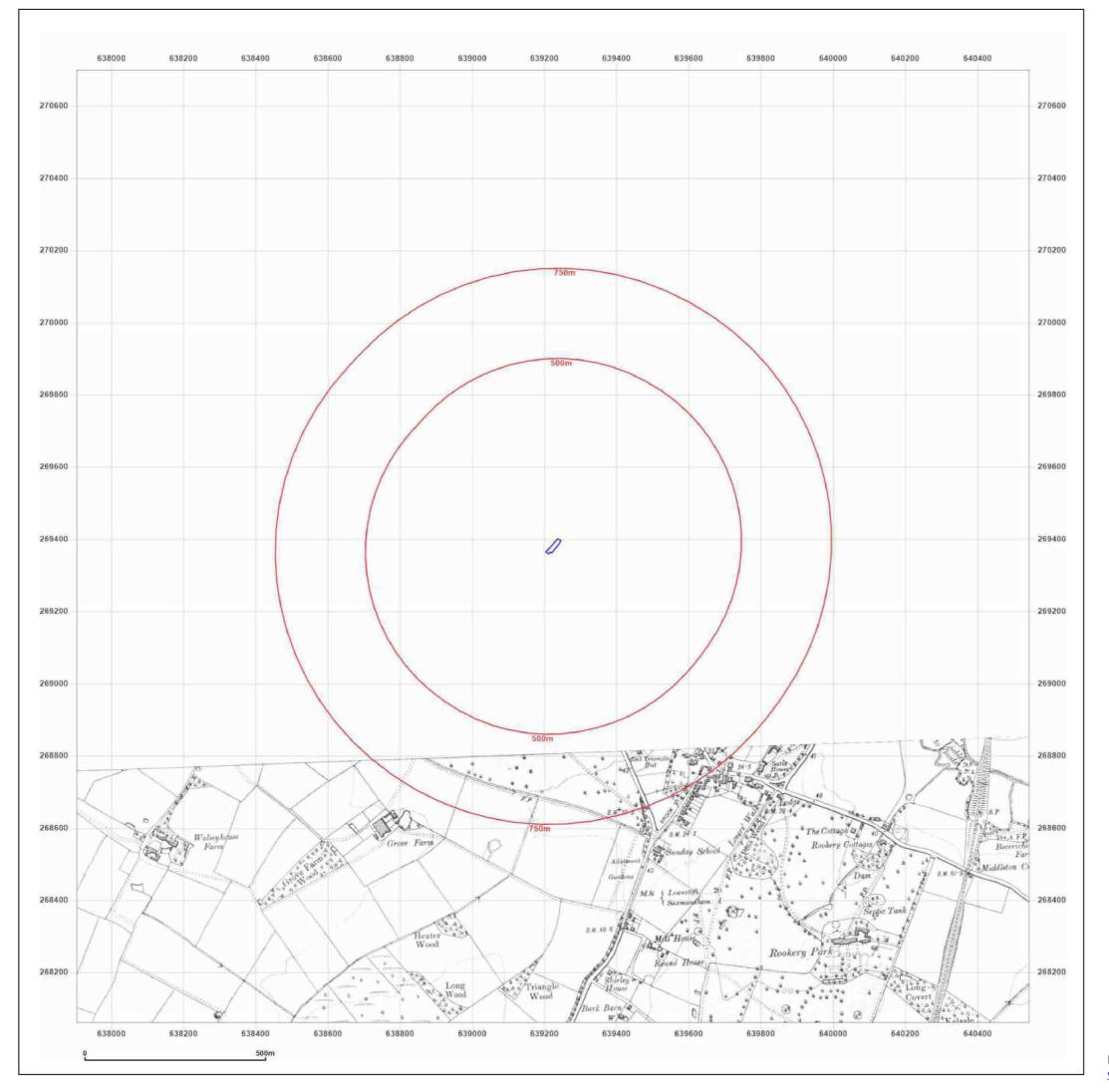




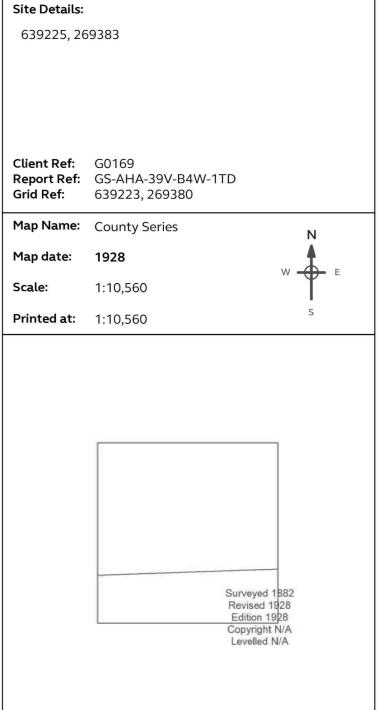
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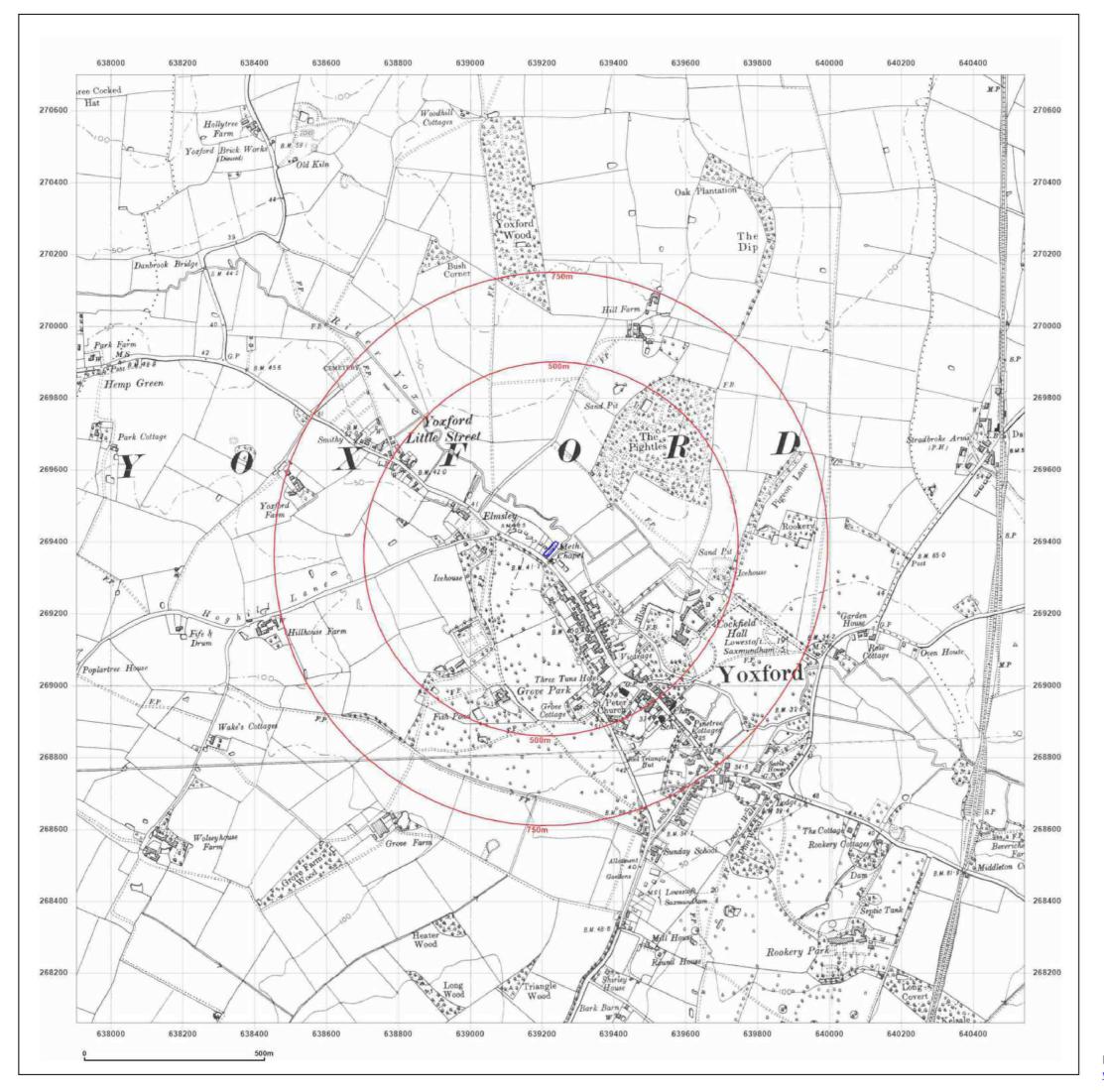




