

Phase I Contaminated Land Assessment

Land East of 10 Gate Farm Road, Shotley, Suffolk, IP9 1QH

Commissioned By
Land Owner

29th July 2023 Report Reference: OES23-006WILK Oakridge Environmental Services Limited

CONTENTS

1. INTRODUCTION

- 1.1. Background
- 1.2. Brief
- 1.3. Scope of Work

2. DESK STUDY

- 2.1. Information Sources
- 2.2. Detailed Site Description
- 2.3. Geology
- 2.4. Hydrogeology and Hydrology
- 2.5. Environmental Search Data
- 2.6. Site History

3. SITE WALKOVER INSPECTION

4. CONCEPTUAL MODEL

- 4.1. Introduction
- 4.2. Source Of Contamination
- 4.3. Potential Pathways
- 4.4. Receptors
- 4.5. Plausible Relevant Pollution Linkage

5. CONCLUSIONS

6. RECOMMENDATIONS

APPENDICES

- APPENDIX 1 Report Limitations & Conditions
- APPENDIX 2 Site Plan
- APPENDIX 3 Groundsure Enviro + GeoInsight Report
- APPENDIX 4 Groundsure Historical Maps

1. INTRODUCTION

1.1. Background

Part IIA of the Environmental Protection Act 1990 (The Act) defines "contaminated land" as any land that appears to be in such a condition, by reason of substances in or under the land that significant harm is being caused or there is a significant possibility of significant harm being caused or pollution to controlled water is being or likely to be caused. The act defines The Act provides the regulatory framework for the identification and remediation of "contaminated Land".

Planning Policy Statement 23: Planning and Pollution Control stated that Land that is potentially affected by contamination is a material consideration for planning purposes.

The National Planning Policy Framework (NPPF) replaced Planning Policy Statement 23 amongst other planning guidance in March 2012. The current version of the NPPF was revised in July 2021.

Section 15 paragraph 174 requires contaminated land to be considered and remediated or mitigated at the planning stage. Additionally, the following 2 paragraphs deal directly with land contamination.

183. Planning policies and decisions should ensure that:

- a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation).
- b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and
- c) adequate site investigation information, prepared by a competent person, is available to inform these assessments.
- 184. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rest with the developer and/or landowner.

A potential developer will need to satisfy the local authority that unacceptable risk from contamination will be successfully addressed through remediation without undue environmental impact during and following the development. Land contamination risk management (LCRM), How to assess and manage the risks from land contamination produced by the Environment Agency replaced CLR11 and

provides the framework for applying a risk management process for dealing with land affected by contamination.

The NHBC, Environment Agency and the Chartered Institute of Environmental Health (CIEH) produced the 'Guidance for the Safe Development of Housing on Land Affected by Contamination R&D66:2008' to enable good practice in the application of the model procedures by all relevant parties.

Where an assessment of land that is or may be affected by contaminated land is required the guidance comprises a staged approach starting with a Stage I Preliminary Risk Assessment, followed by Tier II Risk Estimation and options appraisal Where the Stage I & 2 assessments determine the need for action Phase III involves Remediation, design and implementation with verification.

The assessment involves the identification of the Source – Pathway – Receptor and the identification of the relevant plausible pollution linkages. A conceptual model is created to identify the level of risk that a plausible relevant pollution linkage poses. Using the conceptual model, further investigation is planned and implemented to determine quantitative risk and where determined as necessary plan and implement remediation.

This risk assessment based on the current guidance described above, considers the land condition, proposed development, intermediate and end user of the site is considered appropriate for the assessment of this site.

1.2. Brief

Oakridge Environmental Services Limited have been instructed by the landowner to carry out a Phase I Contaminated Land Assessment of an existing site known as Land East of 10 Gate Farm Road, Shotley, Suffolk, IP9 1QH (Now referred to as 'the site').

I understand that that the site owner is applying for permission to build residential dwellings on the site and therefore introduces a more sensitive end user with this change of use.

The assessment comprises a desktop study and site walkover survey for the purpose of identifying potential sources of contamination on or in close proximity to the site and to determine if there is a pathway from the source to a sensitive receptor (relevant pollution linkage). The risk assessment will determine if further investigations are necessary to carry out generic and potentially detailed assessment of risk to human health or controlled waters.

This report is for the sole private and confidential use of the site owner for whom it was carried out for and for any appointed representatives such as. It should not be relied upon or reproduced in whole or part by any third party without the written

permission of Oakridge Environmental Services Limited. The author does not owe an unauthorised third party any duty of care or skill.

Limitations and conditions relating to the use of this report are detailed in APPENDIX 1 of this report.

1.3. Scope Of Work

The scope of work for this phase I contaminated land assessment is to collect and consider sufficient information regarding the site history, Geo environmental information including ground conditions and information on the local environment to create a 'Conceptual Model' to evaluate plausible relevant pollution linkages.

Where appropriate the report will make recommendations on the need for intrusive investigation, chemical sampling and any other analysis that may be required to confirm the condition of the site and whether or not the site poses a significant possibility of significant harm to human health or controlled waters.

2. DESK STUDY

2.1. Information Sources

The desk study is informed from the following sources.

- Groundsure Enviro + Geo Insight (APPENDIX 3)
- ➤ Groundsure Historical Maps 1886 2023 (APPENDIX 4)
- Google Earth Historical Ariel Photographs

2.2. Detailed Site Description

The site is approximately 0.43 ha in size located at grid reference 624716 234262.

The site is located on Gate Farm Road and is within Babergh District Council Authority.

The land is surrounded mainly by arable fields, with a large residential area directly to the east.

2.3. Geology

With reference to the Enviro + Geo Insight report the site is underlain with Kesgrave Catchment, Sand and Gravel offering a moderate to High permeability, over Thames Group silty clay (Eocene Epoch), offering high to very high permeability.

- There are no records of Artificial (worked) or made ground within 250m of the site.
- There are no records of geological faults within 2500m of the site.
- The site is not within a radon affected area.
- There are no records of Brit Pits and 2 records of historic surface ground workings within 500m of the site. These are listed as60m and 65m northwest of the site and labelled unspecified pits.
- There are no records of Extraction, mining or Natural cavities within 250m of the site.
- There are 3 boreholes recorded within 250m of the site. Borehole 1 is located at Shotley Gate Farm, 144m to the west. Borehole 2 is located 187m to the northwest and borehole 3 is 234m northwest of the site.

There are estimated ground chemistry records for the site including a 50m buffer zone. The results relate to rural soil on site and are shown in Table 1 below.

Table 1. Basic Soil Chemistry Records

Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
15mg/kg	1.8mg/kg	40-60 mg/kg	15mg/kg	100mg/kg

The above levels in table 1 are estimated background soil chemistry values and levels influenced by human activities such as industrial processes. The Levels for Cadmium, Chromium, Nickel and Lead are not at levels considered to pose a risk for land used for residential purposes (Based on Soil Guideline Values (SGV's from the Environment Agency and Generic Assessment Criteria produced by LQM/CIEH 3rd Edition). No further investigation of background soil chemistry is considered necessary for these parameters.

2.4. Hydrogeology and Hydrology

The Groundsure Enviro+Geo Insight search show that the site is located over a Secondary A aquifer within the superficial deposits which describes an aquifer as '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.

The site is located over an unproductive aquifer within the bedrock deposits. An unproductive aquifer describes 'rock layers or drift deposits with low permeability that have negligible significance for water supply or river flow.'

- There are no groundwater abstraction licenses within 250m of the site.
- There are no Surface Water Abstraction Licenses within 1000m of the site.
- There are no Potable Water Abstraction Licenses within 1000m of the site.
- The Environment Agency has designated no source protection zone within 500m of the site.
- The Environment Agency classifies the soil Leaching class as **HIGH**, Infiltration value: **70%**, Dilution value: **300mm/year**.
- The surface and river water features are listed in the Enviro+Geo insight report (APPENDIX 3). 1 feature is located on site or within 500m of the site. This is on site and is a coastal catchment, not part of a river WB catchment.

2.5. Environmental Search Data

The Groundsure Enviro + Geo Insight report attached in APPENDIX 3 has been reviewed to gain knowledge on publicly available environmental data on the site and the immediate vicinity around the site. The information includes public registers held by statutory agencies including the Local Authority and the Environment Agency.

Past Land Uses

There are no historical, industrial uses, tanks, energy features, petrol stations, garages or military uses listed as being onsite.

- There are 3 records of Historical Industrial land uses within 250m of the site. The nearest is located 60m to the northwest and listed as an unspecified pit. The other 2 are listed as unspecified commercial/industrial.
- There are no records of historical tanks within 250m of the site.
- There are 6 records of **historical energy features** within 250m of the site. All are listed as electricity substations, with the nearest being 84m to the west.
- There is 1 record of historical garages within 250m of the site. This is located 150m to the northwest.

Current Land Uses

There are no records of current or recent industrial land uses, petrol stations, sites determined as contaminated land, storage of chemicals or controlled substances, licensed pollutant releases, historical licensed industrial activities or pollutions incidents, on the site.

- There are 5 records of recent industrial land uses within 250m of the site.
 The nearest is an electricity substation located 87m to the west of the site.
- There are no current or **recent petrol station** within 250m of the site.
- There is no **licensed pollutant release** within 250m of the site.
- There is no licensed discharge to controlled waters within 250 m from the site.
- There are no list 2 dangerous substances shown as being stored within 250m from the site.
- There are no pollution incidents recorded by the Environment Agency within 250m of the site.

Landfill and Other Waste Sites

There are no records of active landfills or waste sites within 250m of the site.

- There are no records of a historical landfill (EA/NRW records) within 250m of the site.
- There are 3 records of waste exemptions within 250m from the site. These are all located 245m to the southeast and are listed as 'Disposing of waste exemption, not on a farm burning waste in the open'.

<u>Designated Environmentally Sensitive Sites</u>

The site is not in an officially designated environmentally sensitive area.

- The site is within a Nitrate Vulnerable Zone as recorded by DEFRA.
- The site is not listed as being within a SSSI Risk zone.

2.6. Site History

To determine whether there has been any previous land uses on the site that may be considered to be 'potentially contaminative' Oakridge Environmental Services Ltd have consulted historical and modern map extracts dating from 1886 to 2023. These maps are included in APPENDIX 4. Comments will generally be relating to the area within a 250m radius of the site as the impact with regards to potential contaminants on land further than 250m away are considered to be very low risk unless stated otherwise.

1875 County Series Map (1:10,560 & 1:2,500)

This map set is incomplete.

1881 – 1884 County Series Map (1:10,560 & 1:2,500)

The site is shown as within land parcel 354 and is within an agricultural area. Shotley Gate Farm and a small collection of residential buildings are to the northwest and Bricker's House is to the southwest.

The river Orwell is approximately 750m to the east, and the river Stour to the south.

1889 County Series Map (1;10,560)

This map set is incomplete.

1904 County Series Map (1:10,560 & 1:2,500)

There are no apparent significant changes to the site, or the surrounding area shown on this map layer.

1905 County Series Map (1:10,560)

This map set is incomplete.

1925 to 1926 County Series Map (1:10,560 &1:2,500)

There is an increase in buildings in the residential area to the northwest of the site. An area to the southwest of the site is now a small residential area. There is a collection of approximately 10 large rectangular buildings 250m to the southeast of the site. These buildings were part of the former HMS Ganges, Royal Naval Training Establishment.

1928 County Series Maps (1:10,560)

The Royal Naval Training Establishment, HMS Ganges has increased in size, with an addition of many buildings.

1938 County Series Maps (1:10,560)

This map set is incomplete.

1955 National Grid Map (1:2,500)

The village of Shotley gate has an increased in size, with an addition of approximately 40 residential buildings.

1958 Provisional Map (1:10560)

The residential area in Shotley Gate has increase in size.

1970-1977 National Grid Map (1:10,000 & 1:2,500)

There is a new collection of approximately 20 residential buildings directly to the west of the site.

1983-1989 National Grid Map (1: 1,250 & 1:10,000)

There are no apparent significant changes to the site, or the surrounding area shown on this map layer. This map set is incomplete.

1989-1990 National Grid Map (1:10,000)

The buildings at HMS Ganges are gone.

1994 National Grid Map (1:2,500)

There are no apparent significant changes to the site, or the surrounding area shown on this map layer.

2001 National Grid Map (1:10,000)

There are no identifiable significant changes to the site, or the surrounding area shown on this map layer.

2003 Landline Map (1:1,250)

There are no apparent significant changes to the site, or the surrounding area shown on this map layer.

2010 National Grid Map (1:10,000)

There are no identifiable significant changes to the site, or the surrounding area shown on this map layer.

2023 National Grid Map (1:10,000)

There are no identifiable significant changes to the site, or the surrounding area shown on this map layer.

Google Earth

It can be seen from, the ariel photos that the site has been the side garden of a residential property. The land to the northeast is known as Shotley country park. In 2022 this is now a residential park homes site.





The 2022 picture also shows land investigations for a large residential development on the arable field to the southern border and the former HMS Ganges site further afield.

There are no other significant changes on or in the vicinity of the site that would indicate a potential source of contamination that is likely to impact the site.

Photo 2- 2022 Google Earth Ariel photograph



3. SITE WALKOVER INSPECTION

A site walkover inspection was carried out on the 25th July 2023.

The site is located at the end of Gate Farm Road forming part of the amenity land for 10 Gate Farm Road. Tha site itself is primarily managed grass with as few trees and shrubs. The land is bordered on the Norther and East by Well-kept hedges. The Southern border is a continuation of the amenity land with more trees and some large domestic outbuildings and some stored gardening equipment such as ride on lawnmower. The western boundary is open to front garden, house and driveway for the residential dwelling.

Photo 3 – View from Western Boundary



The site is on the edge of low-density residential dwellings to the west and no commercial uses border are located near to the site.

An arable field id located to the east which extends to the River Orwell Estuary

Directly to the south is the further amenity space for the residential dwelling beyond which is a former arable field and the former HMS Ganges which is now a residential housing development.





There are no signs of potential contamination on or off site. All vegetative growth looks healthy.

4. CONCEPTUAL MODEL

4.1. Introduction

A 'Conceptual Model' is used to assess the potential level of risk to human receptors and controlled waters. It represents the relationship between contaminant sources, pathways and receptors to identify and assess plausible relevant pollutant linkages.

The model is central to the risk assessment process and although formulated during the initial phase of any contaminated land assessment or investigation it is subject to change as information is discovered and the understanding of the site takes shape.

There are four considerations to the conceptual model which form the basis to determine the level of risk.

Source of contamination refers to any identified substance resulting from current or historic uses of the land or the surrounding area or an incident which may have a negative impact on surface or sub-surface soils or the groundwater.

Pathway refers to the method by which an identified potential contaminant can migrate between the source and an identified receptor.

Receptor refers to human, flora, fauna, groundwater, surface water, building or structure.

Pollutant Linkage refers to where there is plausible pathway to 'link' an identified source to a receptor.

4.2. Sources(s) of Contamination

A review of available information gathered from the search data, historical maps, local knowledge and the site walkover inspection of the site identifies that historical and current use of the site are not likely to have caused potential contamination of the site. The desk study and walkover has confirmed that the site has never been built on and is undisturbed land.

There are **no significant identified sources of potential contamination** on the site or near enough to the site to pose a plausible risk of pollution linkages being present.

4.3. Receptors

Potential receptors for the site have been identified based on the identification of potential on-site sources of contamination.

- Future occupants People living in the new dwellings could be affected by exposure to the potential sources of contamination within the soil.
- Construction workers –Excavating footings, laying services below ground may be exposed to contaminants if they are present within soil on site.
- Water supply pipes

4.4. Potential Pathways

The potential pathways for the potential sources of contamination identified are.

- Construction workers may be exposed to contaminants by dermal contact/absorption (through skin or open wounds, ingestion or inhalation of dust or soils during excavation works on onsite).
- Future occupants may be exposed to contaminants Dermal absorption, Inhalation or ingestion of soils/dust.
- Future Occupants may grow their own fruit or vegetables in their gardens posing a risk of plant uptake of contaminants.

• Drinking Water Supply Pipes

4.5. Plausible Relevant Pollutant Linkages

The relevant pollutant linkages are identified via the conceptual model in Table 2. The level of risk is informed by information in the desk study and observations during the site walkover inspection.

Table 2: Conceptual Model

Source(s)	Pathway	Receptor	Risk
NONE	Ingestion of soil/dustInhalationDermal Contact	Construction Workers	NIL
	 Ingestion of soil/dust Inhalation Dermal Contact Home grown produce 	Future occupants	NIL
	Ingress into water supply pipes	Underground Services	NIL
	Ingestion	Future Occupants	

5. CONCLUSIONS

There is no evidence from the desk study and site walkover to suggest that previous activities on or off the site have created a source of contamination. Additionally, there is no evidence of a pollution incident on the site, or off site that may have posed a risk to the site.

The site walkover survey was carried out and visual inspection of the land showed no signs of potential contamination not otherwise identified in the desk top searches.

I do not consider that further investigation into the potential existence of historic contaminants is necessary.

Therefore, the risk is considered Nil, and it is not considered likely that significant potential of significant harm exists.

Potential contamination should not therefore be considered as a material concern for refusing the planning application for the development of residential dwellings.

Therefore, following development, the site is not likely to be determined as contaminated land under Part IIA of the Environmental Protection Act 1990 as required by the NPPF.

6. RECOMMENDATIONS

The conclusions of the Phase I contaminated land assessment based on the known data at the time of writing this report identify that there is unlikely to be a plausible pollution linkage that would make the site unsuitable for a change of use to residential dwellings.

As with any development watching brief should also be adhered to in case unexpected ground conditions are encountered during development .

The following recommendations are therefore made.

 It is recommended that during the site clearance and ground works of any future development, care should be taken to watch for the presence of any contaminants that have not been previously identified and if any suspected contaminants are discovered further guidance should be sought from an Environmental Consultant before works in those areas continue.

This report should be submitted to the Local Planning Authority as part of any planning application for Outline planning permission for residential dwellings.

Prepared By

Chris Cornish BSc (Hons) MCIEH

29th July 2023

APPENDIX 1 – Report Limitations and Conditions

Information was obtained, reviewed and evaluated in preparing this Report from Groundsure Ltd and other named third parties. Our conclusions, opinions and recommendations are based upon this information and the information obtained during the Site walkover. The Consultant preparing this report does not warrant the accuracy of the information provided and will not be responsible for any opinions expressed, or conclusions reached in reliance upon information which is subsequently proven to be inaccurate. No independent validation of such information has been made by Oakridge Environmental Services Limited.

The conclusion and recommendations contained in this Report represent the author's professional opinions. These opinions were given in accordance with currently accepted Government and Industry Guidance in England and Wales at the time of the investigation and publication, as such this report and the opinions within are not a guarantee that this site is free of contamination, hazardous or potentially hazardous materials or conditions. There can be no warranty against the possibility of future changes to the condition of the site, either above or below ground.

The report and the recommendations contained within is limited to the aspects of land contamination specifically reported on and is necessarily qualified accordingly, no liability shall be accepted by Oakridge Environmental Services Limited for other unidentified and unforeseen aspects which may be the result of gradual or sudden pollution incidents, past or present unrecorded land uses both on- and off-site and the potential for associated contaminant migration. The opinions expressed cannot be absolute due to the limitations of the investigation as stated in the report as well as time and resources imposed by the agreed brief.

The conclusions and any recommendations made in this Report are limited to those that can be made on the basis of the investigation carried out as described in the report. The results of this report should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, gas or groundwater samples tested; no liability can be accepted for information in other data sources or conditions not revealed by the information sources, sampling or testing.

This Report was prepared for the sole and exclusive use of the Land Owner and Appointed agents and for the specific purpose instructed as defined in Section 1 of this report. Use of the Report by any other person is unauthorised and such use is at the risk of the site owner.

This report is written for the purpose stated within; it should not be used for any other purposes without consultation with Oakridge Environmental Services Limited. The professional opinion given in this report has been prepared in relation to the proposed end-use. Should another end-use be intended at any time, re-assessment may be required. It is important to note that that over time practises will improve and the relevant guidance and legislation will be amended or superseded, which may necessitate a re-assessment of the site.