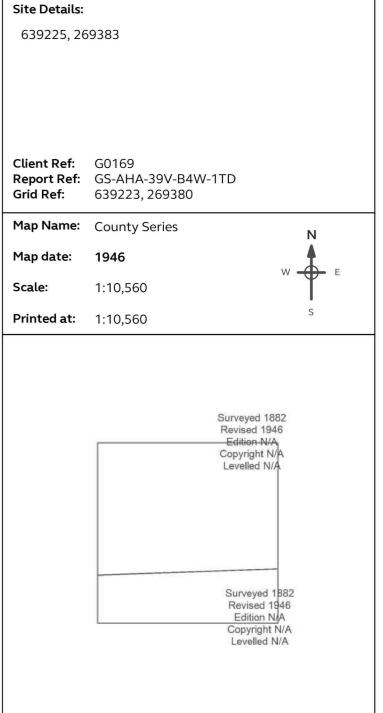
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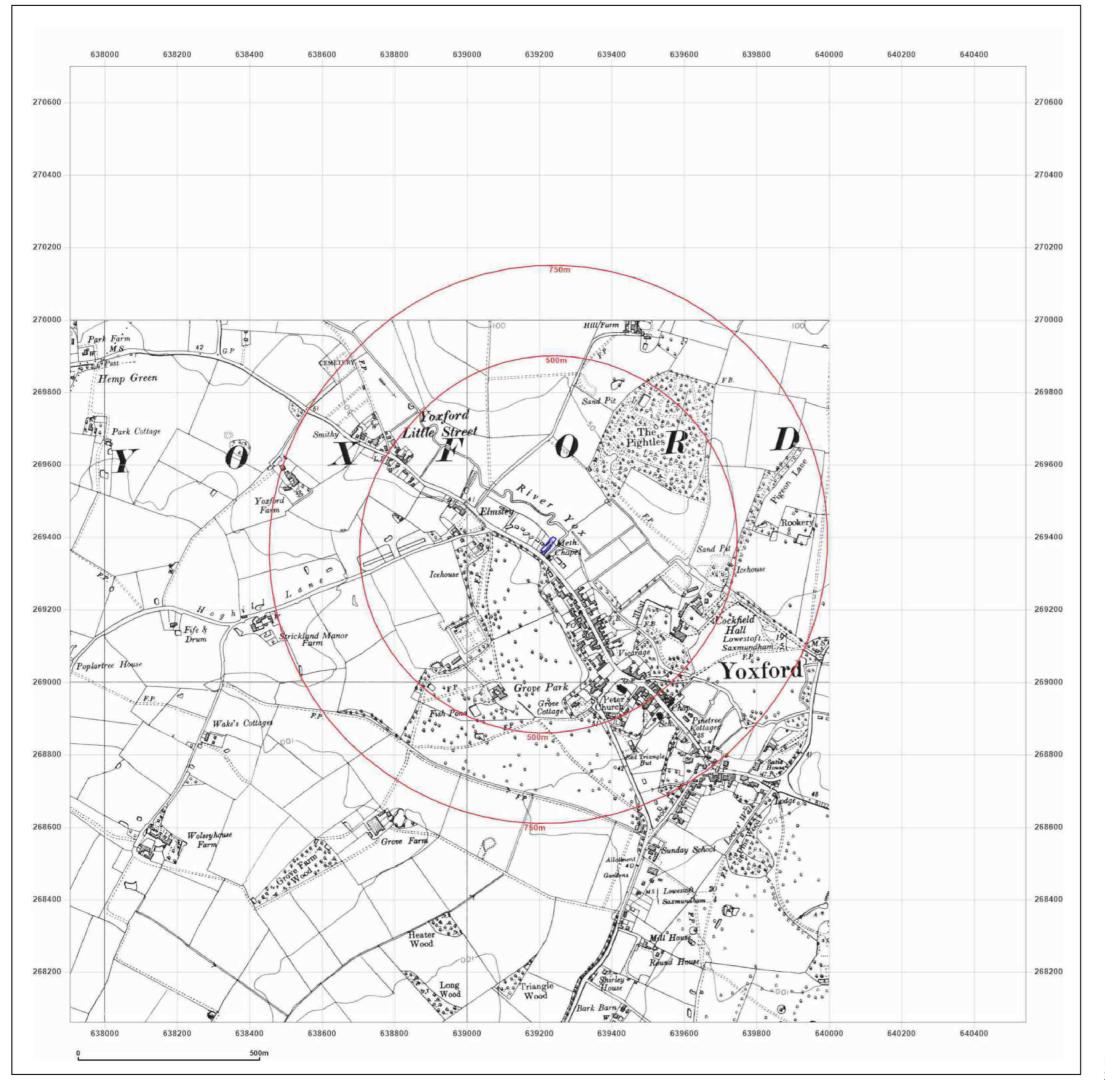




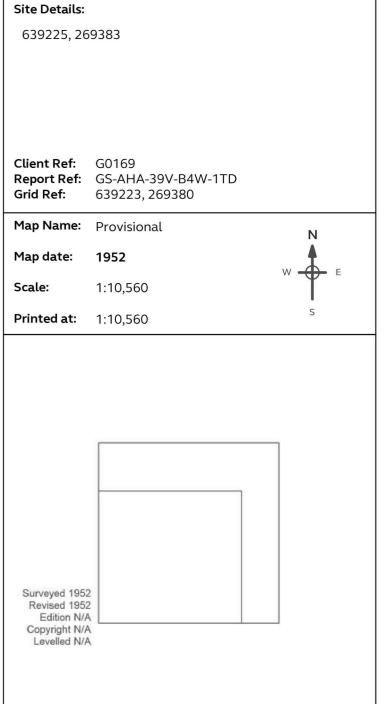