APPENDIX 2 - Site Plans



APPENDIX 3 - Groundsure Enviro+GeoInsight Report

Page Left Blank Intentionally





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Order Details

Date: 25/07/2023

Your ref: OES23-006WILK

Our Ref: HMD-59Q-TFU-GUA-NWD

Site Details

Location: 624716 234262

Area: 0.43 ha

Authority: Babergh District Council *↗*



Summary of findings

<u>p. 2</u> > Aerial image

p. 9 >

OS MasterMap site plan

p.14 > groundsure.com/insightuserguide ↗



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	3	6	-
<u>16</u> >	<u>1.2</u> >	<u>Historical tanks</u> >	0	0	0	9	-
<u>17</u> >	<u>1.3</u> >	<u>Historical energy features</u> >	0	0	6	18	-
18	1.4	Historical petrol stations	0	0	0	0	-
<u>18</u> >	<u>1.5</u> >	<u>Historical garages</u> >	0	0	1	1	-
19	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
<u>20</u> >	<u>2.1</u> >	<u>Historical industrial land uses</u> >	0	0	4	9	-
<u>21</u> >	<u>2.2</u> >	<u>Historical tanks</u> >	0	0	0	13	-
<u>22</u> >	<u>2.3</u> >	<u>Historical energy features</u> >	0	0	13	25	-
23	2.4	Historical petrol stations	0	0	0	0	-
<u>24</u> >	<u>2.5</u> >	Historical garages >	0	0	2	2	-
-							
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
Page 25	Section 3.1	Waste and landfill > Active or recent landfill	On site	0-50m 0	50-250m 0	250-500m 0	500-2000m -
							500-2000m - -
25	3.1	Active or recent landfill	0	0	0	0	500-2000m - -
25 25	3.1	Active or recent landfill Historical landfill (BGS records)	0	0	0	0	
25 25 26	3.1 3.2 3.3	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records)	0 0	0 0	0 0	0 0	
25 25 26 26	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	0 0 0	0 0 0	
25 25 26 26 26	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 0	0 0 0 0	
25 25 26 26 26 26	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 0 0 0 0	500-2000m 500-2000m
25 25 26 26 26 26 26	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 0	- - - -
25 25 26 26 26 26 26 27 26 28 29 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 3	0 0 0 0 0	- - - -
25 25 26 26 26 26 26 27 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 3 50-250m	0 0 0 0 0 0 250-500m	- - - -
25 25 26 26 26 26 26 26 > Page 28 >	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 0 On site	0 0 0 0 0 0 0-50m	0 0 0 0 0 3 50-250m	0 0 0 0 0 0 250-500m	- - - -





30	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
30	4.7	Regulated explosive sites	0	0	0	0	-
30	4.8	Hazardous substance storage/usage	0	0	0	0	-
30	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
30	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
31	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
31	4.12	Radioactive Substance Authorisations	0	0	0	0	-
31	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
31	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
31	4.15	Pollutant release to public sewer	0	0	0	0	-
32	4.16	List 1 Dangerous Substances	0	0	0	0	-
32	4.17	List 2 Dangerous Substances	0	0	0	0	-
<u>32</u> >	<u>4.18</u> >	Pollution Incidents (EA/NRW) >	0	0	0	1	-
32	4.19	Pollution inventory substances	0	0	0	0	-
33	4.20	Pollution inventory waste transfers	0	0	0	0	-
33	4.21	Pollution inventory radioactive waste	0	0	0	0	
33 Page	4.21 Section	Pollution inventory radioactive waste Hydrogeology >	On site	0 0-50m	0 50-250m	0 250-500m	500-2000m
		·	On site		50-250m		500-2000m
Page	Section	<u>Hydrogeology</u> >	On site	0-50m	50-250m		500-2000m
Page 34 >	Section <u>5.1</u> >	Hydrogeology > Superficial aquifer >	On site Identified (0-50m within 500m	50-250m		- 500-2000m
Page <u>34</u> > <u>36</u> >	Section 5.1 > 5.2 >	Hydrogeology > Superficial aquifer > Bedrock aquifer >	On site Identified (0-50m within 500m within 500m within 50m)	50-250m		- 500-2000m
Page 34 > 36 > 38 >	Section <u>5.1</u> > <u>5.2</u> > <u>5.3</u> >	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability >	On site Identified (Identified (0-50m within 500m within 500m within 50m) in 0m)	50-250m		500-2000m
Page 34 > 36 > 38 > 39	Section 5.1 > 5.2 > 5.3 > 5.4	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability - soluble rock risk	On site Identified (Identified (Identified (None (with	0-50m within 500m within 500m within 50m) in 0m)	50-250m		500-2000m
Page 34 > 36 > 38 > 39 39	Section 5.1 > 5.2 > 5.3 > 5.4 5.5	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk Groundwater vulnerability- local information	On site Identified (Identified (Identified (None (with	0-50m within 500m within 500m within 50m) in 0m)	50-250m)	250-500m	
Page 34 > 36 > 38 > 39 39 40	Section 5.1 > 5.2 > 5.3 > 5.4 5.5 5.6	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk Groundwater vulnerability- local information Groundwater abstractions	On site Identified (Identified (Identified (None (with None (with	0-50m within 500m within 500m within 50m) in 0m) in 0m)	50-250m))	250-500m	0
Page 34 > 36 > 38 > 39 40 41 >	Section 5.1 > 5.2 > 5.3 > 5.4 5.5 5.6 5.7 >	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk Groundwater vulnerability- local information Groundwater abstractions Surface water abstractions >	On site Identified (Identified (Identified (None (with None (with 0	0-50m within 500m within 500m within 50m) in 0m) 0 0	50-250m)) 0 0	250-500m 0	0 2
Page 34 > 36 > 38 > 39 40 41 >	Section 5.1 > 5.2 > 5.3 > 5.4 5.5 5.6 5.7 > 5.8	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk Groundwater vulnerability- local information Groundwater abstractions Surface water abstractions > Potable abstractions	On site Identified (Identified (Identified (None (with None (with 0 0 0	0-50m within 500m within 500m in 0m) in 0m) 0 0	50-250m)) 0 0	250-500m 0 0	0 2
Page 34 > 36 > 38 > 39 40 41 > 41 42	Section 5.1 > 5.2 > 5.3 > 5.4 5.5 5.6 5.7 > 5.8 5.9	Hydrogeology > Superficial aquifer > Bedrock aquifer > Groundwater vulnerability > Groundwater vulnerability- soluble rock risk Groundwater vulnerability- local information Groundwater abstractions Surface water abstractions > Potable abstractions Source Protection Zones	On site Identified (Identified (Identified (None (with None (with 0 0 0 0	0-50m within 500m within 500m in 0m) 0 0 0	50-250m)) 0 0 0 0	250-500m 0 0 0	0 2



Date: 25 July 2023



<u>44</u> >	<u>6.2</u> >	<u>Surface water features</u> >	0	0	1	-	-
<u>44</u> >	<u>6.3</u> >	WFD Surface water body catchments >	1	-	-	-	-
44	6.4	WFD Surface water bodies	0	0	0	-	-
<u>45</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
46	7.1	Risk of flooding from rivers and the sea	None (with	in 50m)			
46	7.2	Historical Flood Events	0	0	0	-	-
46	7.3	Flood Defences	0	0	0	-	-
47	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
47	7.5	Flood Storage Areas	0	0	0	-	-
48	7.6	Flood Zone 2	None (with	in 50m)			
48	7.7	Flood Zone 3	None (with	in 50m)			
Page	Section	Surface water flooding >					
<u>49</u> >	<u>8.1</u> >	Surface water flooding >	1 in 100 ye	ar, 0.3m - 1.0	m (within 5	0m)	
Page	Section	Groundwater flooding >					
Page 51 >	Section <u>9.1</u> >	Groundwater flooding > Groundwater flooding >	Moderate ((within 50m)			
			Moderate ((within 50m) _{0-50m}	50-250m	250-500m	500-2000m
<u>51</u> >	<u>9.1</u> >	Groundwater flooding >				250-500m	500-2000m
<u>51</u> >	<u>9.1</u> >	Groundwater flooding > Environmental designations >	On site	0-50m	50-250m		
<u>51</u> > Page <u>52</u> >	9.1 > Section 10.1 >	Groundwater flooding > Environmental designations > Sites of Special Scientific Interest (SSSI) >	On site	0-50m	50-250m 0	1	2
51 > Page 52 > 53 >	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	50-250m 0 0	1	2
51 > Page 52 > 53 >	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	50-250m 0 0	1 1 0	2 2 0
51 > Page 52 > 53 > 54 55 >	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	50-250m 0 0 0	1 1 0 4	2 2 0 3
51 > Page 52 > 53 > 54 55 >	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) > National Nature Reserves (NNR)	On site 0 0 0 0 0	0-50m 0 0 0	50-250m 0 0 0 0	1 1 0 4	2 2 0 3
51 > Page 52 > 53 > 54 55 > 57	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	50-250m 0 0 0 0 0	1 1 0 4 0	2 2 0 3 0
51 > Page 52 > 53 > 54 55 > 57 57	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	0-50m 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 0	1 1 0 4 0 0	2 2 0 3 0 0
51 > Page 52 > 53 > 54 > 57 > 57 > 57 >	9.1 > Section 10.1 > 10.2 > 10.3 10.4 > 10.5 10.6 10.7 > 10.8	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	50-250m 0 0 0 0 0 0 0 0 0	1 1 0 4 0 0	2 2 0 3 0 0 2
51 > Page 52 > 53 > 54 55 > 57 57 > 57 > 58	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	0-50m 0 0 0 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 0 0 0 0 0	1 1 0 4 0 0 0	2 2 0 3 0 0 2 0





58	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
59	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
59	10.15	Nitrate Sensitive Areas	0	0	0	0	0
<u>59</u> >	<u>10.16</u> >	Nitrate Vulnerable Zones >	1	0	0	0	11
<u>61</u> >	<u>10.17</u> >	SSSI Impact Risk Zones >	1	-	-	-	-
<u>62</u> >	<u>10.18</u> >	SSSI Units >	0	0	0	2	9
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
69	11.1	World Heritage Sites	0	0	0	-	-
<u>70</u> >	<u>11.2</u> >	Area of Outstanding Natural Beauty >	1	1	0	-	-
70	11.3	National Parks	0	0	0	-	-
70	11.4	Listed Buildings	0	0	0	-	-
<u>71</u> >	<u>11.5</u> >	Conservation Areas >	0	1	0	-	-
71	11.6	Scheduled Ancient Monuments	0	0	0	-	-
71	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>72</u> >	<u>12.1</u> >	<u>Agricultural Land Classification</u> >	Grade 3 (w	ithin 250m)			
73	12.2	Open Access Land	0	0	0	-	-
73	12.3	Tree Felling Licences	0	0	0	-	-
73	12.4	Environmental Stewardship Schemes	0	0	0	-	-
<u>74</u> >	<u>12.5</u> >	Countryside Stewardship Schemes >	1	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>75</u> >	<u>13.1</u> >	Priority Habitat Inventory >	0	1	1	-	-
<u>76</u> >	<u>13.2</u> >	<u>Habitat Networks</u> >	1	0	1	-	-
<u>76</u> >	<u>13.3</u> >	Open Mosaic Habitat >	0	0	1	-	-
76	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
<u>78</u> >	<u>14.1</u> >	10k Availability >	Identified (within 500m)		
<u>79</u> >	<u>14.2</u> >	Artificial and made ground (10k) >	0	0	0	2	-
<u>80</u> >	<u>14.3</u> >	Superficial geology (10k) >	1	0	0	2	-



Date: 25 July 2023



81	14.4	Landslip (10k)	0	0	0	0	-
<u>82</u> >	<u>14.5</u> >	Bedrock geology (10k) >	1	0	1	1	-
83	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>84</u> >	<u>15.1</u> >	50k Availability >	Identified (within 500m)	•	
<u>85</u> >	<u>15.2</u> >	Artificial and made ground (50k) >	0	0	0	2	-
86	15.3	Artificial ground permeability (50k)	0	0	-	-	-
<u>87</u> >	<u>15.4</u> >	Superficial geology (50k) >	1	0	0	1	-
<u>88</u> >	<u>15.5</u> >	Superficial permeability (50k) >	Identified (within 50m)			
88	15.6	Landslip (50k)	0	0	0	0	-
88	15.7	Landslip permeability (50k)	None (with	in 50m)			
<u>89</u> >	<u>15.8</u> >	Bedrock geology (50k) >	1	0	0	1	-
<u>90</u> >	<u>15.9</u> >	Bedrock permeability (50k) >	Identified (within 50m)			
90	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
<u>91</u> >	<u>16.1</u> >	BGS Boreholes >	0	0	3	-	-
Page	Section	Natural ground subsidence >					
<u>93</u> >	<u>17.1</u> >	Shrink swell clays >	Moderate (within 50m)			
94 >	<u>17.2</u> >	Running sands >	Very low (w	vithin 50m)			
<u>96</u> >	<u>17.3</u> >	Compressible deposits >	Negligible (within 50m)			
<u>97</u> >	<u>17.4</u> >	Collapsible deposits >	Very low (w	vithin 50m)			
<u>98</u> >	<u>17.5</u> >	<u>Landslides</u> >	Very low (w	vithin 50m)			
<u>99</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
101	18.1	BritPits	0	0	0	0	-
<u>102</u> >	<u>18.2</u> >	Surface ground workings >	0	0	2	-	-
102	18.3	Underground workings	0	0	0	0	0
102	18.4	Underground mining extents	0	0	0	0	-
102	18.5	Historical Mineral Planning Areas	0	0	0	0	-





103	18.6	Non-coal mining	0	0	0	0	0
103	18.7	JPB mining areas	None (with	in 0m)			
103	18.8	The Coal Authority non-coal mining	0	0	0	0	-
103	18.9	Researched mining	0	0	0	0	-
104	18.10	Mining record office plans	0	0	0	0	-
104	18.11	BGS mine plans	0	0	0	0	-
104	18.12	Coal mining	None (with	in 0m)			
104	18.13	Brine areas	None (with	in 0m)			
104	18.14	Gypsum areas	None (with	in 0m)			
105	18.15	Tin mining	None (with	in 0m)			
105	18.16	Clay mining	None (with	in 0m)			
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
106	19.1	Natural cavities	0	0	0	0	-
106	19.2	Mining cavities	0	0	0	0	0
106	19.3	Reported recent incidents	0	0	0	0	-
106	19.4	Historical incidents	0	0	0	0	-
107	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
<u>108</u> >	<u>20.1</u> >	Radon >	Less than 1	% (within 0r	n)		
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
<u>110</u> >	<u>21.1</u> >	BGS Estimated Background Soil Chemistry >	1	1	-	-	-
110	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
110	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
111	22.1	Underground railways (London)	0	0	0	-	-
111	22.2	Underground railways (Non-London)	0	0	0	-	-
111	22.3	Railway tunnels	0	0	0	-	-
111	22.4	Historical railway and tunnel features	0	0	0	-	-
111	22.5	Royal Mail tunnels	0	0	0	-	-





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

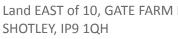
Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

112	22.6	Historical railways	0	0	0	-	-
112	22.7	Railways	0	0	0	-	-
112	22.8	Crossrail 1	0	0	0	0	-
112	22.9	Crossrail 2	0	0	0	0	-
112	22.10	HS2	0	0	0	0	-



Date: 25 July 2023





Recent aerial photograph

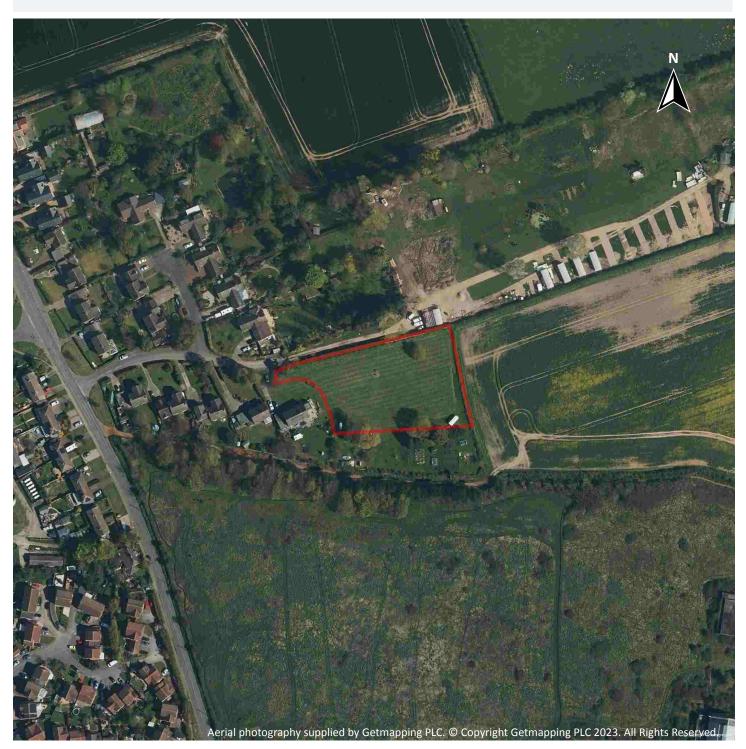


Capture Date: 04/07/2019





Recent site history - 2016 aerial photograph



Capture Date: 05/05/2016





Recent site history - 2009 aerial photograph



Capture Date: 24/05/2009





Recent site history - 2008 aerial photograph



Capture Date: 15/08/2008

Site Area: 0.43ha



Date: 25 July 2023



Recent site history - 1999 aerial photograph

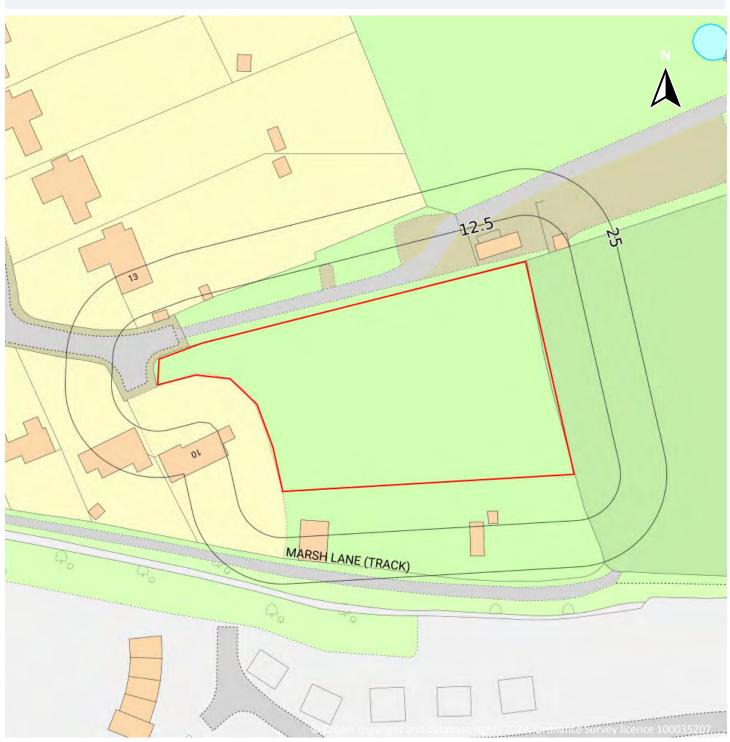


Capture Date: 26/06/1999





OS MasterMap site plan



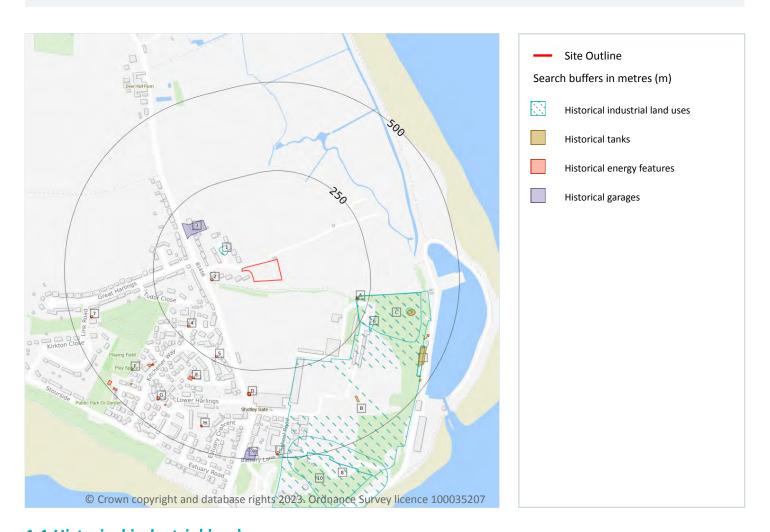
Site Area: 0.43ha



01273 257 755



1 Past land use



1.1 Historical industrial land uses

Records within 500m 9

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

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

ID	Location	Land use	Dates present	Group ID
1	60m NW	Unspecified Pit	1904 - 1925	2332395





ID	Location	Land use	Dates present	Group ID
В	215m E	Unspecified Commercial/Industrial	1928	2325874
С	217m E	Unspecified Commercial/Industrial	1938	2338939
6	275m SE	Unspecified Ground Workings	1904	2318237
С	360m E	Unspecified Tank	1928 - 1938	2327879
I	434m SE	Septic Tanks	1938	2339237
I	434m SE	Septic Tanks	1928	2335143
8	445m S	Hospital	1904 - 1925	2342802
10	491m S	Unspecified Commercial/Industrial	1938	2326850

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m 9

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 ungrouped 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
С	365m E	Unspecified Tank	1926 - 1955	420107
В	388m SE	Unspecified Tank	1955	416747
F	411m SW	Unspecified Tank	1955 - 1968	420385
1	432m SE	Unspecified Tank	1926	416716
1	434m SE	Septic Tanks	1926 - 1955	421116
1	437m E	Unspecified Tank	1955	416715
F	443m SW	Unspecified Tank	1955 - 1968	418044
I	471m SE	Tanks	1955	417576
ı	478m SE	Tanks	1955	417574

This data is sourced from Ordnance Survey / Groundsure.



Date: 25 July 2023



1.3 Historical energy features

Records within 500m 24

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 ungrouped 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 >

2 84m W Electricity Substation 1975 - 1994 299394 4 211m SW Electricity Substation 1988 - 1994 298325 A 214m E Electricity Substations 1988 - 1994 299277 A 217m E Electricity Substation 1955 - 1975 297855 A 232m E Electricity Substation 1955 - 1975 299169 5 233m SW Electricity Substation 1988 - 1994 297357 D 312m S Electricity Substation 1994 299721 E 317m SW Electricity Substation 1994 296425 E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 H 430m S Electricity Substation 1989 296424 H 431m SW </th <th>ID</th> <th>Location</th> <th>Land use</th> <th>Dates present</th> <th>Group ID</th>	ID	Location	Land use	Dates present	Group ID
A 214m E Electricity Substations 1988 - 1994 299277 A 217m E Electricity Substation 1955 - 1975 297855 A 232m E Electricity Substation 1955 - 1975 299169 5 233m SW Electricity Substation 1988 - 1994 297357 D 312m S Electricity Substation 1994 299721 E 317m SW Electricity Substation 1994 296425 E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S	2	84m W	Electricity Substation	1975 - 1994	299394
A 217m E Electricity Substation 1955 - 1975 297855 A 232m E Electricity Substation 1955 - 1975 299169 5 233m SW Electricity Substation 1988 - 1994 297357 D 312m S Electricity Substation 1955 - 1989 300017 D 313m S Electricity Substation 1994 299721 E 317m SW Electricity Substation 1994 296425 E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	4	211m SW	Electricity Substation	1988 - 1994	298325
A 232m E Electricity Substation 1955 - 1975 299169 5 233m SW Electricity Substation 1988 - 1994 297357 D 312m S Electricity Substation 1995 - 1989 300017 D 313m S Electricity Substation 1994 299721 E 317m SW Electricity Substation 1994 296425 E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	Α	214m E	Electricity Substations	1988 - 1994	299277
5 233m SW Electricity Substation 1988 - 1994 297357 D 312m S Electricity Substation 1955 - 1989 300017 D 313m S Electricity Substation 1994 299721 E 317m SW Electricity Substation 1994 296425 E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1989 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	Α	217m E	Electricity Substation	1955 - 1975	297855
D 312m S Electricity Substation 1955 - 1989 300017 D 313m S Electricity Substation 1994 299721 E 317m SW Electricity Substation 1994 296425 E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1989 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1989 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	Α	232m E	Electricity Substation	1955 - 1975	299169
D 313m S Electricity Substation 1994 299721 E 317m SW Electricity Substation 1994 296425 E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	5	233m SW	Electricity Substation	1988 - 1994	297357
E 317m SW Electricity Substation 1994 296425 E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	D	312m S	Electricity Substation	1955 - 1989	300017
E 320m SW Electricity Substation 1989 296426 F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	D	313m S	Electricity Substation	1994	299721
F 361m SW Electricity Substation 1988 - 1994 299140 F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	Е	317m SW	Electricity Substation	1994	296425
F 363m SW Electricity Substation 1989 297612 F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	Е	320m SW	Electricity Substation	1989	296426
F 366m SW Electricity Substation 1994 297752 G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	F	361m SW	Electricity Substation	1988 - 1994	299140
G 420m SW Electricity Substation 1994 296423 G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	F	363m SW	Electricity Substation	1989	297612
G 426m SW Electricity Substation 1989 296424 H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	F	366m SW	Electricity Substation	1994	297752
H 430m S Electricity Substation 1955 - 1968 297026 H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	G	420m SW	Electricity Substation	1994	296423
H 431m SW Electricity Substation 1989 298587 H 432m S Electricity Substation 1994 298452	G	426m SW	Electricity Substation	1989	296424
H 432m S Electricity Substation 1994 298452	Н	430m S	Electricity Substation	1955 - 1968	297026
	Н	431m SW	Electricity Substation	1989	298587
I 437m E Electricity Substation 1961 - 1997 296964	Н	432m S	Electricity Substation	1994	298452
	I	437m E	Electricity Substation	1961 - 1997	296964
7 439m W Electricity Substation 1955 - 1994 297676	7	439m W	Electricity Substation	1955 - 1994	297676
F 480m SW Electricity Substation 1994 296437	F	480m SW	Electricity Substation	1994	296437





ID	Location	Land use	Dates present	Group ID
J	482m S	Electricity Substation	1994	299128
F	484m SW	Electricity Substation	1989	296436
J	487m S	Electricity Substation	1989	297569

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m 0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m 2

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

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

ID	Location	Land use	Dates present	Group ID
3	150m NW	Garage	1975 - 1988	88585
9	469m S	Garage	1955 - 1968	88394

This data is sourced from Ordnance Survey / Groundsure.





1.6 Historical military land

Records within 500m 0

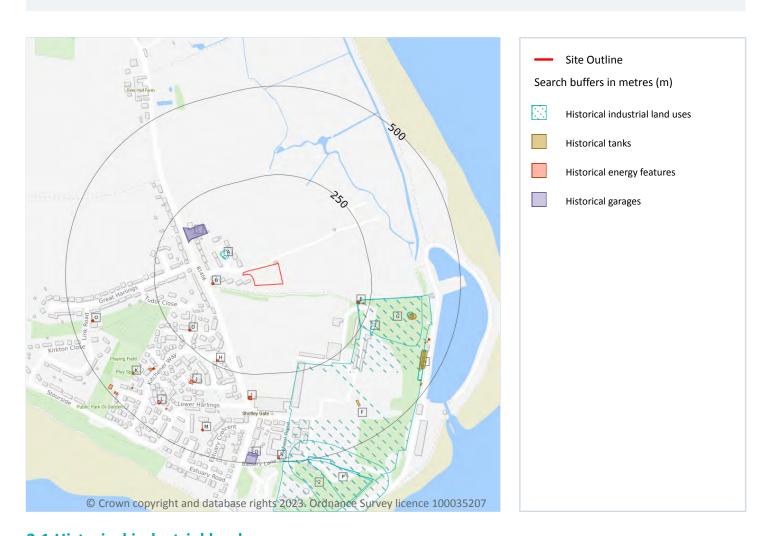
Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

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 13

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

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

ID	Location	Land Use	Date	Group ID
Α	60m NW	Unspecified Pit	1925	2332395
А	65m NW	Unspecified Pit	1904	2332395
F	215m E	Unspecified Commercial/Industrial	1928	2325874





ID	Location	Land Use	Date	Group ID
G	217m E	Unspecified Commercial/Industrial	1938	2338939
1	275m SE	Unspecified Ground Workings	1904	2318237
G	360m E Unspecified Tank 1928 23278		2327879	
G	362m E	Unspecified Tank	1938	2327879
Ν	434m SE	Septic Tanks	1938	2339237
N	434m SE	Septic Tanks	1928	2335143
N	434m SE	Septic Tanks	1928	2335143
Р	445m S	Hospital	1904	2342802
2	491m S	Unspecified Commercial/Industrial	1938	2326850
Р	499m S	Hospital	1925	2342802

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m 13

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

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

ID	Location	Land Use	Date	Group ID
G	365m E	Unspecified Tank	1926	420107
G	371m E	Unspecified Tank	1955	420107
F	388m SE	Unspecified Tank	1955	416747
K	411m SW	Unspecified Tank	1968	420385
K	411m SW	Unspecified Tank	1955	420385
Ν	432m SE	Unspecified Tank	1926	416716
Ν	434m SE	Septic Tanks	1926	421116
Ν	437m E	Unspecified Tank	1955	416715
Ν	438m SE	Septic Tanks	1955	421116
K	443m SW	Unspecified Tank	1955	418044





ID	Location	Land Use	Date	Group ID
K	443m SW	Unspecified Tank	1968	418044
N	471m SE	Tanks	1955	417576
N	478m SE	Tanks	1955	417574

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m 38

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 20 >

ID	Location	Land Use	Date	Group ID
В	84m W	Electricity Substation	1975	299394
В	85m W	Electricity Substation	1994	299394
В	87m W	Electricity Substation	1988	299394
D	211m SW	Electricity Substation	1988	298325
D	212m SW	Electricity Substation	1994	298325
Е	214m E	Electricity Substations	1988	299277
Е	215m E	Electricity Substations	1994	299277
Е	217m E	Electricity Substation	1975	297855
Е	217m E	Electricity Substation	1955	297855
Е	232m E	Electricity Substation	1975	299169
Е	232m E	Electricity Substation	1955	299169
Н	233m SW	Electricity Substation	1988	297357
Н	234m SW	Electricity Substation	1994	297357
I	312m S	Electricity Substation	1989	300017
I	313m S	Electricity Substation	1994	299721
I	313m S	Electricity Substation	1955	300017
J	317m SW	Electricity Substation	1994	296425





ID	Location	Land Use	Date	Group ID
J	320m SW	Electricity Substation	1989	296426
K	361m SW	Electricity Substation	1994	299140
K	362m SW	Electricity Substation	1988	299140
Κ	363m SW	Electricity Substation	1989	297612
K	366m SW	Electricity Substation	1994	297752
L	420m SW	Electricity Substation	1994	296423
L	426m SW	Electricity Substation	1989	296424
M	430m S	Electricity Substation	1968	297026
M	430m S	Electricity Substation	1955	297026
M	431m SW	Electricity Substation	1989	298587
M	432m S	Electricity Substation	1994	298452
Ν	437m E	Electricity Substation	1961	296964
Ν	438m E	Electricity Substation	1997	296964
0	439m W	Electricity Substation	1975	297676
0	439m W	Electricity Substation	1955	297676
0	442m W	Electricity Substation	1994	297676
0	442m W	Electricity Substation	1988	297676
K	480m SW	Electricity Substation	1994	296437
R	482m S	Electricity Substation	1994	299128
K	484m SW	Electricity Substation	1989	296436
R	487m S	Electricity Substation	1989	297569

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 4

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

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

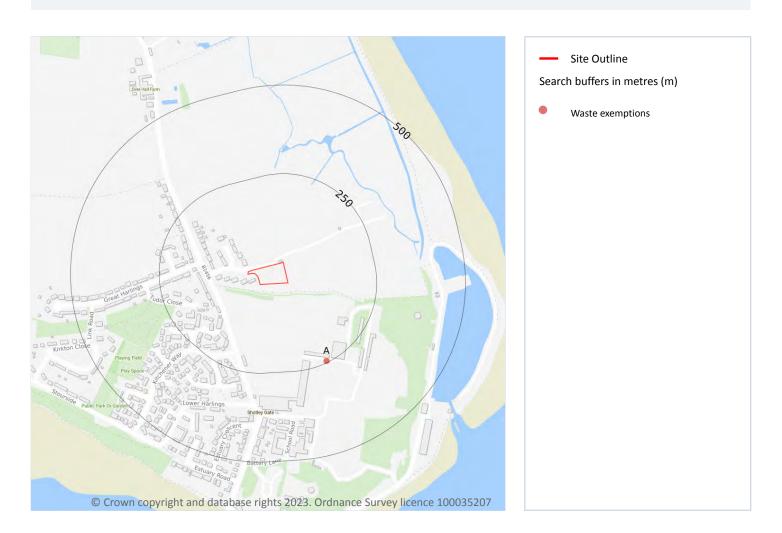
ID	Location	Land Use	Date	Group ID
С	150m NW	Garage	1975	88585
С	151m NW	Garage	1988	88585
Q	469m S	Garage	1968	88394
Q	469m S	Garage	1955	88394

This data is sourced from Ordnance Survey / Groundsure.





3 Waste and landfill



3.1 Active or recent landfill

Records within 500m 0

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

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

3.2 Historical landfill (BGS records)

Records within 500m 0

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

This data is sourced from the British Geological Survey.





3.3 Historical landfill (LA/mapping records)

Records within 500m 0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m 0

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

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

3.5 Historical waste sites

Records within 500m 0

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

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

3.6 Licensed waste sites

Records within 500m 0

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

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

3.7 Waste exemptions

Records within 500m 3

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

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

ID	Location	Site	Reference	Category	Sub-Category	Description
А	245m SE	-	WEX214726	Disposing of waste exemption	Not on a farm	Burning waste in the open



Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

ID	Location	Site	Reference	Category	Sub-Category	Description
А	245m SE	-	WEX070288	Disposing of waste exemption	Not on a farm	Burning waste in the open
А	245m SE	-	WEX338455	Disposing of waste exemption	Not on a farm	Burning waste in the open

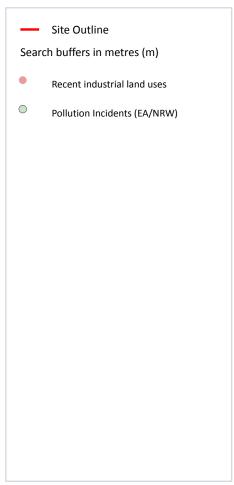
This data is sourced from the Environment Agency and Natural Resources Wales.





4 Current industrial land use





4.1 Recent industrial land uses

Records within 250m 5

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 28 >

ID	Location	Company	Address	Activity	Category
1	87m W	Electricity Sub Station	Suffolk, IP9	Electrical Features	Infrastructure and Facilities
2	171m SW	Telephone Exchange	Suffolk, IP9	Telecommunications Features	Infrastructure and Facilities
3	217m E	Electricity Sub Station	Suffolk, IP9	Electrical Features	Infrastructure and Facilities





ID	Location	Company	Address	Activity	Category
4	229m SW	Electricity Sub Station	Suffolk, IP9	Electrical Features	Infrastructure and Facilities
5	235m SW	Electricity Sub Station	Suffolk, IP9	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m 0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m 0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m 0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m 0

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

This data is sourced from Local Authority records.





4.6 Control of Major Accident Hazards (COMAH)

Records within 500m 0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m 0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m 0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m 0

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

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





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

Records within 500m 0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m 0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m 0

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

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m 0

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

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

4.15 Pollutant release to public sewer

Records within 500m 0

Discharges of Special Category Effluents to the public sewer.

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





0

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

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

Features are displayed on the Current industrial land use map on page 28 >

ID	Location	Details	
6	6 496m E Incident Date: 02/09/2001 Incident Identification: 28682 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified		Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m 0

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

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





4.20 Pollution inventory waste transfers

Records within 500m 0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m 0

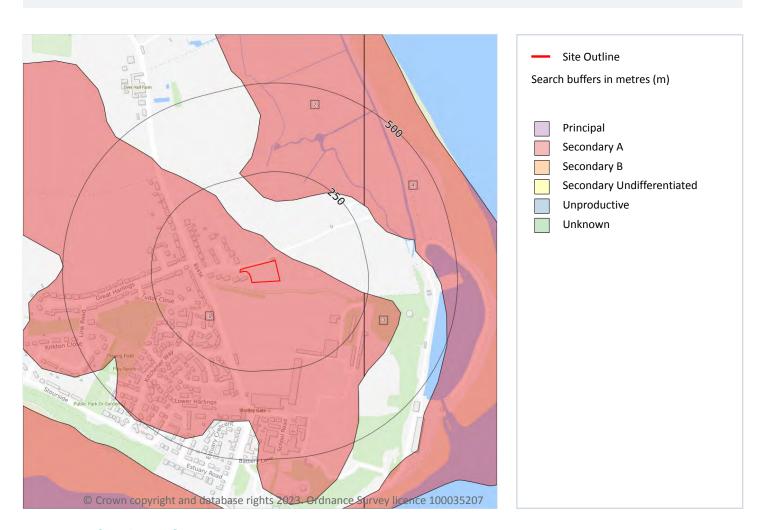
The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

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





5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m 4

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 34 >

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	167m N	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



Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

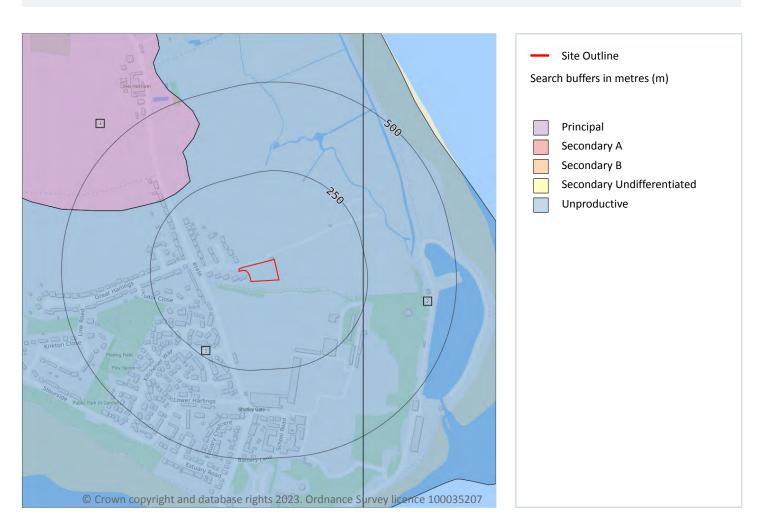
ID	Location	Designation	Description
3	240m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	295m NE	Secondary 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 3

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on page 36 >

ID	Location	Designation	Description	
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow	
2	237m E	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow	



Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

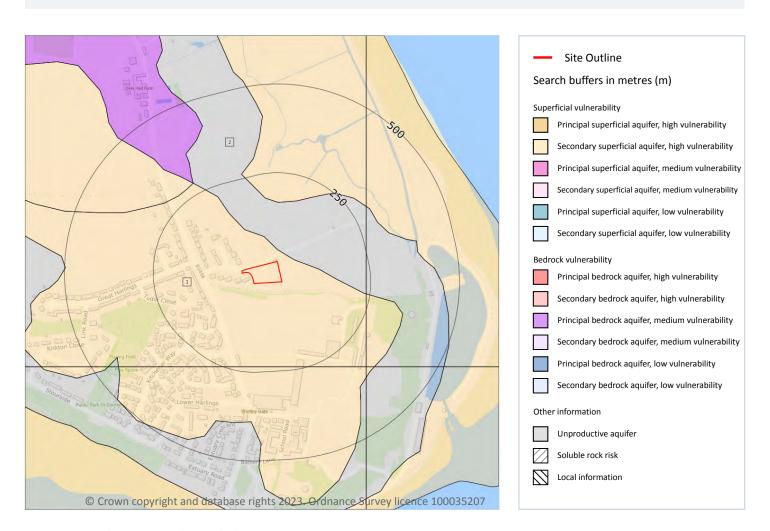
ID	Location	Designation	Description
3	277m NW	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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





Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m 2

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

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

Features are displayed on the Groundwater vulnerability map on page 38 >





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed
2	28m NE	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site 0

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

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

5.5 Groundwater vulnerability- local information

Records on site 0

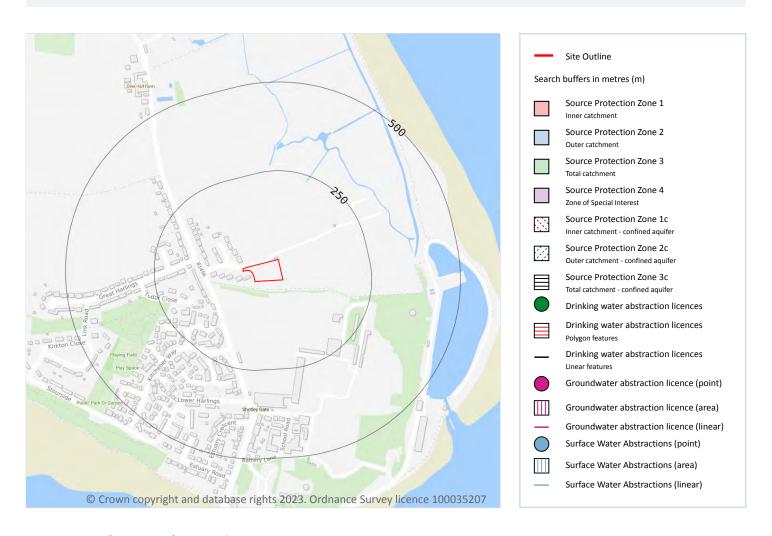
This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506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

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





Abstractions and Source Protection Zones



5.6 Groundwater abstractions

Records within 2000m 0

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

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





5.7 Surface water abstractions

Records within 2000m 2

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 40 >

ID	Location	Details	
-	1374m NE	Status: Active Licence No: AN/035/0010/018 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: UNNAMED DRAIN AT FELIXSTOWE DOCK- TRIMLEY MARSH PUMP STATION Data Type: Point Name: WALTON FARMS LTD Easting: 625645 Northing: 235339	Annual Volume (m³): 68957 Max Daily Volume (m³): 1296 Original Application No: NPS/WR/022269 Original Start Date: 10/07/2015 Expiry Date: 31/03/2026 Issue No: 2 Version Start Date: 01/04/2021 Version End Date: -
-	1911m NE	Status: Active Licence No: AN/035/0010/018 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: UNNAMED DRAIN AT FELIXSTOWE DOCK Data Type: Line Name: WALTON FARMS LTD Easting: 626224 Northing: 235513	Annual Volume (m³): 68957 Max Daily Volume (m³): 1296 Original Application No: NPS/WR/022269 Original Start Date: 10/07/2015 Expiry Date: 31/03/2026 Issue No: 2 Version Start Date: 01/04/2021 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 0

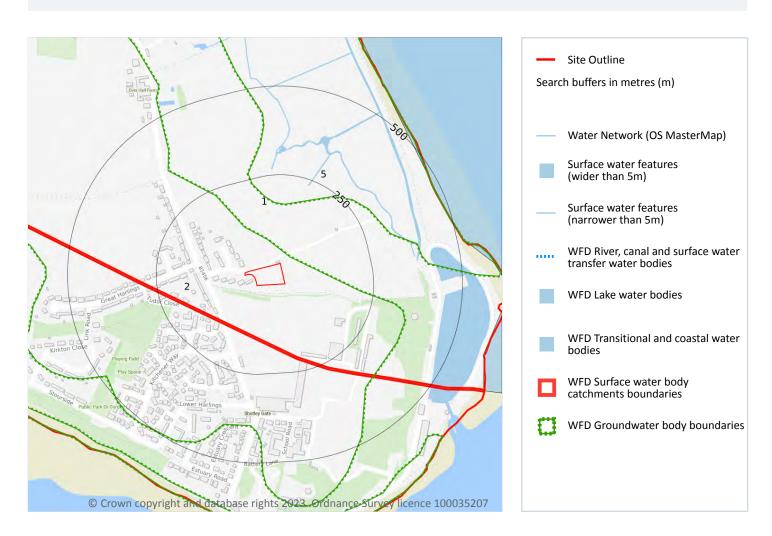
Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

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





6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m 1

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 43 >

ID	Location	Type of water feature	Ground level	Permanence	Name
5	233m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.





6.2 Surface water features

Records within 250m 1

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 43 >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site 1

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

Features are displayed on the Hydrology map on page 43 >

ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	Coastal Catchment	Not part of a river WB catchment	43	Gipping	East Suffolk

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

6.4 WFD Surface water bodies

Records identified 0

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

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





6.5 WFD Groundwater bodies

Records on site 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 43 >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	On site	Essex Gravels	GB40503G000400 7	Poor	Poor	Good	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 0

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

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

7.2 Historical Flood Events

Records within 250m 0

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

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

7.3 Flood Defences

Records within 250m 0

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

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





7.4 Areas Benefiting from Flood Defences

Records within 250m 0

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

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

7.5 Flood Storage Areas

Records within 250m 0

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

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





River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m 0

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

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

7.7 Flood Zone 3

Records within 50m

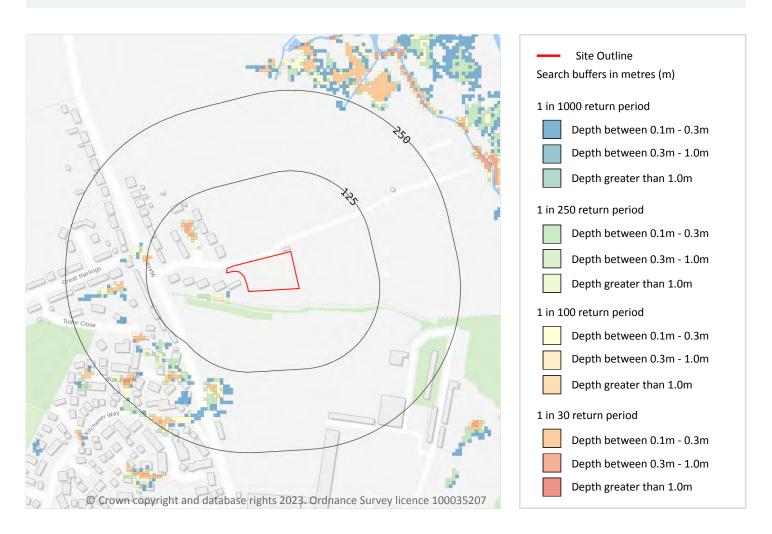
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

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





8 Surface water flooding



8.1 Surface water flooding

Highest risk on site	Negligible

Highest risk within 50m

1 in 100 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 49 >

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





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

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

This data is sourced from Ambiental Risk Analytics.