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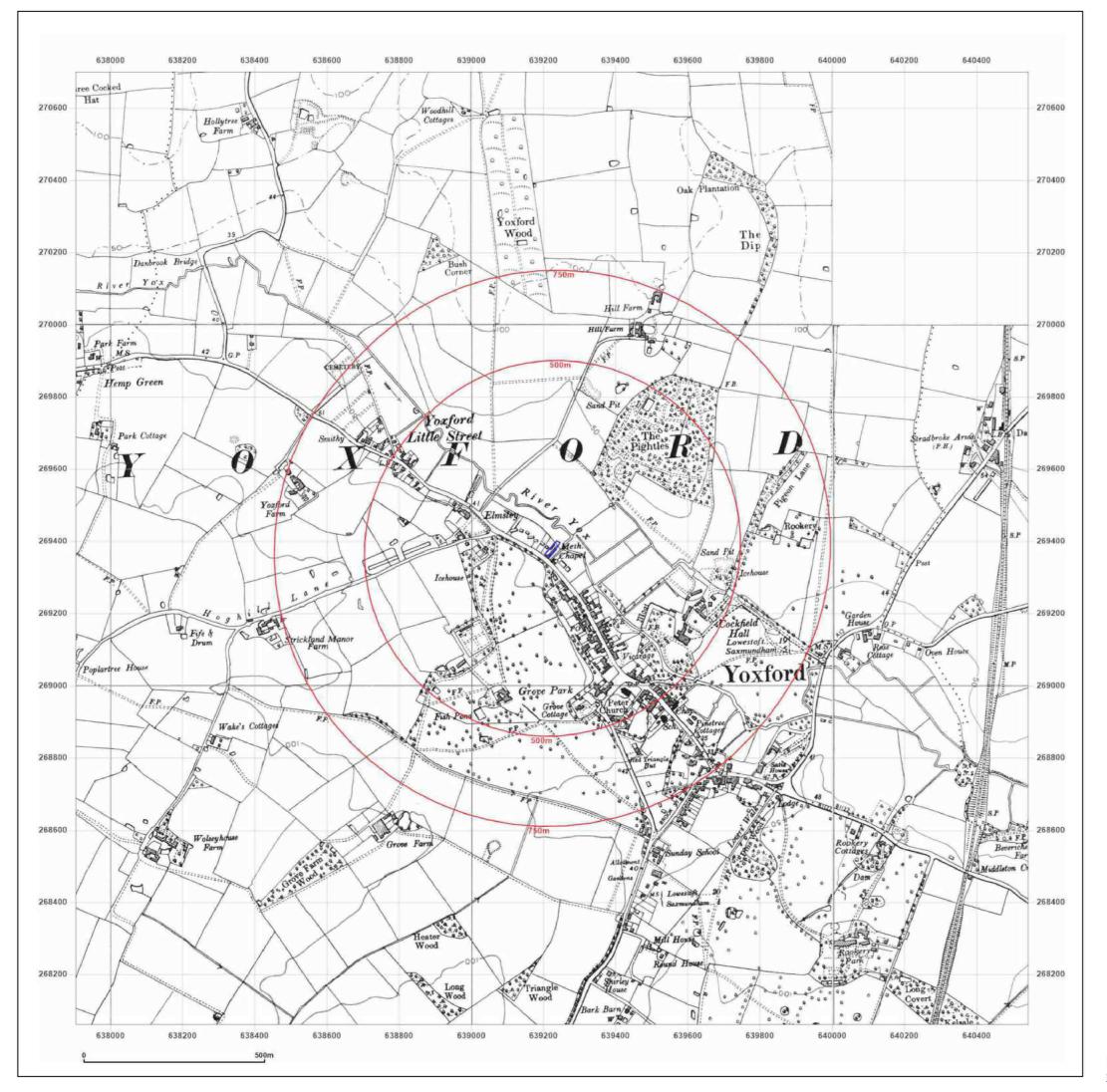




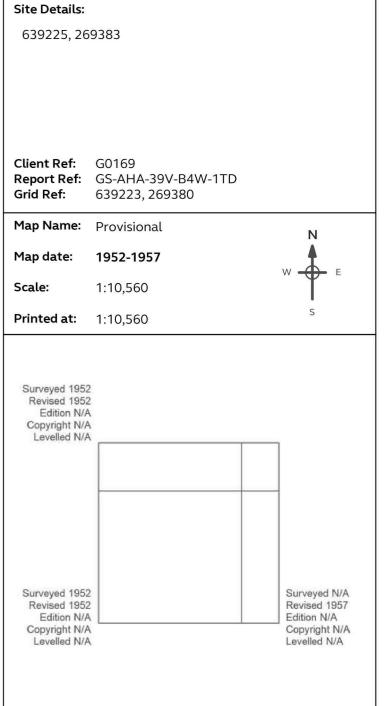