9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site	Moderate
Highest risk within 50m	Moderate

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

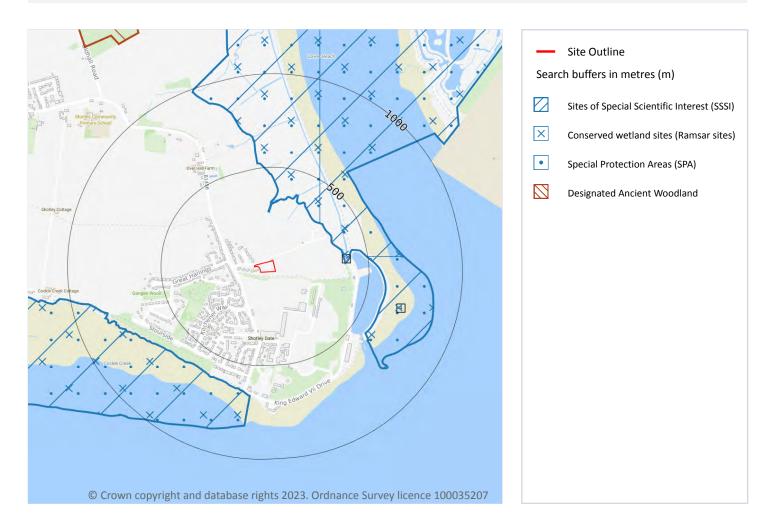
Features are displayed on the Groundwater flooding map on page 51 >

This data is sourced from Ambiental Risk Analytics.





10 Environmental designations



10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m 3

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 renotified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on page 52 >

ID	Location	Name	Data source
Α	263m N	Orwell Estuary	Natural England





ID	Location	Name	Data source
5	607m SW	Stour Estuary	Natural England
-	1590m S	Stour Estuary	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m 3

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

Features are displayed on the Environmental designations map on page 52 >

ID	Location	Site	Details
A	263m N	Name: Stour and Orwell Estuaries Site status: Listed Data source: Natural England	Overview: The Stour and Orwell Estuaries is a wetland of international importance, comprising extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. It provides habitats for an important assemblage of wetland birds in the non-breeding season and supports internationally important numbers of wintering and passage wildfowl and waders. The site also holds several nationally scarce plants and British Red Data Book invertebrates. Ramsar criteria: Ramsar criterion 2 Contains seven nationally scarce plants: stiff saltmarsh-grass Puccinellia rupestris; small cord-grass Spartina maritima; perennial glasswort Sarcocornia perennis; lax-flowered sea lavender Limonium humile; and the eelgrasses Zostera angustifolia, Z. marina and Z. noltei. Contains five British Red Data Book invertebrates: the muscid fly Phaonia fusca; the horsefly Haematopota grandis; two spiders, Arctosa fulvolineata and Baryphema duffeyi; and the Endangered swollen spire snail Mercuria confusa.





ID	Location	Site	Details
В	607m SW	Name: Stour and Orwell Estuaries Site status: Listed Data source: Natural England	Overview: The Stour and Orwell Estuaries is a wetland of international importance, comprising extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. It provides habitats for an important assemblage of wetland birds in the non-breeding season and supports internationally important numbers of wintering and passage wildfowl and waders. The site also holds several nationally scarce plants and British Red Data Book invertebrates. Ramsar criteria: Ramsar criterion 2 Contains seven nationally scarce plants: stiff saltmarsh-grass Puccinellia rupestris; small cord-grass Spartina maritima; perennial glasswort Sarcocornia perennis; lax-flowered sea lavender Limonium humile; and the eelgrasses Zostera angustifolia, Z. marina and Z. noltei. Contains five British Red Data Book invertebrates: the muscid fly Phaonia fusca; the horsefly Haematopota grandis; two spiders, Arctosa fulvolineata and Baryphema duffeyi; and the Endangered swollen spire snail Mercuria confusa.
	1589m S	Name: Stour and Orwell Estuaries Site status: Listed Data source: Natural England	Overview: The Stour and Orwell Estuaries is a wetland of international importance, comprising extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. It provides habitats for an important assemblage of wetland birds in the non-breeding season and supports internationally important numbers of wintering and passage wildfowl and waders. The site also holds several nationally scarce plants and British Red Data Book invertebrates. Ramsar criteria: Ramsar criterion 2 Contains seven nationally scarce plants: stiff saltmarsh-grass Puccinellia rupestris; small cord-grass Spartina maritima; perennial glasswort Sarcocornia perennis; lax-flowered sea lavender Limonium humile; and the eelgrasses Zostera angustifolia, Z. marina and Z. noltei. Contains five British Red Data Book invertebrates: the muscid fly Phaonia fusca; the horsefly Haematopota grandis; two spiders, Arctosa fulvolineata and Baryphema duffeyi; and the Endangered swollen spire snail Mercuria confusa.

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 7

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

Features are displayed on the Environmental designations map on page 52 >

ID	Location	Name	Species of interest	Habitat description	Data source
1	263m N	Stour and Orwell Estuaries	Great crested grebe; Great cormorant; Mute swan; Common shelduck; Eurasian wigeon; Gadwall; Northern pintail; Greater scaup; Common goldeneye; Pied avocet; Ringed plover; Ringed plover; European golden plover; Grey plover; Northern lapwing; Red knot; Eurasian curlew; Common redshank; Common redshank; Ruddy turnstone; Black-tailed godwit; Dunlin; Dark-bellied brent goose	Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Shingle, Sea cliffs, Islets; Bogs, Marshes, Water fringed vegetation, Fens	Natural Englan d
2	321m NE	Stour and Orwell Estuaries	Great crested grebe; Great cormorant; Mute swan; Common shelduck; Eurasian wigeon; Gadwall; Northern pintail; Greater scaup; Common goldeneye; Pied avocet; Ringed plover; Ringed plover; European golden plover; Grey plover; Northern lapwing; Red knot; Eurasian curlew; Common redshank; Common redshank; Ruddy turnstone; Black-tailed godwit; Dunlin; Dark-bellied brent goose	Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Shingle, Sea cliffs, Islets; Bogs, Marshes, Water fringed vegetation, Fens	Natural Englan d
3	372m E	Stour and Orwell Estuaries	Great crested grebe; Great cormorant; Mute swan; Common shelduck; Eurasian wigeon; Gadwall; Northern pintail; Greater scaup; Common goldeneye; Pied avocet; Ringed plover; Ringed plover; European golden plover; Grey plover; Northern lapwing; Red knot; Eurasian curlew; Common redshank; Common redshank; Ruddy turnstone; Black-tailed godwit; Dunlin; Dark-bellied brent goose	Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Shingle, Sea cliffs, Islets; Bogs, Marshes, Water fringed vegetation, Fens	Natural Englan d





ID	Location	Name	Species of interest	Habitat description	Data source
4	494m E	Stour and Orwell Estuaries	Great crested grebe; Great cormorant; Mute swan; Common shelduck; Eurasian wigeon; Gadwall; Northern pintail; Greater scaup; Common goldeneye; Pied avocet; Ringed plover; Ringed plover; European golden plover; Grey plover; Northern lapwing; Red knot; Eurasian curlew; Common redshank; Common redshank; Ruddy turnstone; Black-tailed godwit; Dunlin; Dark-bellied brent goose	Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Shingle, Sea cliffs, Islets; Bogs, Marshes, Water fringed vegetation, Fens	Natural Englan d
В	607m SW	Stour and Orwell Estuaries	Great crested grebe; Great cormorant; Mute swan; Common shelduck; Eurasian wigeon; Gadwall; Northern pintail; Greater scaup; Common goldeneye; Pied avocet; Ringed plover; Ringed plover; European golden plover; Grey plover; Northern lapwing; Red knot; Eurasian curlew; Common redshank; Common redshank; Ruddy turnstone; Black-tailed godwit; Dunlin; Dark-bellied brent goose	Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Shingle, Sea cliffs, Islets; Bogs, Marshes, Water fringed vegetation, Fens	Natural Englan d
-	1590m S	Stour and Orwell Estuaries	Great crested grebe; Great cormorant; Mute swan; Common shelduck; Eurasian wigeon; Gadwall; Northern pintail; Greater scaup; Common goldeneye; Pied avocet; Ringed plover; Ringed plover; European golden plover; Grey plover; Northern lapwing; Red knot; Eurasian curlew; Common redshank; Common redshank; Ruddy turnstone; Black-tailed godwit; Dunlin; Dark-bellied brent goose	Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Shingle, Sea cliffs, Islets; Bogs, Marshes, Water fringed vegetation, Fens	Natural Englan d
-	1619m S	Stour and Orwell Estuaries	Great crested grebe; Great cormorant; Mute swan; Common shelduck; Eurasian wigeon; Gadwall; Northern pintail; Greater scaup; Common goldeneye; Pied avocet; Ringed plover; Ringed plover; European golden plover; Grey plover; Northern lapwing; Red knot; Eurasian curlew; Common redshank; Common redshank; Ruddy turnstone; Black-tailed godwit; Dunlin; Dark-bellied brent goose	Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Shingle, Sea cliffs, Islets; Bogs, Marshes, Water fringed vegetation, Fens	Natural Englan d

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





10.5 National Nature Reserves (NNR)

Records within 2000m 0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m 0

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

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

10.7 Designated Ancient Woodland

Records within 2000m 2

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on page 52 >

ID	Location	Name	Woodland Type
6	1389m NW	Oldhall Grove	Ancient & Semi-Natural Woodland
-	1719m W	Kiln Queach	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m

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.



Contact us with any questions at: Date: 25 July 2023



10.9 Forest Parks

Records within 2000m 0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m 0

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

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

10.11 Green Belt

Records within 2000m 0

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

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

10.12 Proposed Ramsar sites

Records within 2000m 0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m 0

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

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





10.14 Potential Special Protection Areas (pSPA)

Records within 2000m 0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m 0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m 12

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	Sandlings and Chelmsford	Groundwater	78	Existing
558m W	Sandlings and Chelmsford	Groundwater	78	Existing
1087m NE	Sandlings and Chelmsford	Groundwater	78	Existing
1575m S	Sandlings and Chelmsford	Groundwater	78	Existing
1575m S	Ramsey River NVZ	Surface Water	421	Existing
1580m N	Sandlings and Chelmsford	Groundwater	78	Existing
1607m S	Ramsey River NVZ	Surface Water	421	Existing
1608m S	Sandlings and Chelmsford	Groundwater	78	Existing



Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

Location	Name	Туре	NVZ ID	Status
1645m N	Sandlings and Chelmsford	Groundwater	78	Existing
1686m N	Sandlings and Chelmsford	Groundwater	78	Existing
1790m N	Sandlings and Chelmsford	Groundwater	78	Existing
1800m N	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 61 >





ID	Location	Type of developments requiring consultation
1D 1	Location On site	All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 50 units or more. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units. Air pollution - Any development that could cause AIR POLLUTION (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hozardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic
		digestion, other waste management. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to
		surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply . Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements.
Thin d	nto in november	from National Francisco

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m 11

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

Features are displayed on the SSSI Impact Zones and Units map on page 61 >

ID: 4

Location: 263m N

SSSI name: Orwell Estuary

Unit name: Shotley Marshes South
Broad habitat: Neutral Grassland - Lowland

Condition: Favourable





Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Assemblages of breeding birds - Lowland open waters and their margins	Not Recorded	01/01/1900

ID:

Location: 373m E

Orwell Estuary SSSI name: Unit name: **Shotley Point** Broad habitat: Littoral Sediment

Condition: Unfavourable - No change

Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Unfavourable - No change	16/05/2013
Estuaries	Unfavourable - No change	16/05/2013

ID: 10

Location: 607m SW SSSI name: **Stour Estuary** Unit name: **Erwarton Bay** Broad habitat: Littoral Sediment

Favourable Condition:

Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Avocet, Recurvirostra avosetta	Favourable	08/07/2010
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	08/07/2010
Aggregations of non-breeding birds - Brent goose (dark-bellied), Branta bernicla bernicla	Favourable	08/07/2010
Aggregations of non-breeding birds - Cormorant, Phalacrocorax carbo carbo	Favourable	08/07/2010
Aggregations of non-breeding birds - Curlew, Numenius arquata	Favourable	08/07/2010



Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Favourable	08/07/2010
Aggregations of non-breeding birds - Great crested grebe, Podiceps cristatus	Favourable	08/07/2010
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Favourable	08/07/2010
Aggregations of non-breeding birds - Knot, Calidris canutus	Favourable	08/07/2010
Aggregations of non-breeding birds - Mute swan, Cygnus olor	Favourable	08/07/2010
Aggregations of non-breeding birds - Pintail, Anas acuta	Favourable	08/07/2010
Aggregations of non-breeding birds - Redshank, Tringa totanus	Favourable	08/07/2010
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	08/07/2010
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Favourable	08/07/2010
Littoral sediment	Favourable	08/07/2010
Nationally scarce plant - Inula crithmoides, Golden Samphire	Favourable	12/10/2010
Nationally scarce plant - Sarcocornia perennis, Perennial Glasswort	Favourable	12/10/2010
Nationally scarce plant - Zostera noltei, Dwarf Eelgrass	Favourable	12/10/2010
Population of Schedule 5 annelid worm - Alkmaria romijni, Tentacled Lagoon-worm	Favourable	08/07/2010
Population of Schedule 5 sea anemone - Nematostella vectensis, Starlet Sea Anemone	Favourable	08/07/2010

ID: 11

Location: 618m NE

SSSI name: Orwell Estuary

Unit name: River Orwell Channel Broad habitat: Littoral Sediment

Condition: Favourable

Reportable features:

Feature name	Feature condition	Date of assessment
Estuaries	Favourable	16/05/2013

ID: 12

Location: 664m N

SSSI name: Orwell Estuary

Unit name: Shotley Marshes North
Broad habitat: Neutral Grassland - Lowland





Condition: Favourable

Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Avocet, Recurvirostra avosetta	Favourable	16/05/2013
Aggregations of non-breeding birds - Brent goose (dark-bellied), Branta bernicla bernicla	Favourable	16/05/2013
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Favourable	16/05/2013
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Favourable	16/05/2013
Aggregations of non-breeding birds - Redshank, Tringa totanus	Favourable	16/05/2013
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Favourable	16/05/2013
Assemblages of breeding birds - Lowland open waters and their margins	Favourable	16/05/2013

ID: 20

Location: 1100m NE SSSI name: Orwell Estuary

Unit name: Trimley

Broad habitat: Littoral Sediment

Condition: Unfavourable - No change

Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Unfavourable - No change	16/05/2013
Estuaries	Unfavourable - No change	16/05/2013

ID: 21

Location: 1230m NE
SSSI name: Orwell Estuary
Unit name: Trimley Marshes

Broad habitat: Standing Open Water And Canals

Condition: Favourable

Reportable features:



Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Avocet, Recurvirostra avosetta	Favourable	16/05/2013
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	16/05/2013
Aggregations of non-breeding birds - Brent goose (dark-bellied), Branta bernicla	Favourable	16/05/2013
Aggregations of non-breeding birds - Cormorant, Phalacrocorax carbo carbo	Favourable	16/05/2013
Aggregations of non-breeding birds - Gadwall, Anas strepera	Favourable	16/05/2013
Aggregations of non-breeding birds - Pintail, Anas acuta	Favourable	16/05/2013
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Favourable	16/05/2013
Assemblages of breeding birds - Lowland open waters and their margins	Favourable	16/05/2013

ID:

Location: 1410m N SSSI name: Orwell Estuary

Unit name: 12

Broad habitat: Littoral Sediment

Condition: Unfavourable - No change

Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - No change	16/05/2013
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Unfavourable - No change	16/05/2013
Estuaries	Unfavourable - No change	16/05/2013

ID:

Location: 1590m S
SSSI name: Stour Estuary
Unit name: Bathside Bay
Broad habitat: Littoral Sediment

Condition: Favourable

Reportable features:





Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Brent goose (dark-bellied), Branta bernicla bernicla	Favourable	11/10/2010
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Favourable	11/10/2010
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Favourable	11/10/2010
Aggregations of non-breeding birds - Knot, Calidris canutus	Favourable	11/10/2010
Aggregations of non-breeding birds - Redshank, Tringa totanus	Favourable	11/10/2010
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	11/10/2010
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Favourable	11/10/2010

ID:

Location: 1751m N SSSI name: Orwell Estuary

Unit name: 13

Broad habitat: Littoral Sediment

Condition: Unfavourable - Declining

Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Unfavourable - Declining	16/05/2013
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Unfavourable - Declining	16/05/2013
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	16/05/2013
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Unfavourable - Declining	16/05/2013
Estuaries	Unfavourable - Declining	16/05/2013

ID:

Location: 1950m N SSSI name: Orwell Estuary

Unit name: Hill House Farm Marshes
Broad habitat: Neutral Grassland - Lowland

Condition: Favourable

Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Brent goose (dark-bellied), Branta bernicla	Favourable	16/05/2013





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

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 2

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.

Features are displayed on the Visual and cultural designations map on page 69 >

ID	Location	NAME	Data Source
1	On site	Suffolk Coast & Heaths	Natural England

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

11.3 National Parks

Records within 250m 0

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

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

11.4 Listed Buildings

Records within 250m

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

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





1

11.5 Conservation Areas

Records within 250m

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 69 >

ID	Location	Name	District	Date of designation
3	18m SW	Shotley Gate	Babergh	02/06/2011

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

11.6 Scheduled Ancient Monuments

Records within 250m 0

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

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

11.7 Registered Parks and Gardens

Records within 250m 0

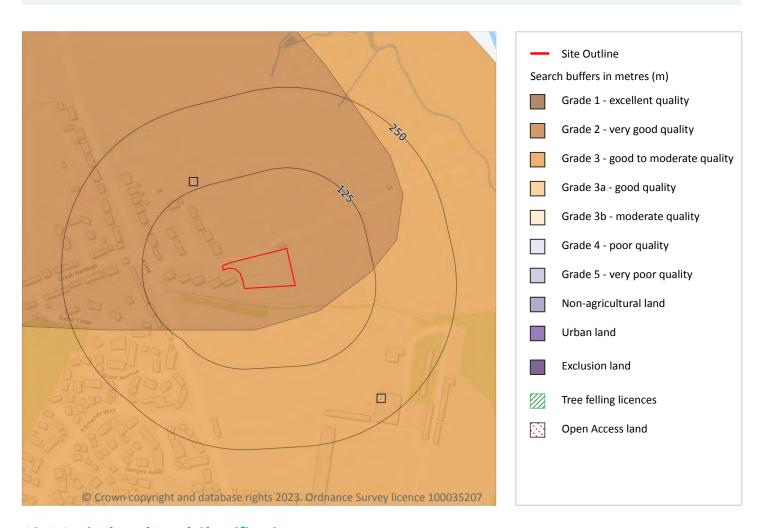
Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the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

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





12 Agricultural designations



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 72 >





ID	Location	Classification	Description
1	On site	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
2	48m SE	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m 0

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

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

12.3 Tree Felling Licences

Records within 250m 0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m 0

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

This data is sourced from Natural England.





1

12.5 Countryside Stewardship Schemes

Records within 250m

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.

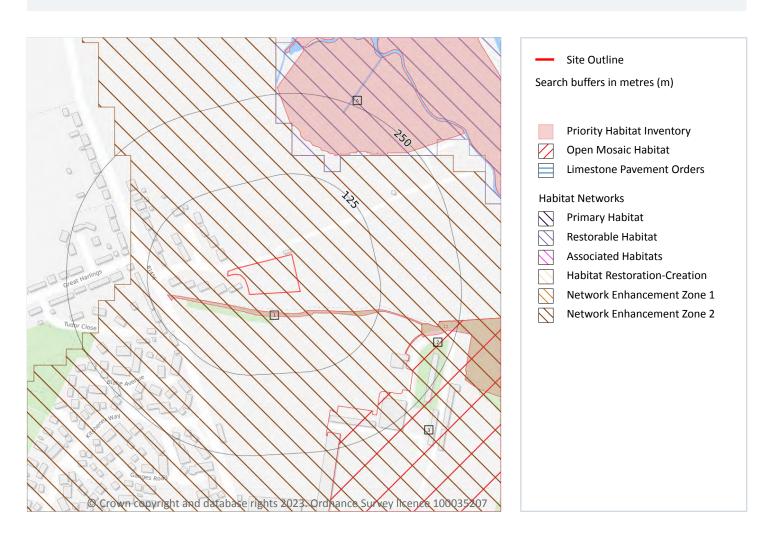
On site	1053505	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025
Location	Reference	Scheme	Start Date	End Date

This data is sourced from Natural England.





13 Habitat designations



13.1 Priority Habitat Inventory

Records within 250m 2

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

Features are displayed on the Habitat designations map on page 75 >

ID	Location	Main Habitat	Other habitats
2	22m SW	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
А	167m NE	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)

This data is sourced from Natural England.





13.2 Habitat Networks

Records within 250m 2

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.