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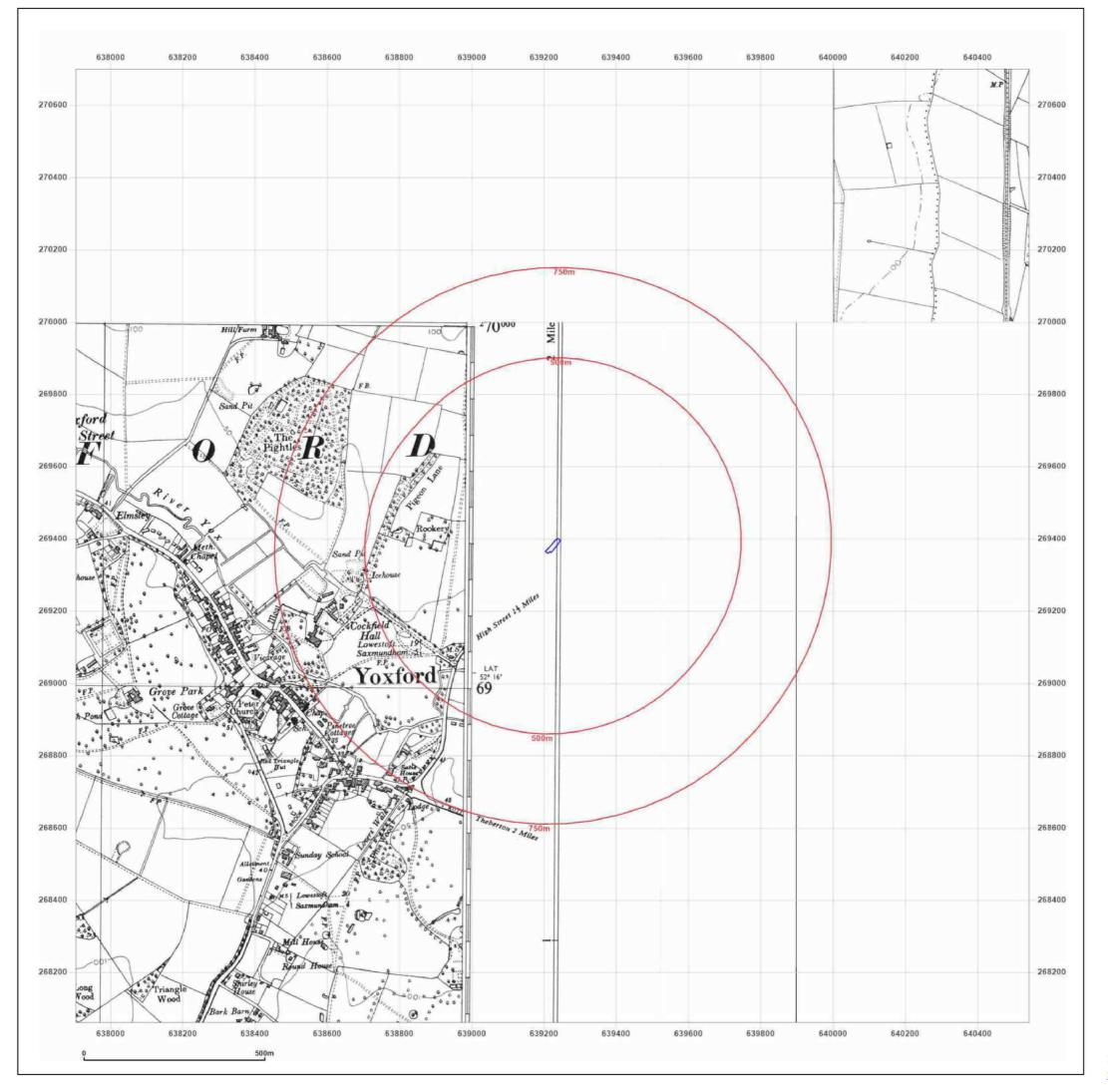




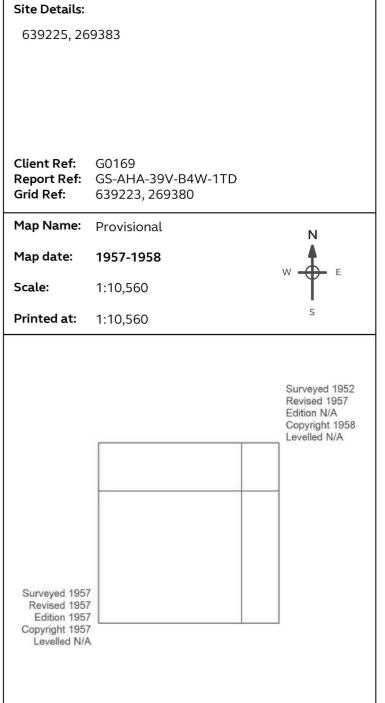
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