Features are displayed on the Habitat designations map on page 75 >

ID	Location	Туре	Habitat	
1	On site Network Enhancement Zone 2		Not specified	
-	Oil site	Network Limancement Zone Z	Not specified	

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m 1

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

Features are displayed on the Habitat designations map on page 75 >

ID	Location	Site reference	Identificati on confidence	Primary source	Secondary source	Tertiary source
3	187m SE	NLUD Ref: 350500045	High	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	Lee,P A report on a survey of the invertebrates of the HMS Ganges site, Shotley, Suffolk

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.





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

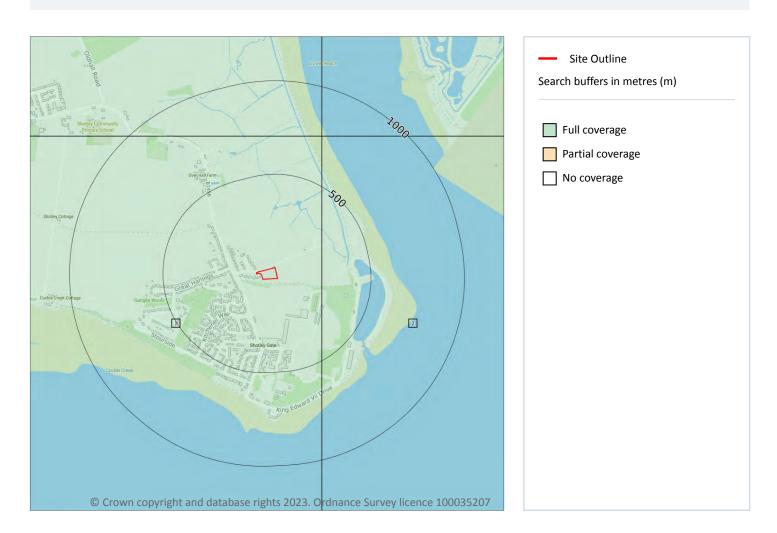
Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

This data is sourced from Natural England.





14 Geology 1:10,000 scale - Availability



14.1 10k Availability

Records within 500m 2

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

Features are displayed on the Geology 1:10,000 scale - Availability map on page 78 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	TM23SW
2	237m E	Full	Full	Full	No coverage	TM23SE

This data is sourced from the British Geological Survey.





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



14.2 Artificial and made ground (10k)

Records within 500m 2

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.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on page 79 >

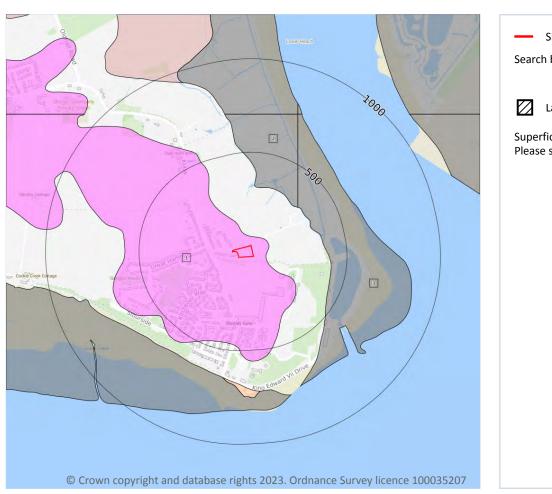
ID	Location	LEX Code	Description	Rock description
Α	378m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
Α	418m E	WGR-VOID	Worked Ground (Undivided)	Void

This data is sourced from the British Geological Survey.





Geology 1:10,000 scale - Superficial



Site Outline
Search buffers in metres (m)

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

14.3 Superficial geology (10k)

Records within 500m

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on page 80 >

ID	Location	LEX Code	Description	Rock description
1	On site	KGCA-XSV	Kesgrave Catchment Subgroup - Sand And Gravel	Sand And Gravel
2	308m NE	ITDU-CZ	Intertidal Deposits (undifferentiated) - Silty Clay	Clay, Silty
3	324m NE	ITDU-CZ	Intertidal Deposits (undifferentiated) - Silty Clay	Clay, Silty

This data is sourced from the British Geological Survey.





14.4 Landslip (10k)

Records within 500m 0

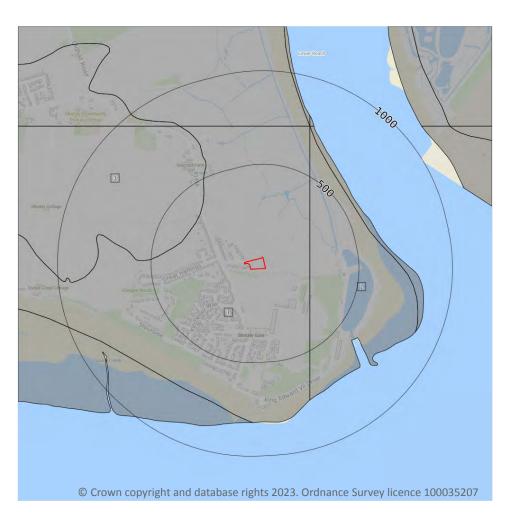
Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.





Geology 1:10,000 scale - Bedrock



Site Outline
Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m 3

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on page 82 >

ID	Location	LEX Code	Description	Rock age
1	On site	THAM-SICL	Thames Group - Silty Clay	Eocene Epoch
2	237m E	THAM-SICL	Thames Group - Silty Clay	Eocene Epoch
3	336m NW	RCG-SANDU	Red Crag Formation - Sand	Thurnian Age - Piacenzian Age [Obsolete definition]





This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m 0

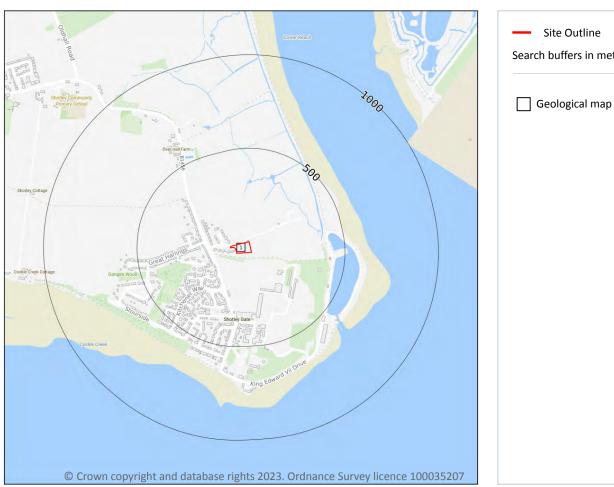
Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

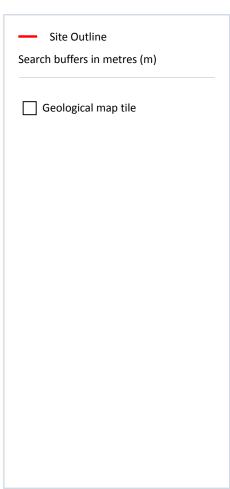
This data is sourced from the British Geological Survey.





15 Geology 1:50,000 scale - Availability





15.1 50k Availability

Records within 500m 1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on page 84 >

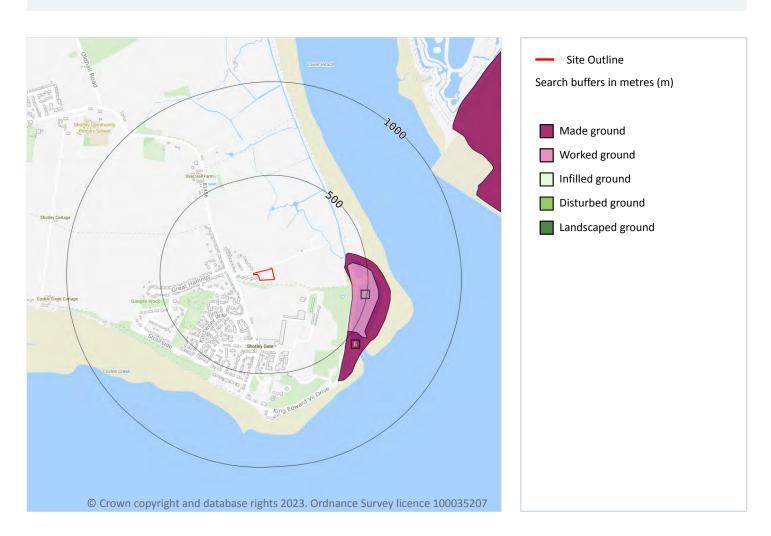
ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW224_colchester_v4

This data is sourced from the British Geological Survey.





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



15.2 Artificial and made ground (50k)

Records within 500m 2

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on page 85 >

ID	Location	LEX Code	Description	Rock description
1	379m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	395m E	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.





15.3 Artificial ground permeability (50k)

Records within 50m 0

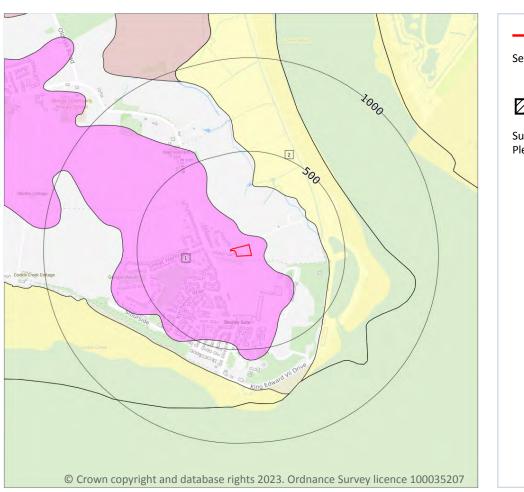
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.





Geology 1:50,000 scale - Superficial



Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)

Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m 2

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on page 87 >

ID	Location	LEX Code	Description	Rock description
1	On site	KGCA-XSV	KESGRAVE CATCHMENT SUBGROUP	SAND AND GRAVEL
2	313m N	ITDU-XCZ	INTERTIDAL DEPOSITS (UNDIFFERENTIATED)	CLAY AND SILT

This data is sourced from the British Geological Survey.





1

15.5 Superficial 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 any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Very High	High

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m 0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m 0

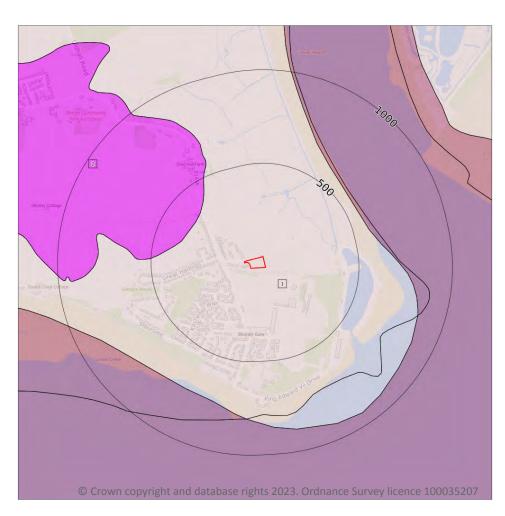
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.





Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

Bedrock geology (50k)

Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m 2

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on page 89 >

	ID	Location	LEX Code	Description	Rock age
1 On site		On site	THAM-XCZS	THAMES GROUP - CLAY, SILT AND SAND	-
	2	336m NW	RCG-S	RED CRAG FORMATION - SAND	PIACENZIAN

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	Mixed	Moderate	Very Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m 0

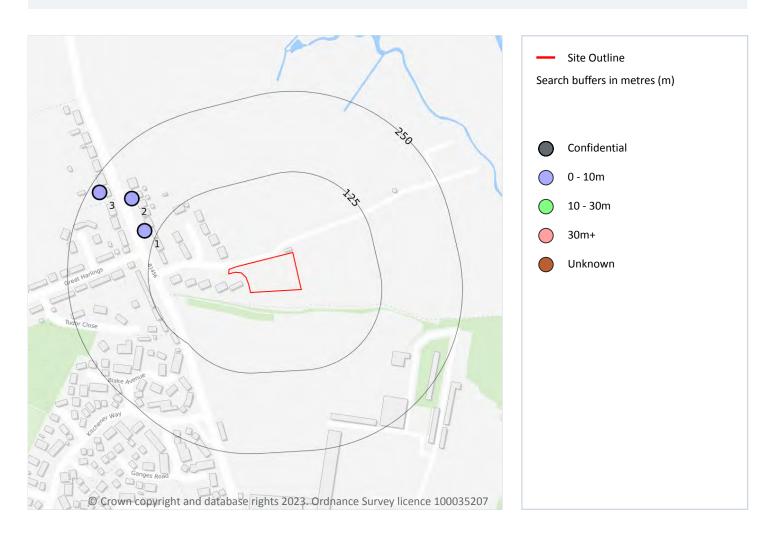
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.





16 Boreholes



16.1 BGS Boreholes

Records within 250m 3

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

Features are displayed on the Boreholes map on page 91 >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	144m W	624520 234330	SHOTLEY GATE FARM	9.14	N	<u>564012</u> ⊅
2	187m NW	624500 234380	SHOTLEY SUFFOLK ALWARTON	7.6	N	<u>563937</u> ⊅
3	234m NW	624450 234390	16 EAST VIEW TERRACE	9.14	N	<u>564013</u> ⊅





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

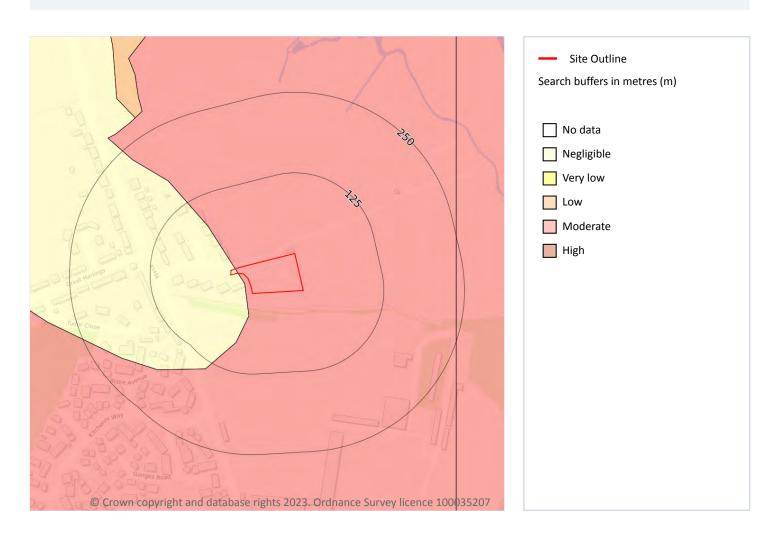
Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

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 93 >

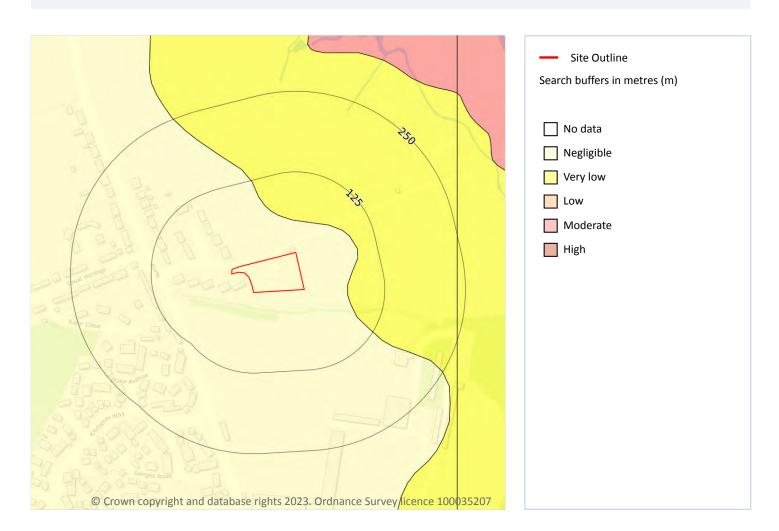
Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
On site	Moderate	Ground conditions predominantly high plasticity.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m 2

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

Features are displayed on the Natural ground subsidence - Running sands map on page 94 >

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.



Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

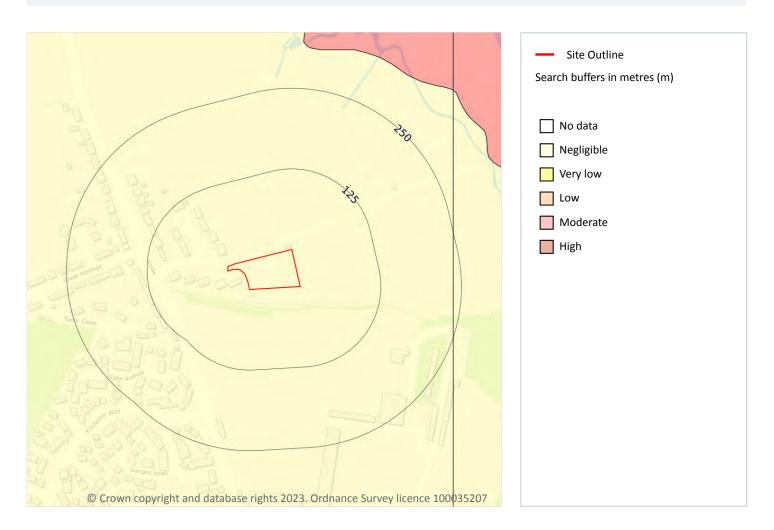
Location	Hazard rating	Details
49m NE	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m 1

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

Features are displayed on the Natural ground subsidence - Compressible deposits map on page 96 >

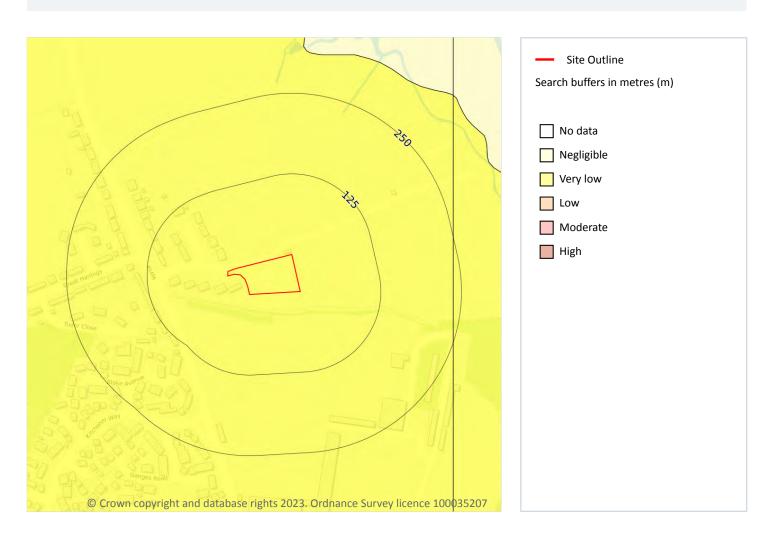
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m 1

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

Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 97 >

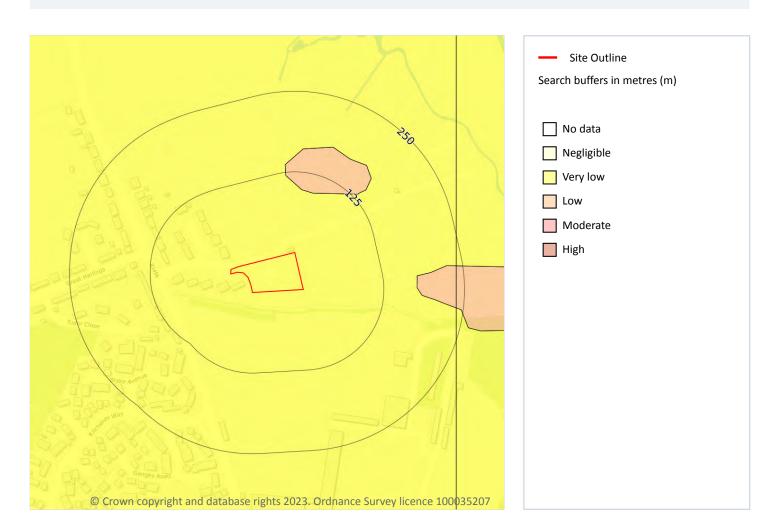
Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m 1

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

Features are displayed on the Natural ground subsidence - Landslides map on page 98 >

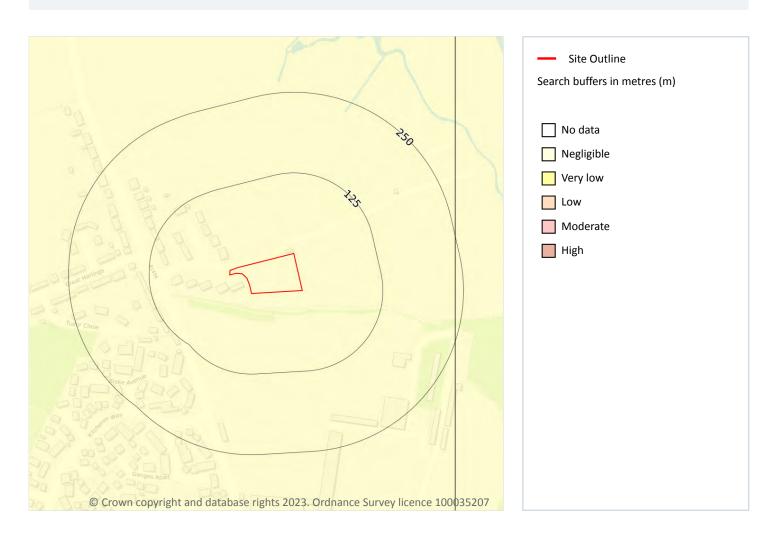
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

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 99

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.