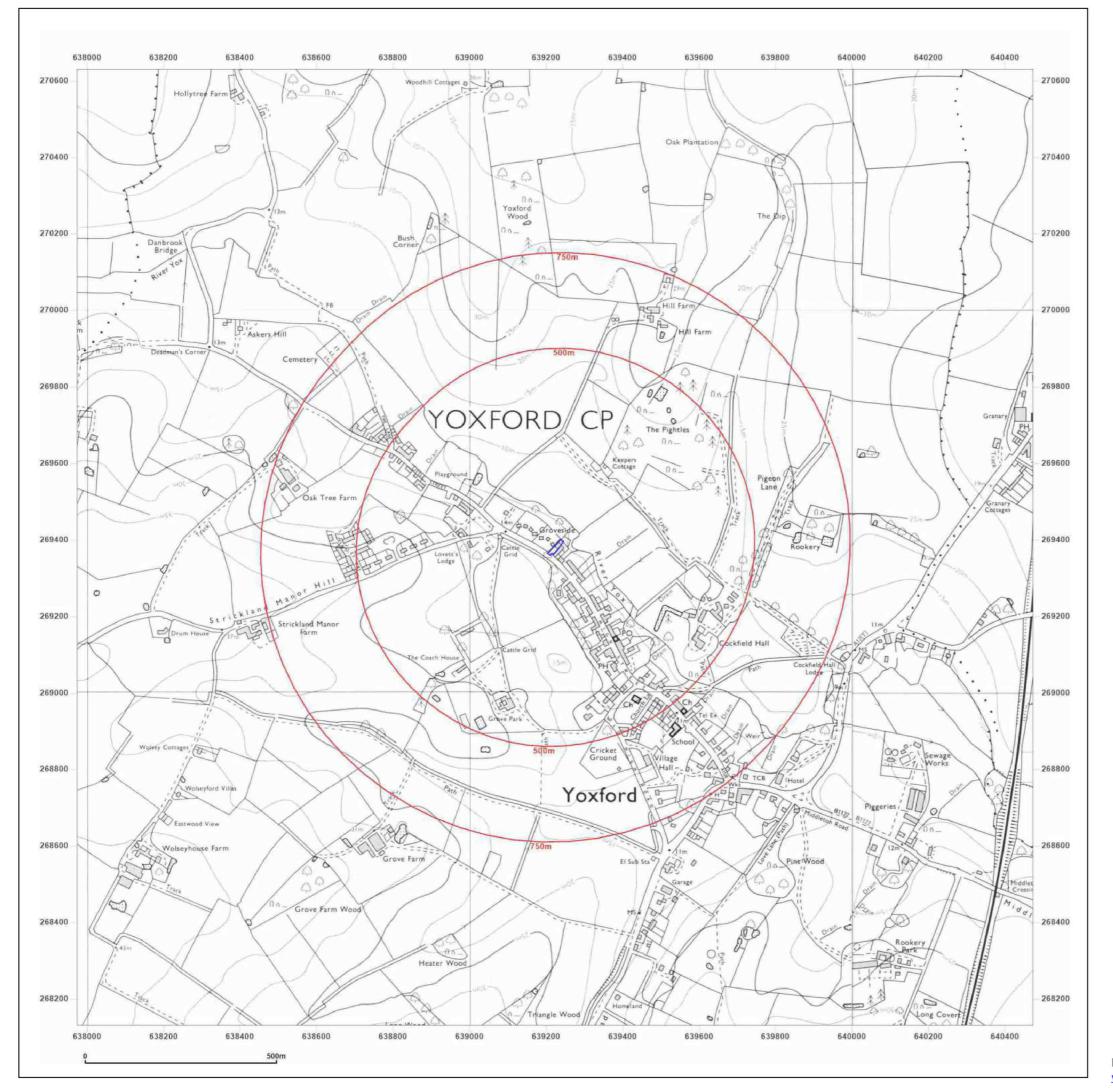




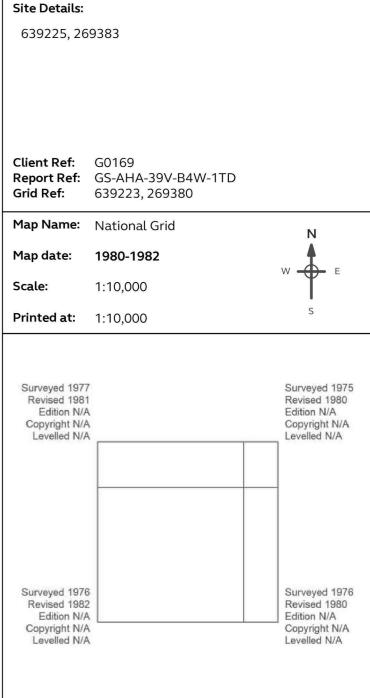
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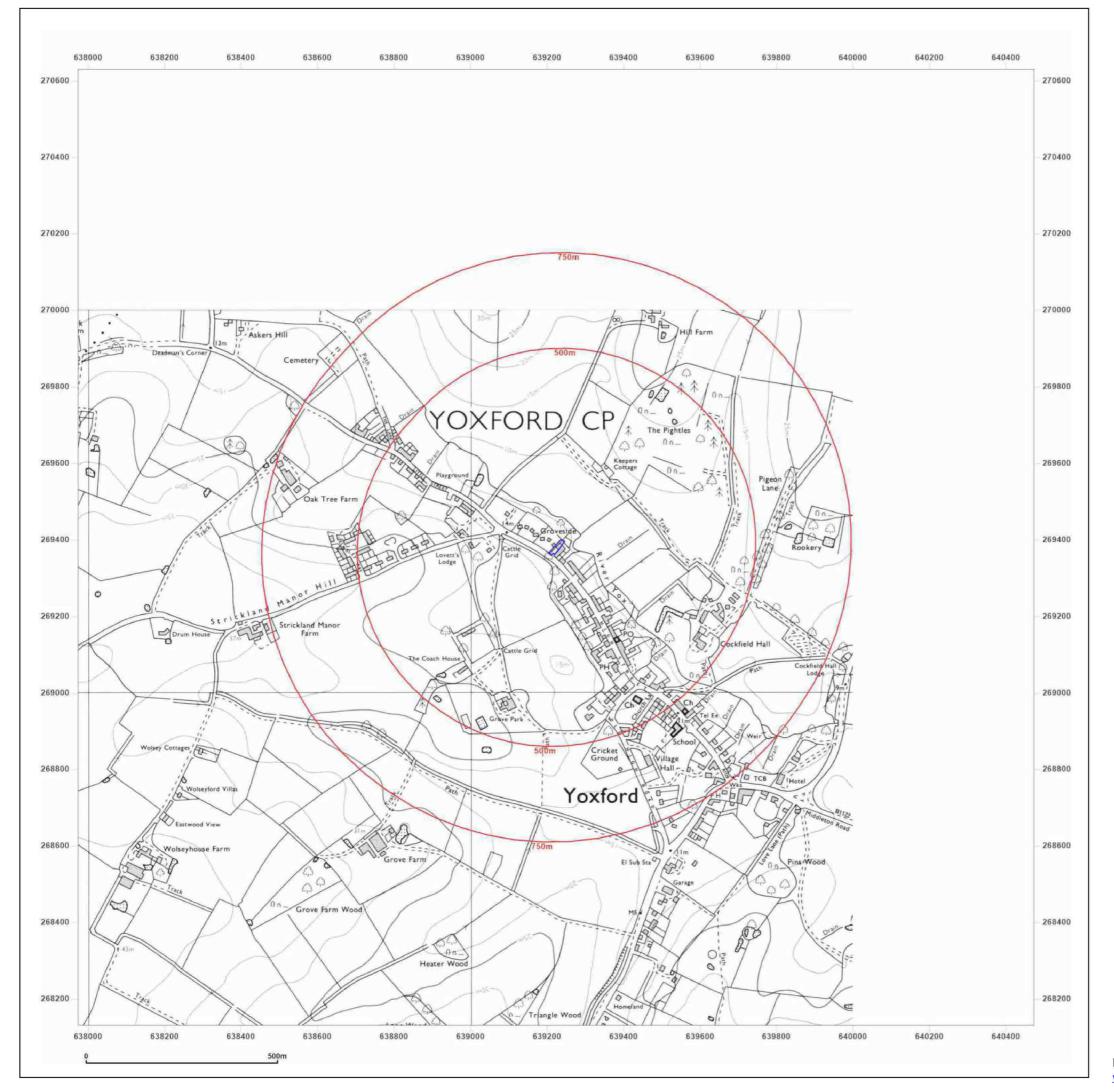