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

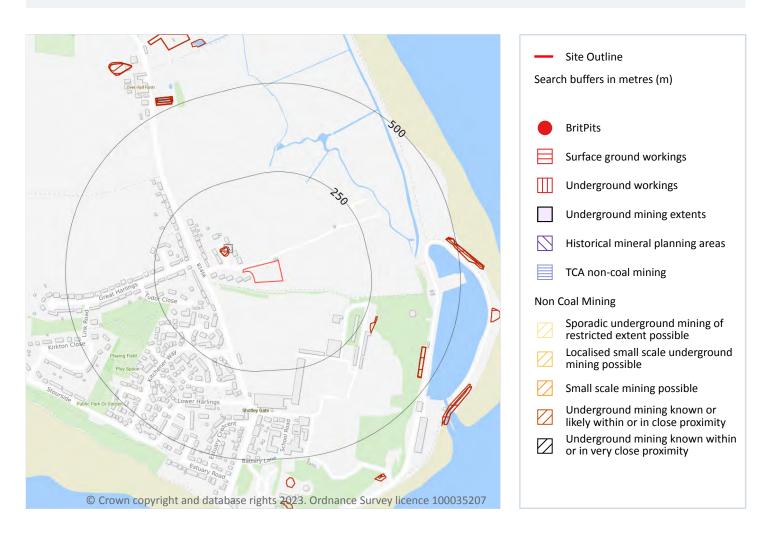
Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

This data is sourced from the British Geological Survey.





18 Mining and ground workings



18.1 BritPits

Records within 500m 0

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

This data is sourced from the British Geological Survey.





18.2 Surface ground workings

Records within 250m 2

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

Features are displayed on the Mining and ground workings map on page 101 >

ID	Location	Land Use	Year of mapping	Mapping scale
А	60m NW	Unspecified Pit	1925	1:10560
Α	65m NW	Unspecified Pit	1904	1:10560

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

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 0

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.



104



18.15 Tin mining

Records on site 0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site 0

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

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





19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m 0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

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

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.

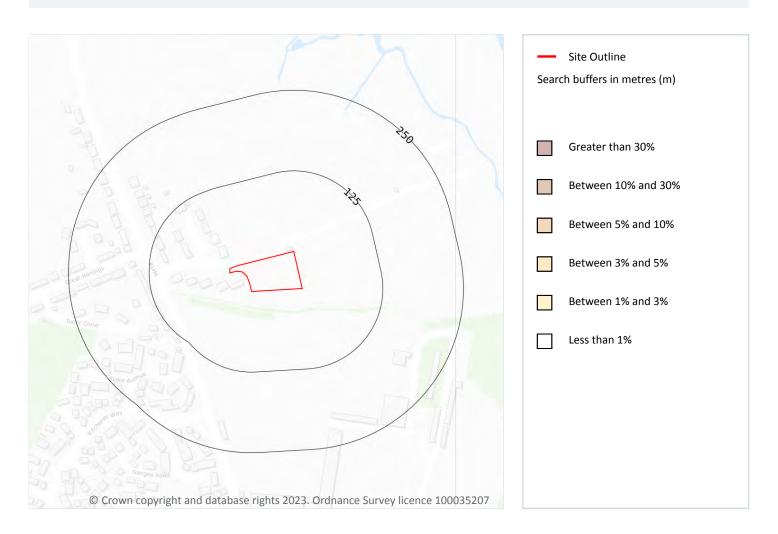
The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

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 108 >

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







Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Ref: HMD-59Q-TFU-GUA-NWD Your ref: OES23-006WILK Grid ref: 624716 234262

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 2

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 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

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 https://www.groundsure.com/sources-reference ..

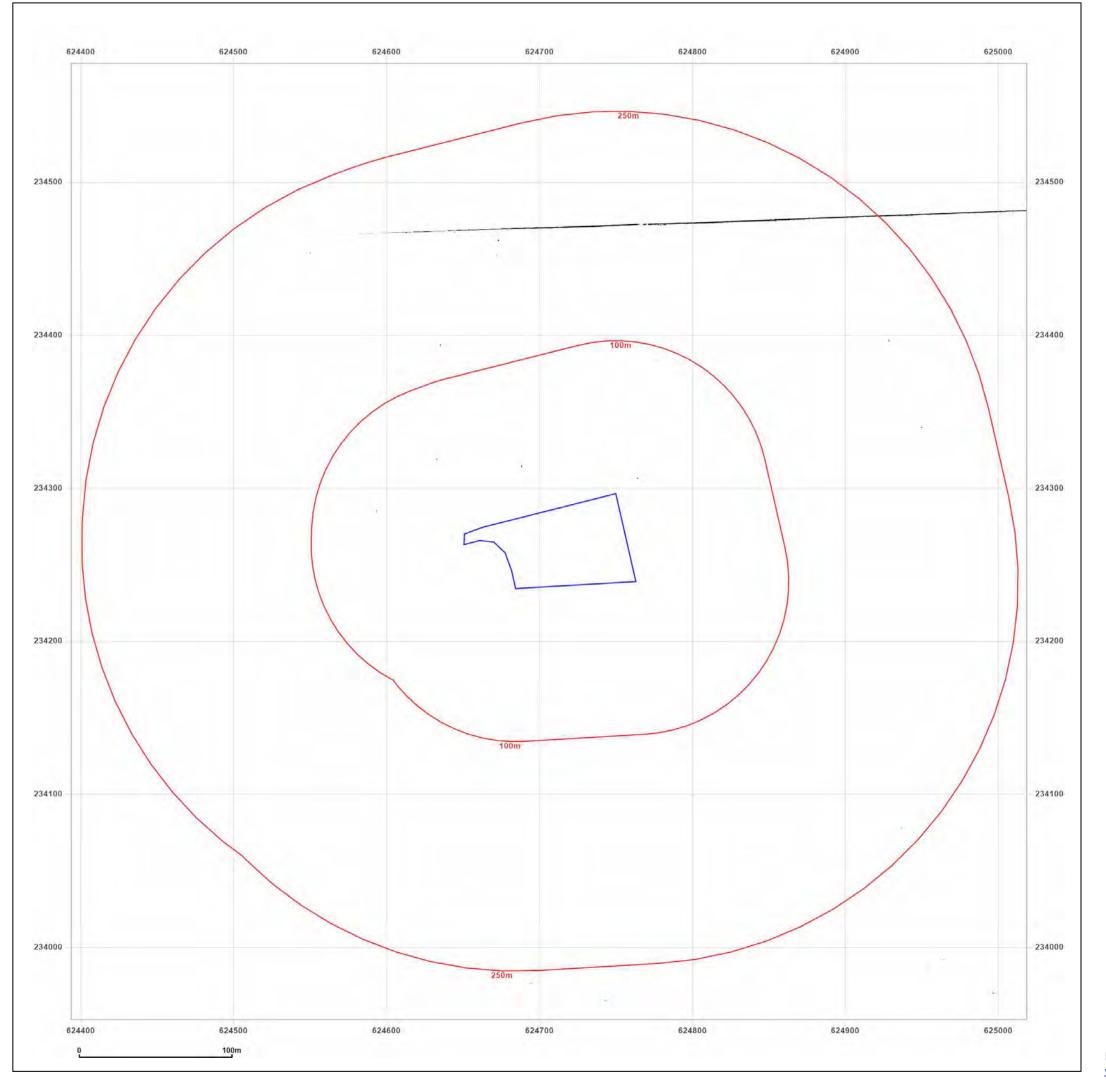
Terms and conditions

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



APPENDIX 4 - Groundsure Historical Maps

Page Left Blank Intentionally







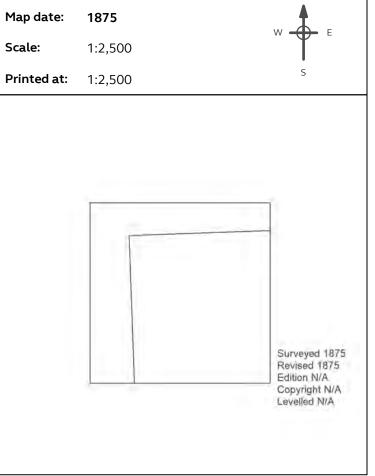
Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK Report Ref: HMD-GUJ-LY4-UQA-5S6

Grid Ref: 624706, 234265

Map Name: County Series

Map date:



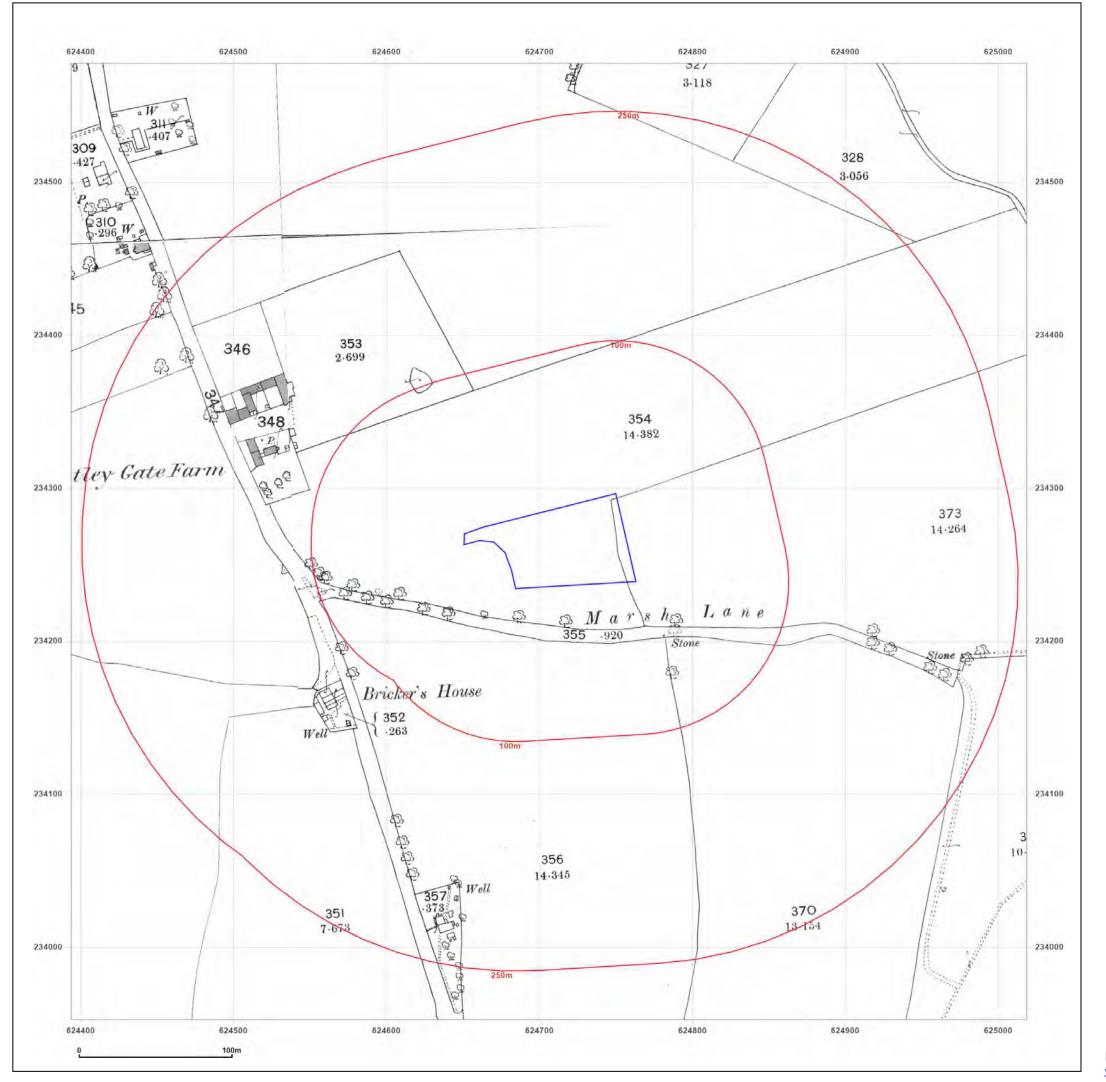


Produced by Groundsure Insights T: 08444 159000 E: info@groundsure.com W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK
Report Ref: HMD-GUJ-LY4-UQA-5S6

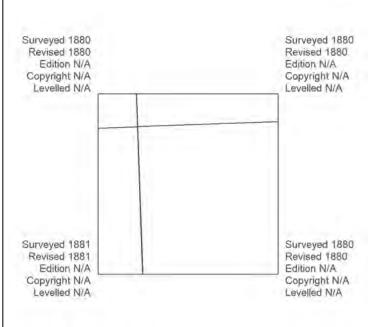
Grid Ref: 624706, 234265

Map Name: County Series

Map date: 1880-1881

Scale: 1:2,500

Printed at: 1:2,500



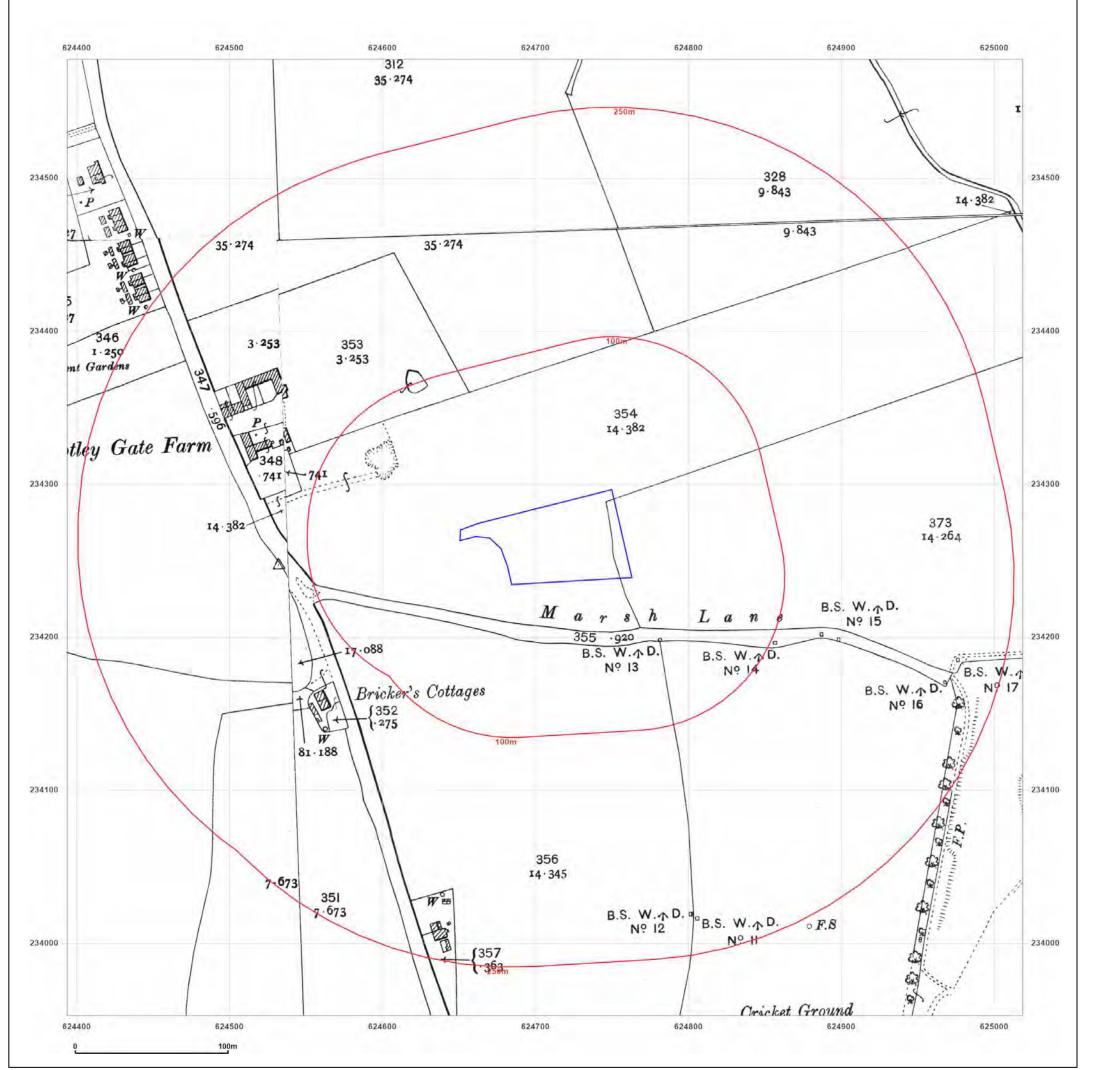


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

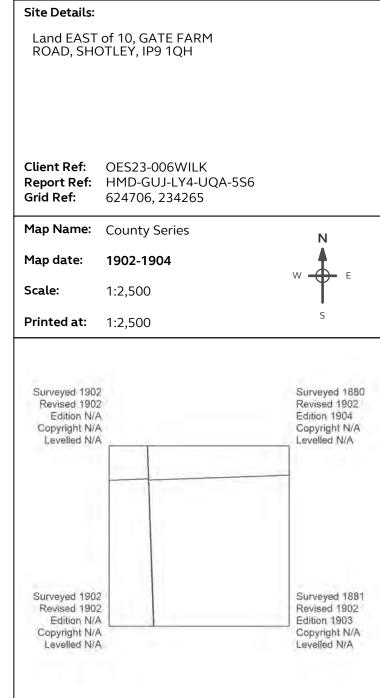
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:







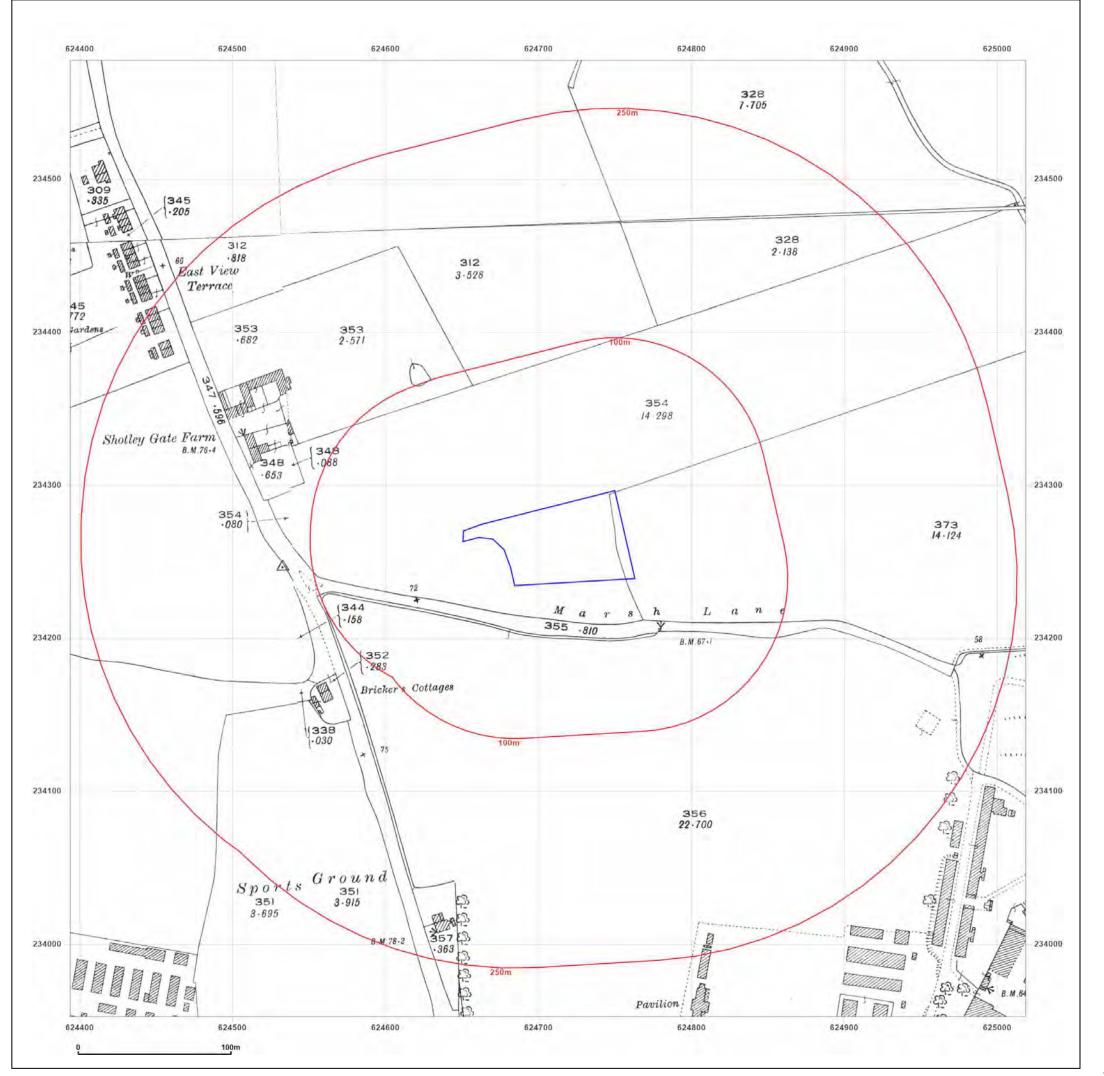


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Site Details:

Client Ref: OES23-006WILK **Report Ref:** HMD-GUJ-LY4-UQA-5S6

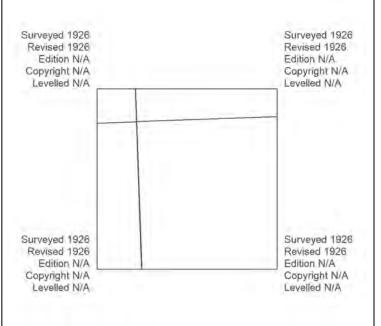
Grid Ref: 624706, 234265

Map Name: County Series

Map date: 1926

Scale: 1:2,500

Printed at: 1:2,500



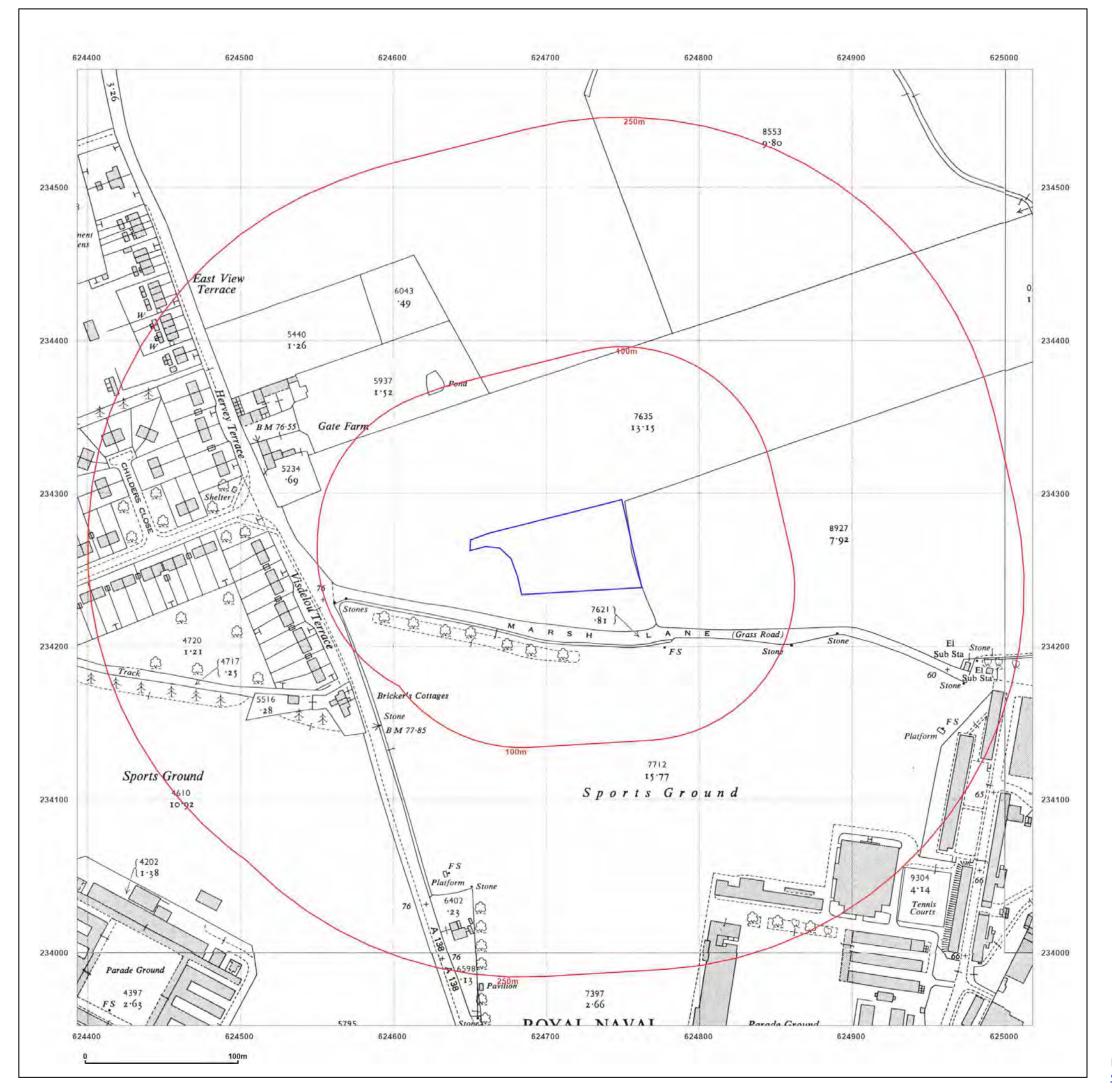


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK
Report Ref: HMD-GUJ-LY4-UQA-5S6

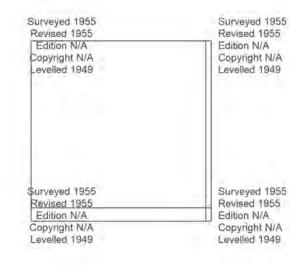
Grid Ref: 624706, 234265

Map Name: National Grid

Map date: 1955

Scale: 1:2,500

Printed at: 1:2,500



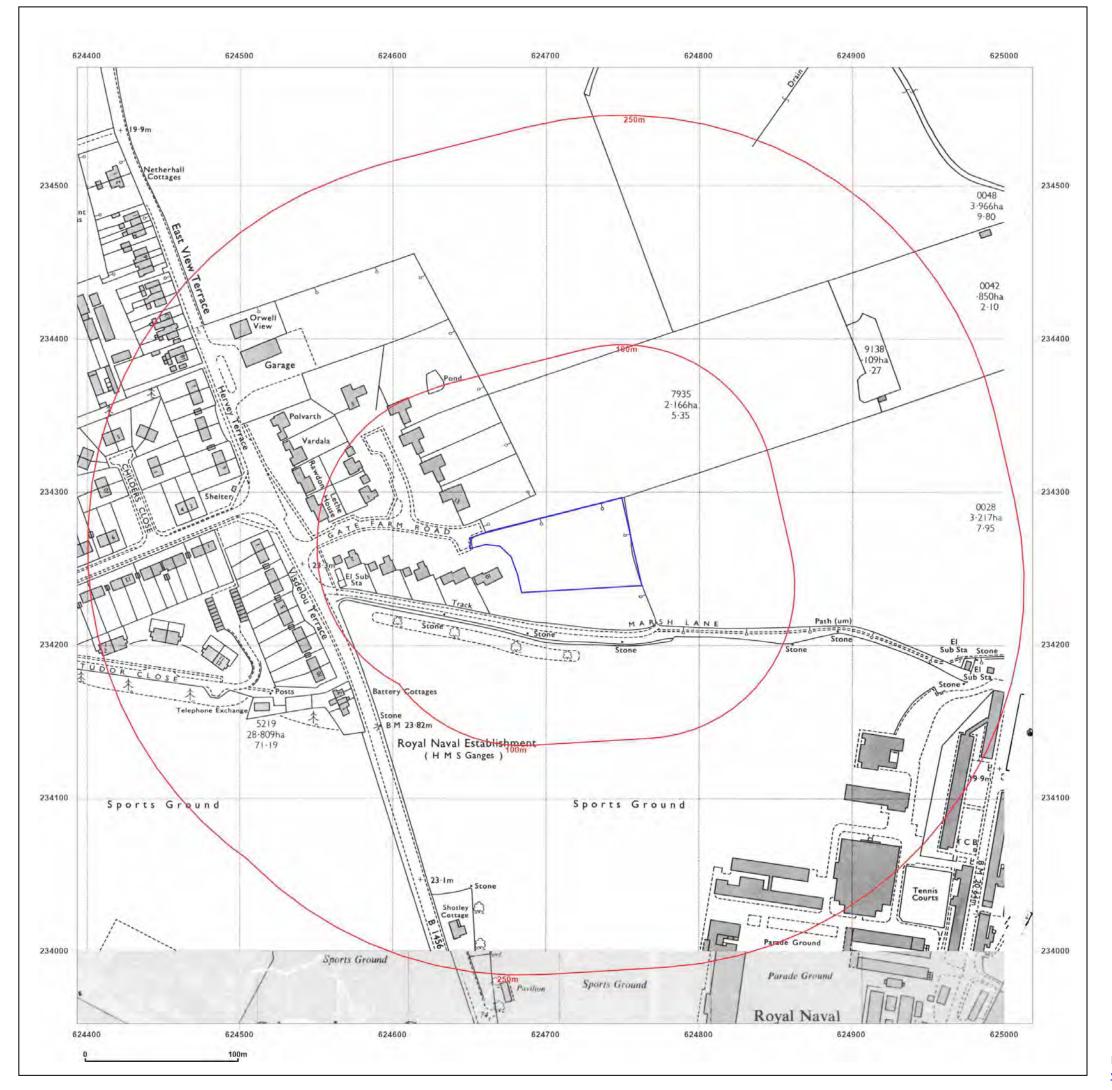


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

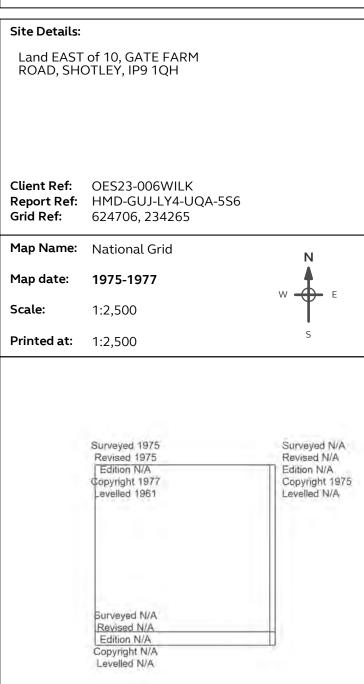
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:







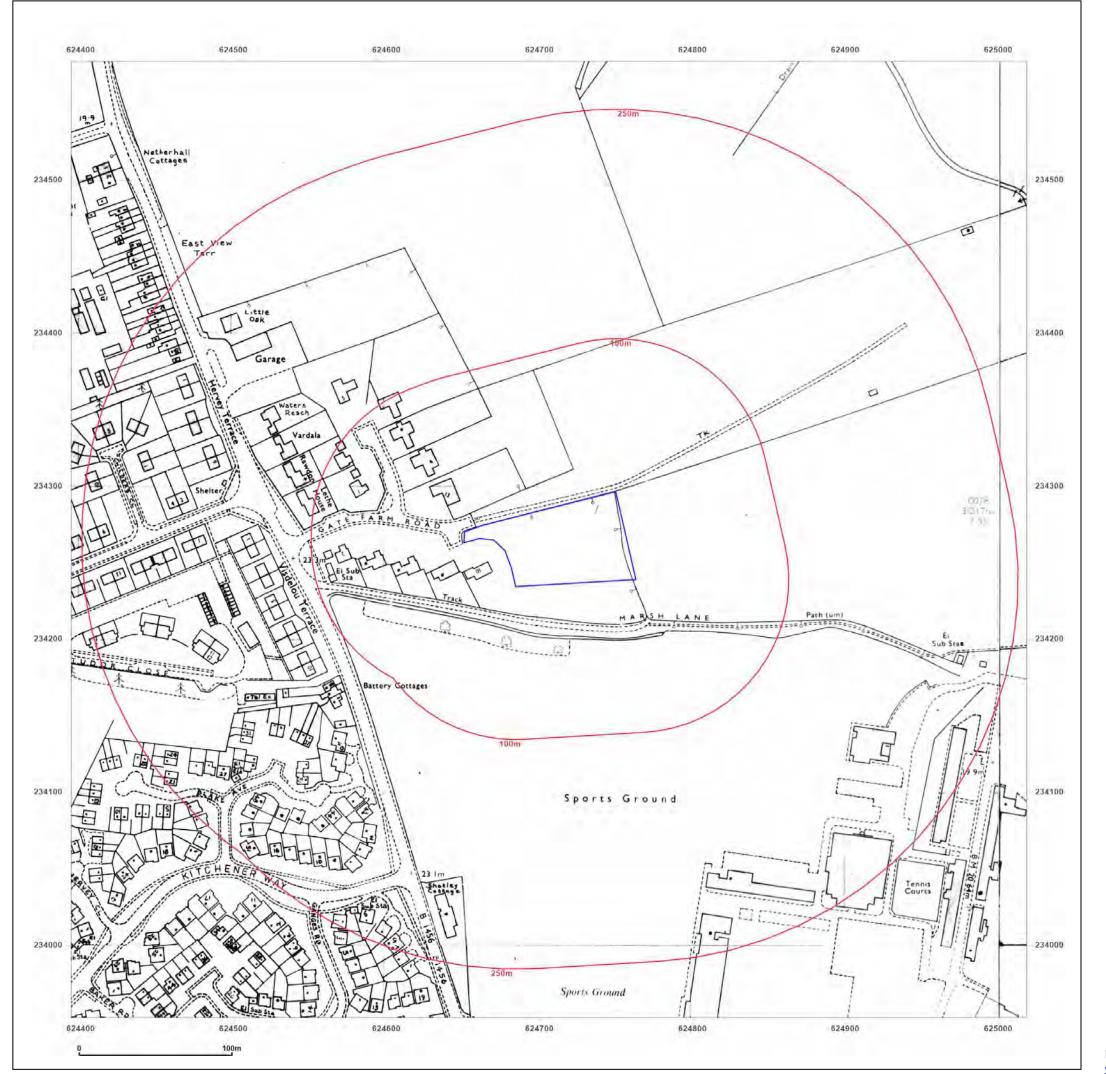


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK **Report Ref:** HMD-GUJ-LY4-UQA-5S6

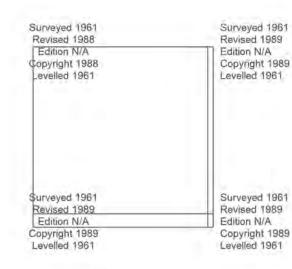
Grid Ref: 624706, 234265

Map Name: National Grid

Map date: 1988-1989

Scale: 1:2,500

Printed at: 1:2,500



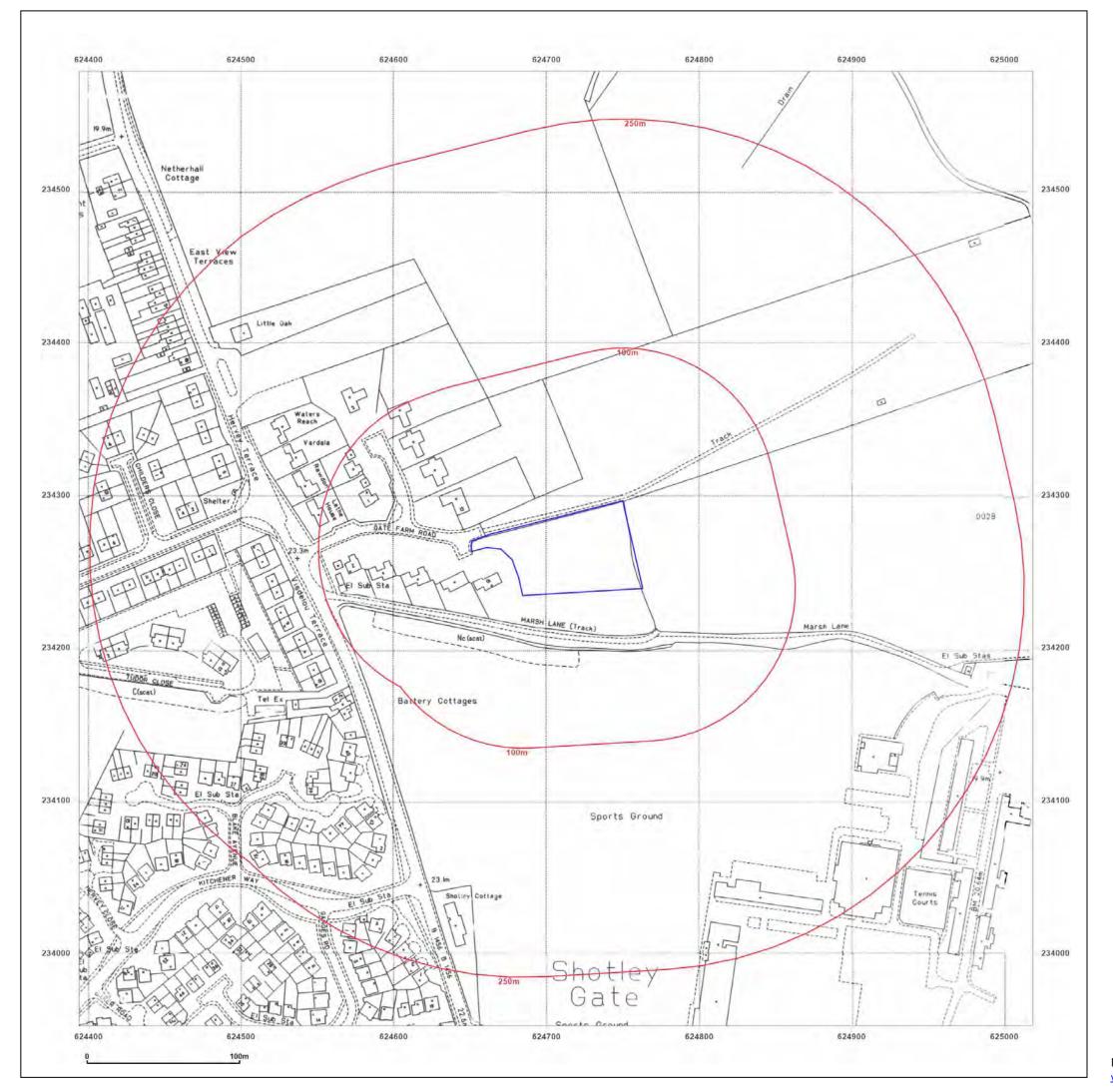


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK
Report Ref: HMD-GUJ-LY4-UQA-5S6

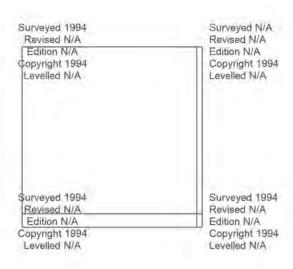
Grid Ref: 624706, 234265

Map Name: National Grid

Map date: 1994

Scale: 1:2,500

Printed at: 1:2,500



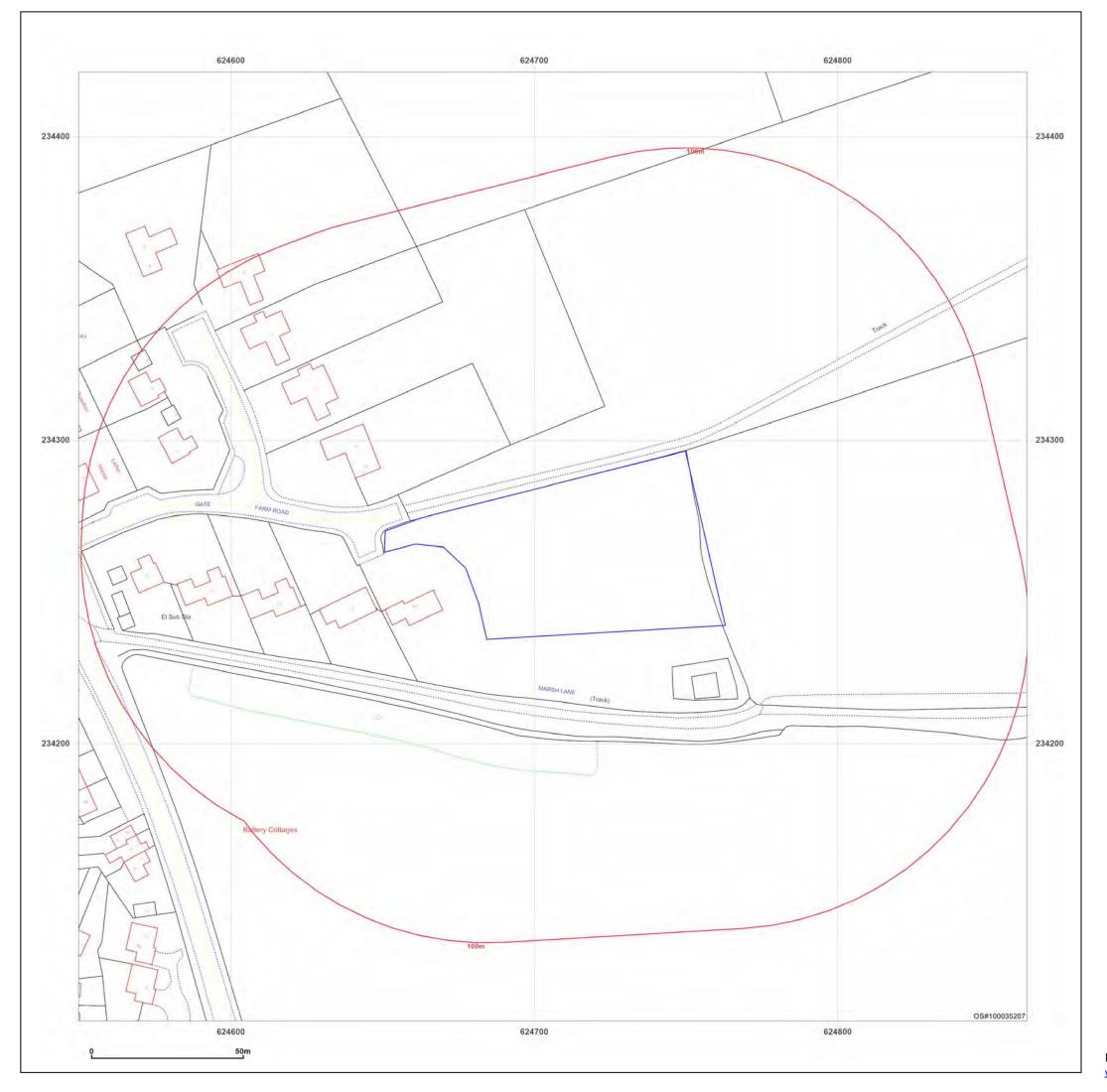


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK

Report Ref: HMD-GUJ-LY4-UQA-5S6

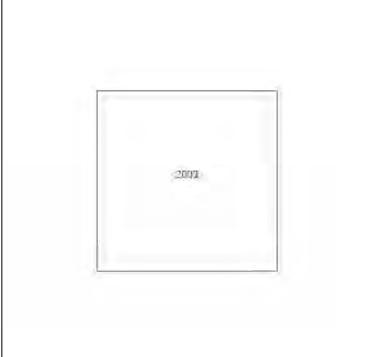
Grid Ref: 624706, 234265

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



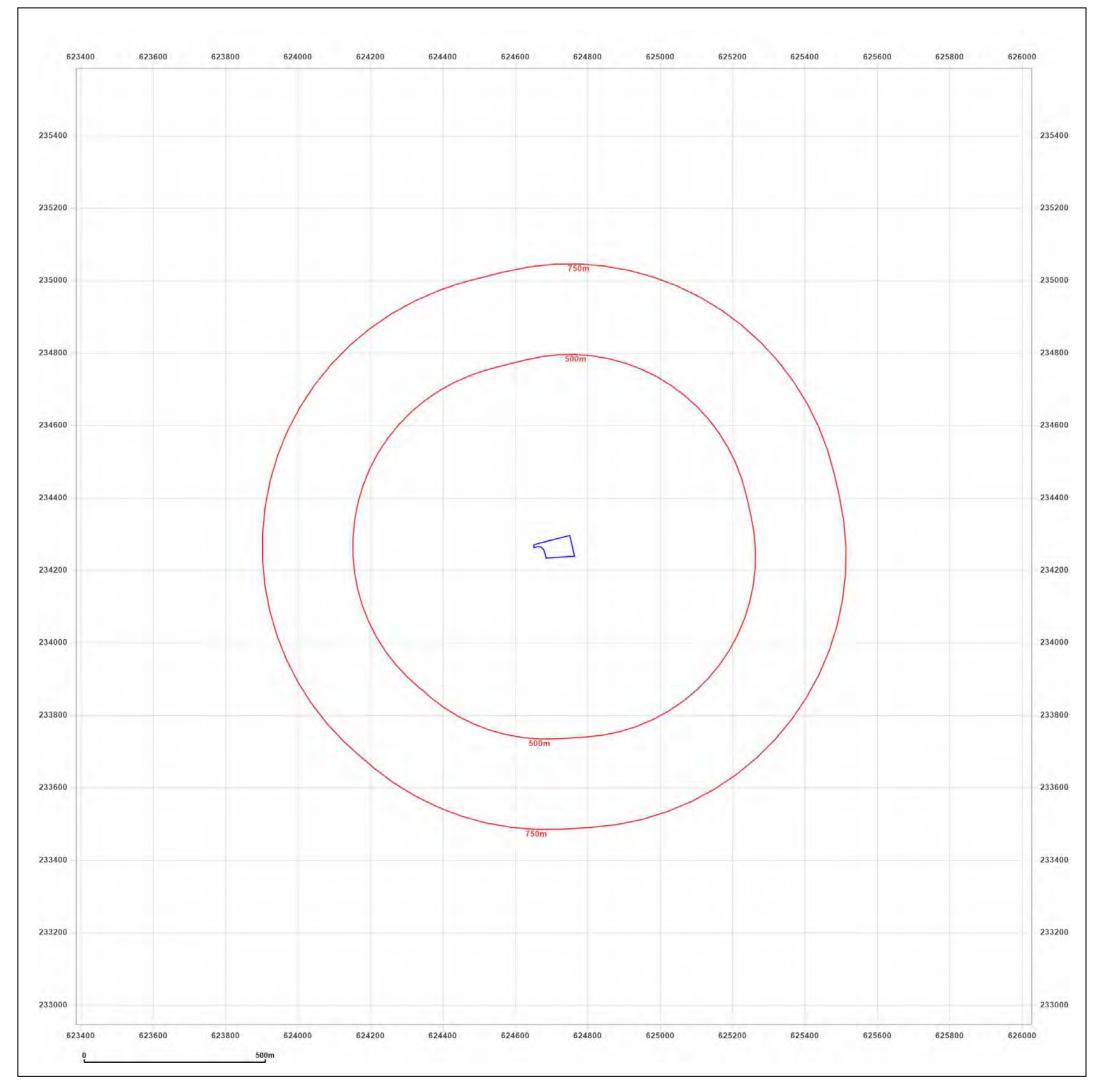


Produced by Groundsure Insights T: 08444 159000 E: info@groundsure.com W: www.groundsure.com