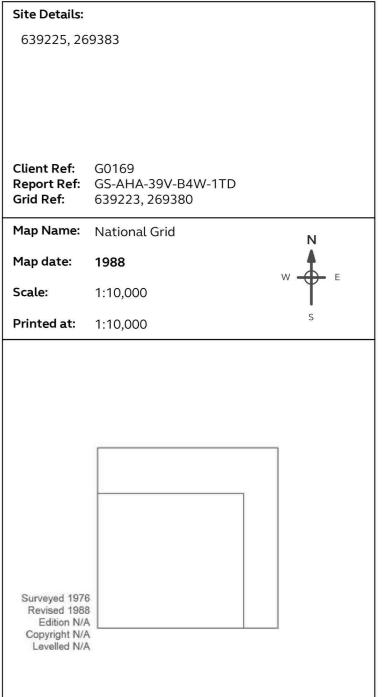
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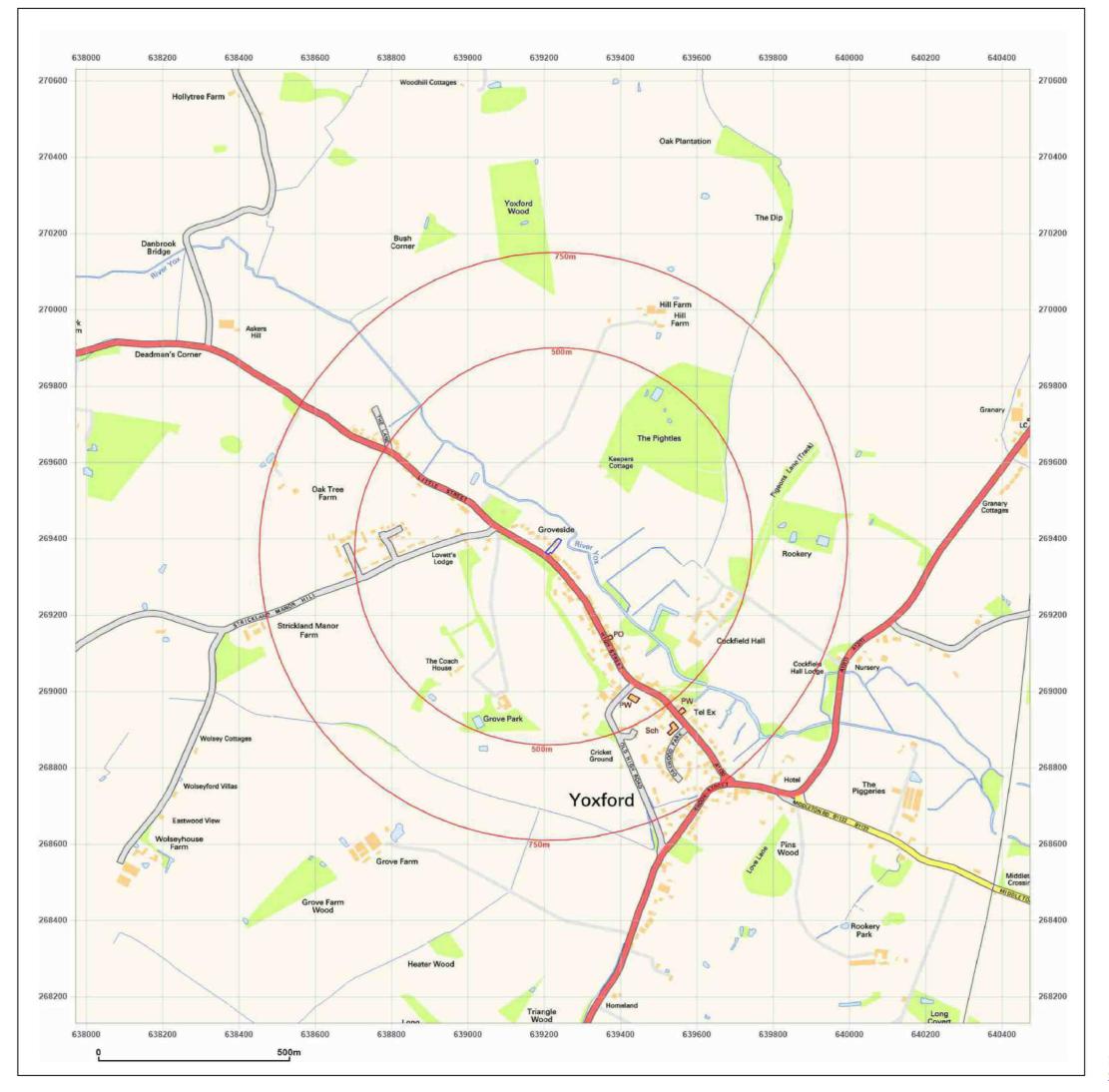




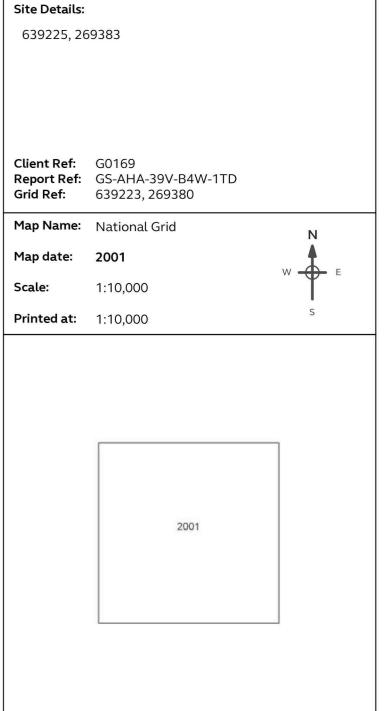
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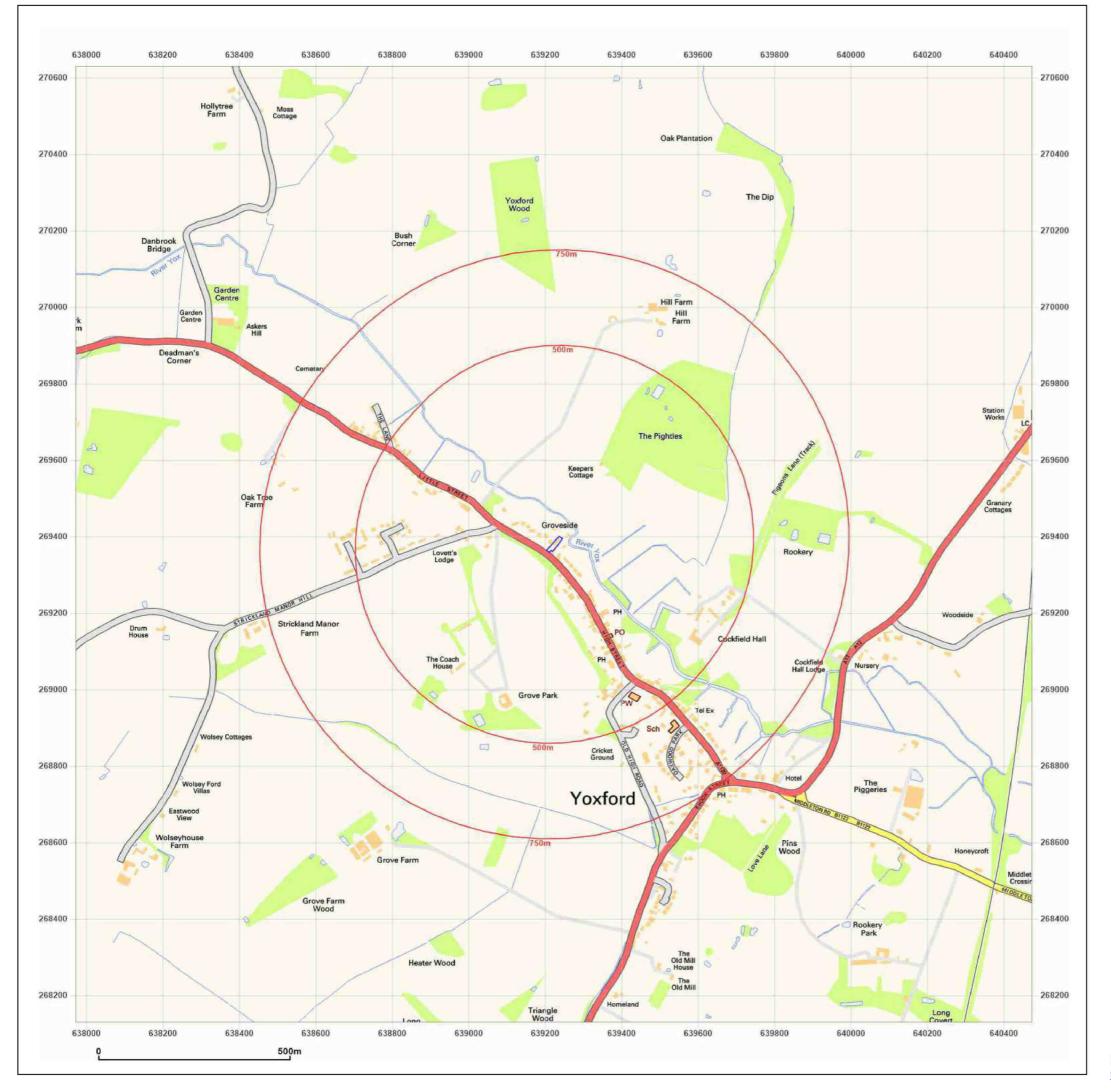




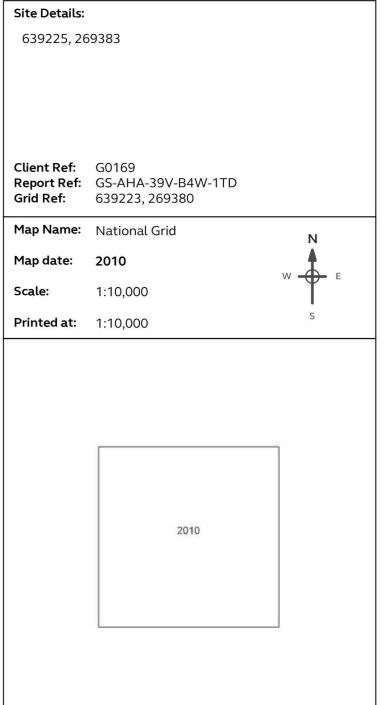
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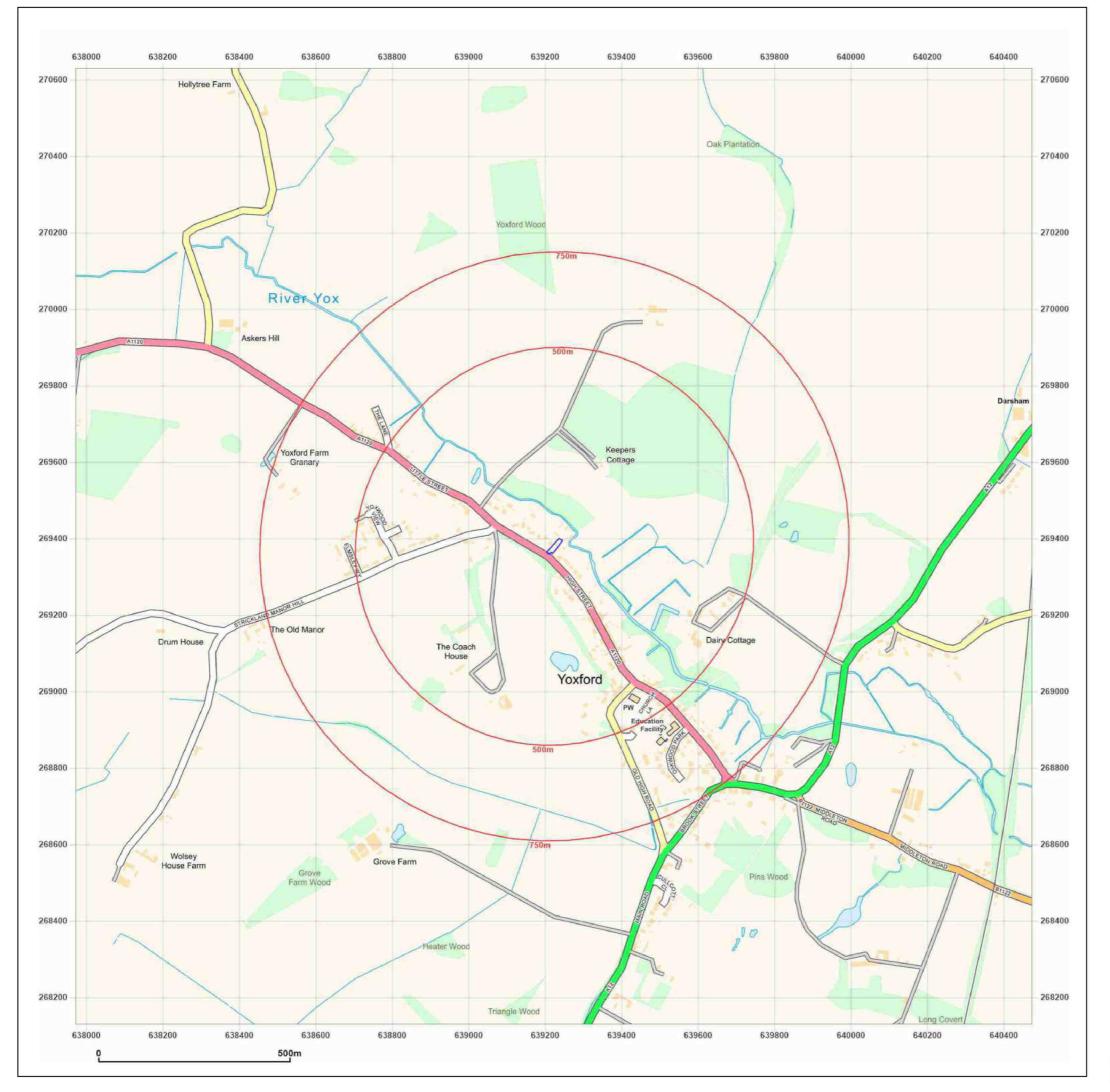




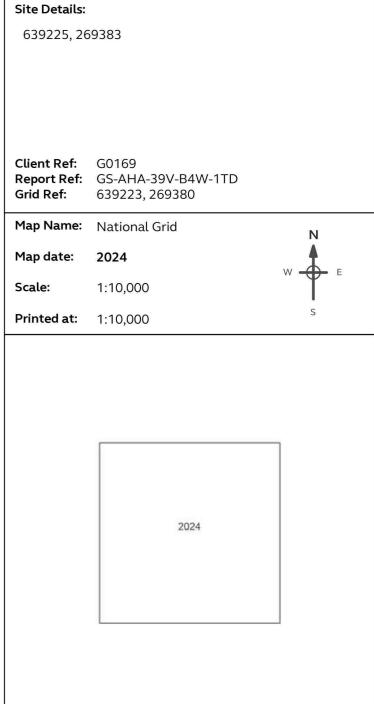
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