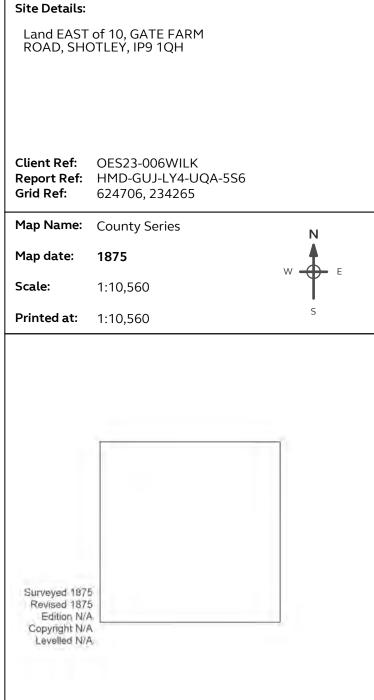
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:







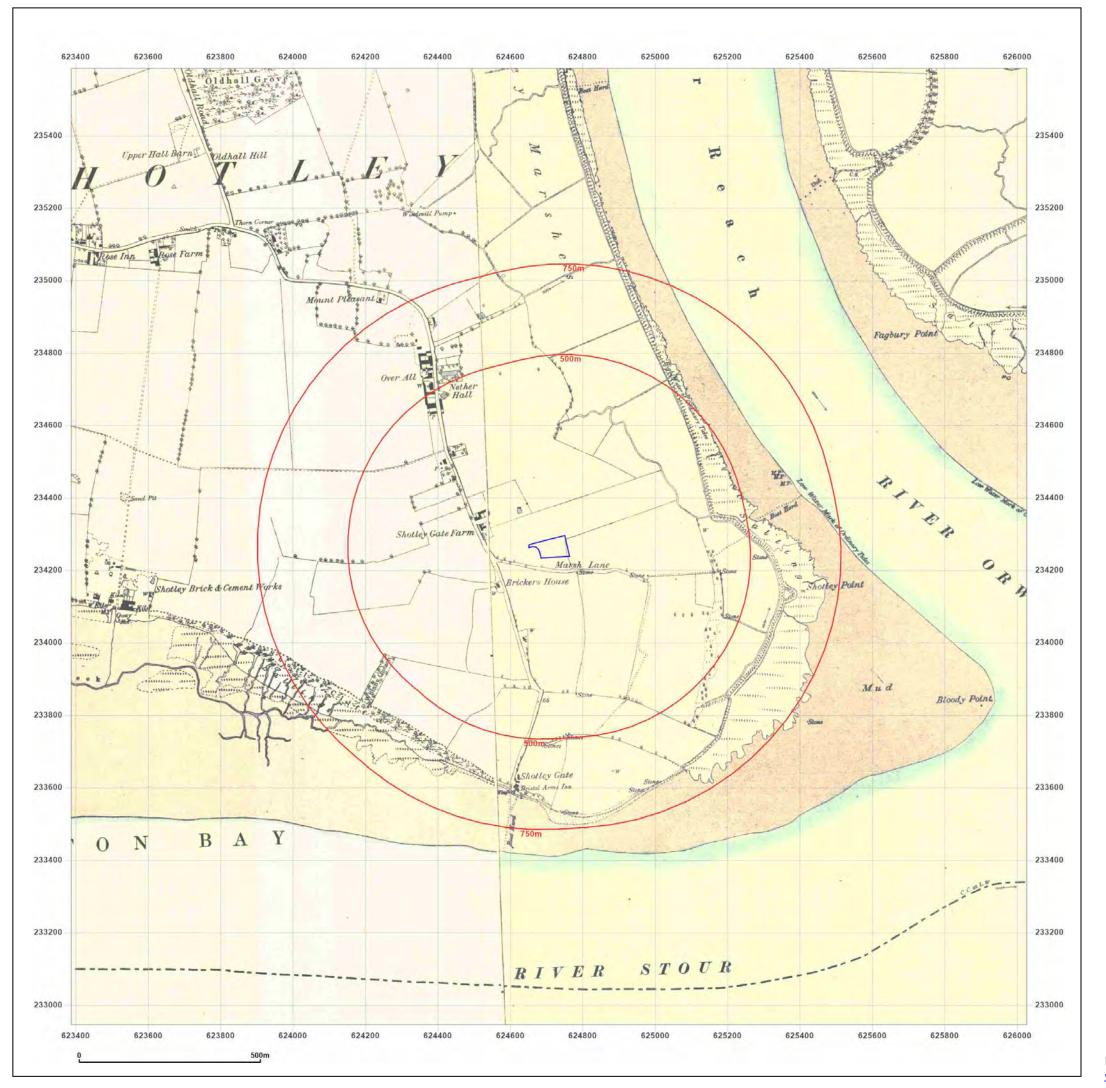


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK
Report Ref: HMD-GUJ-LY4-UQA-5S6

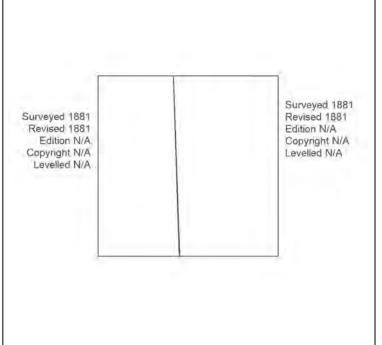
Grid Ref: 624706, 234265

Map Name: County Series

Map date: 1881

Scale: 1:10,560

Printed at: 1:10,560



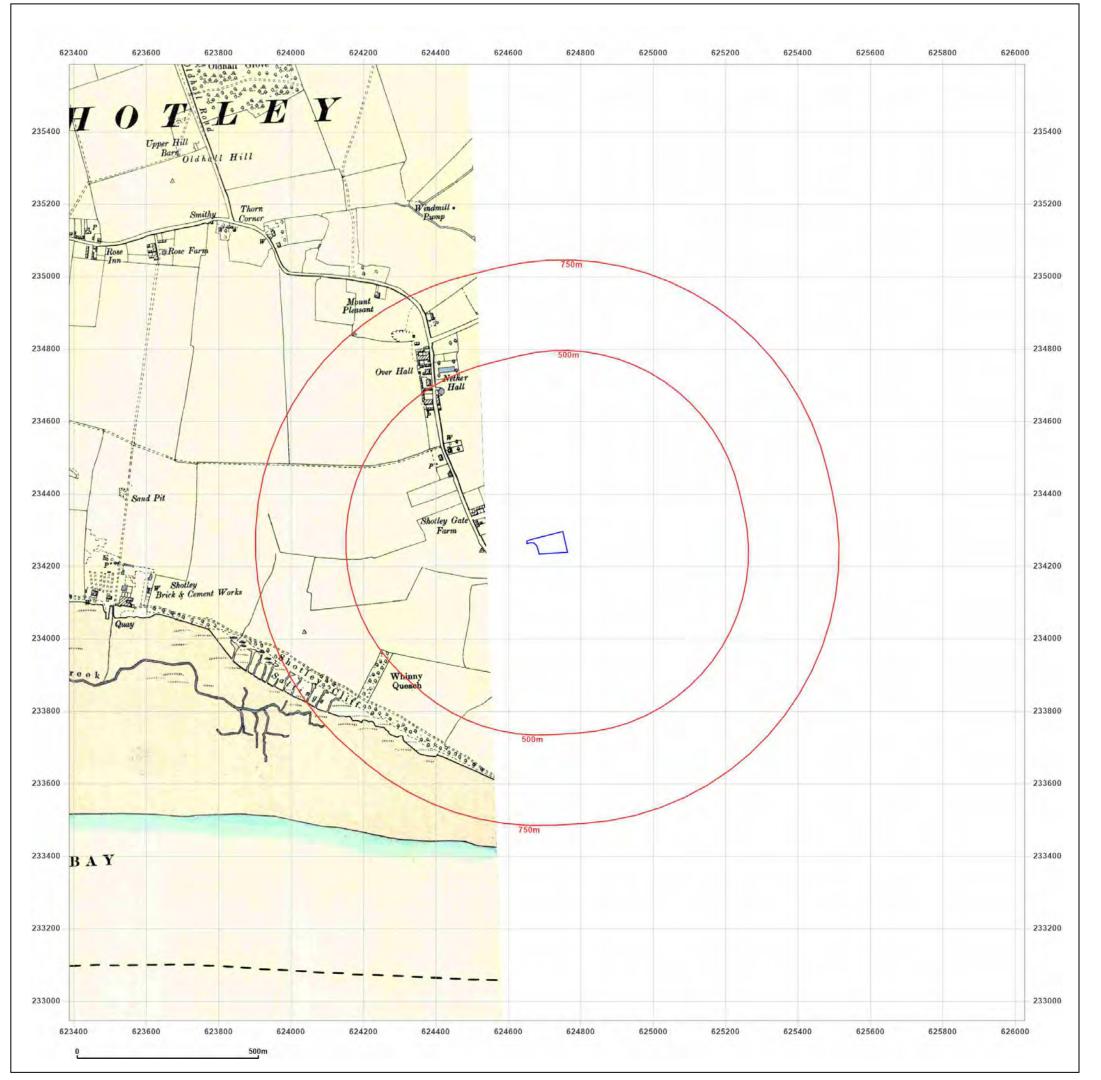


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

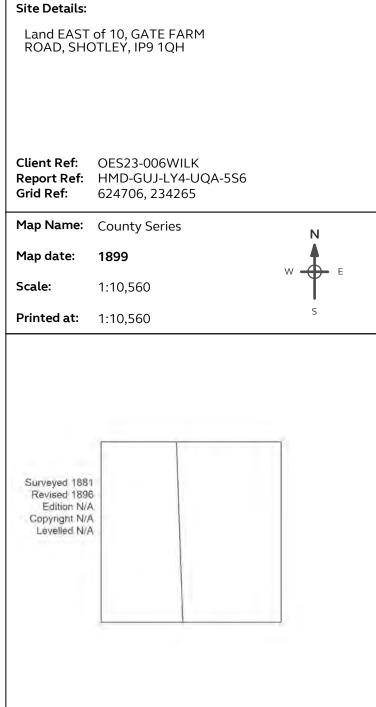
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





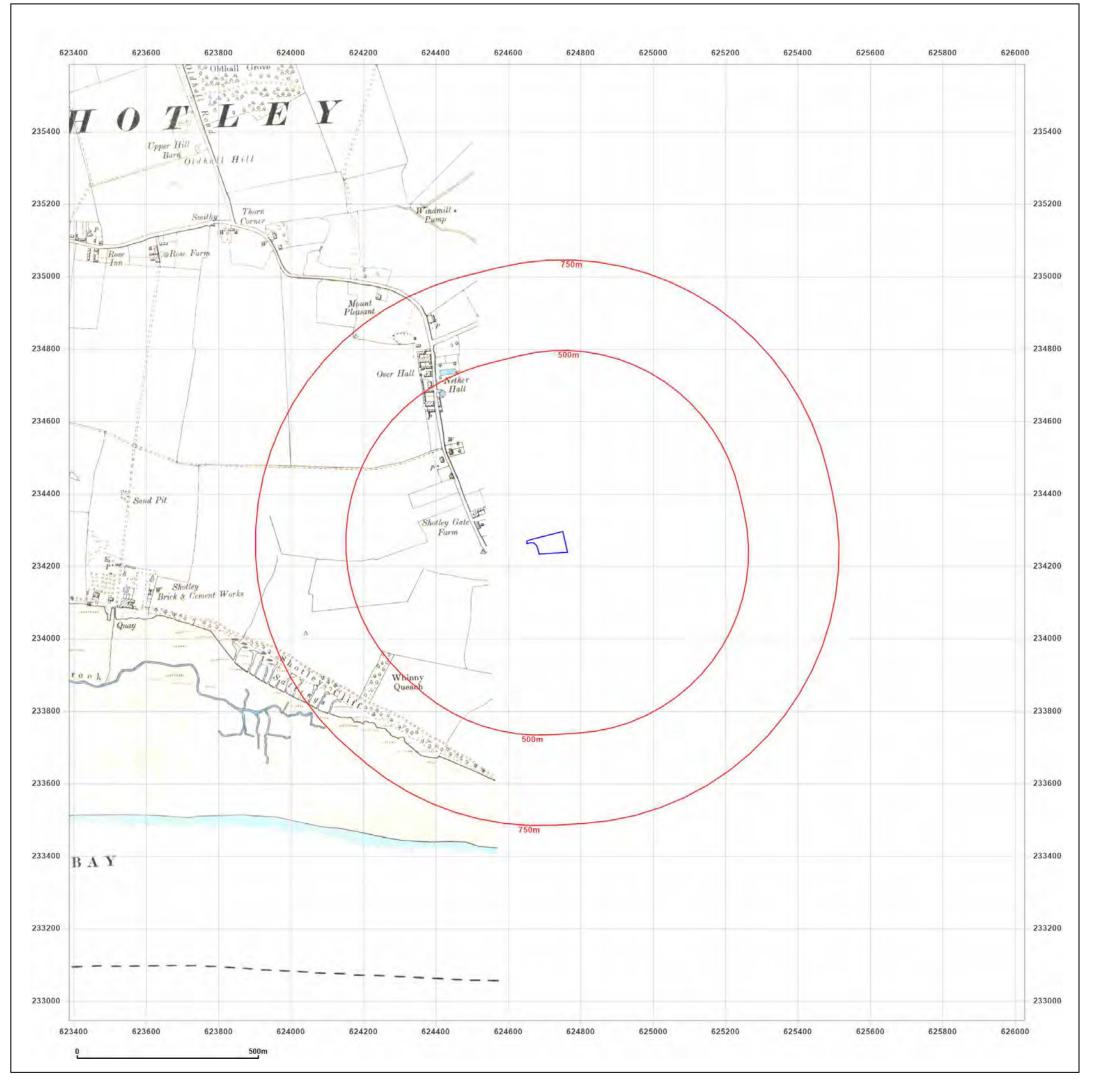




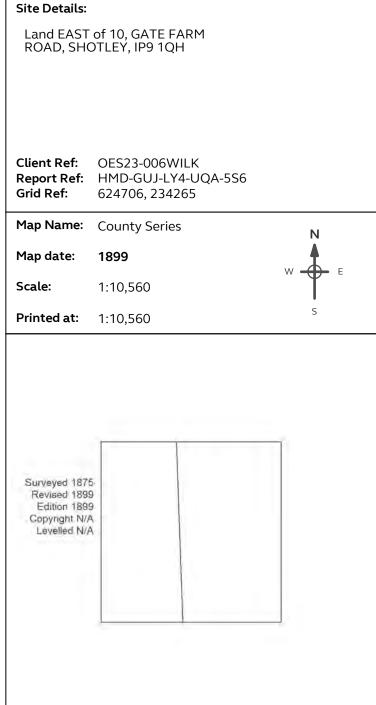
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





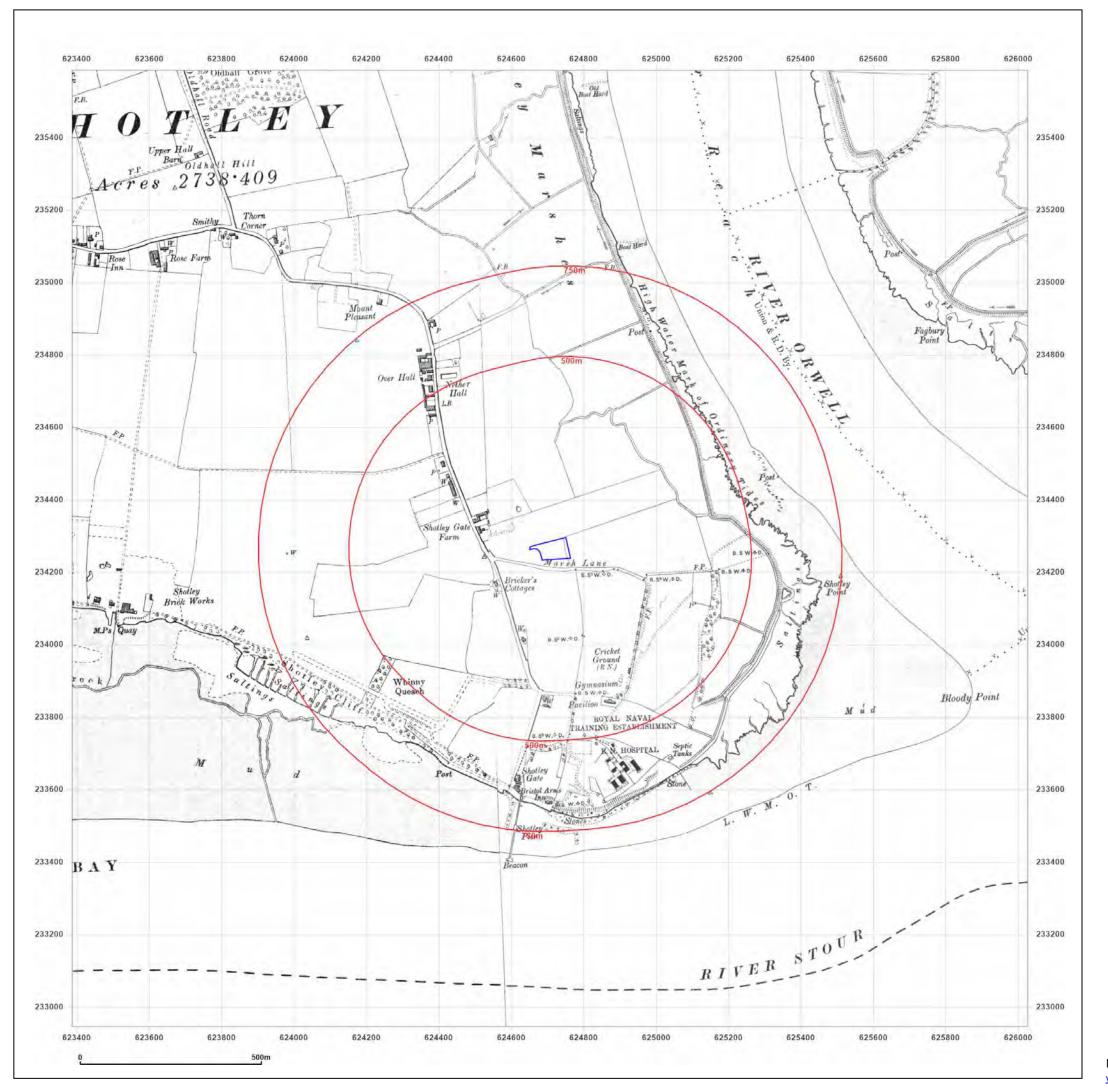




© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK

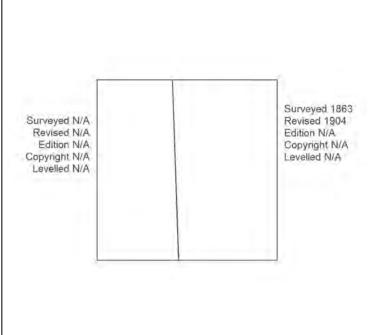
Report Ref: HMD-GUJ-LY4-UQA-5S6 **Grid Ref:** 624706, 234265

Map Name: County Series

Map date: 1901-1904

Scale: 1:10,560

Printed at: 1:10,560



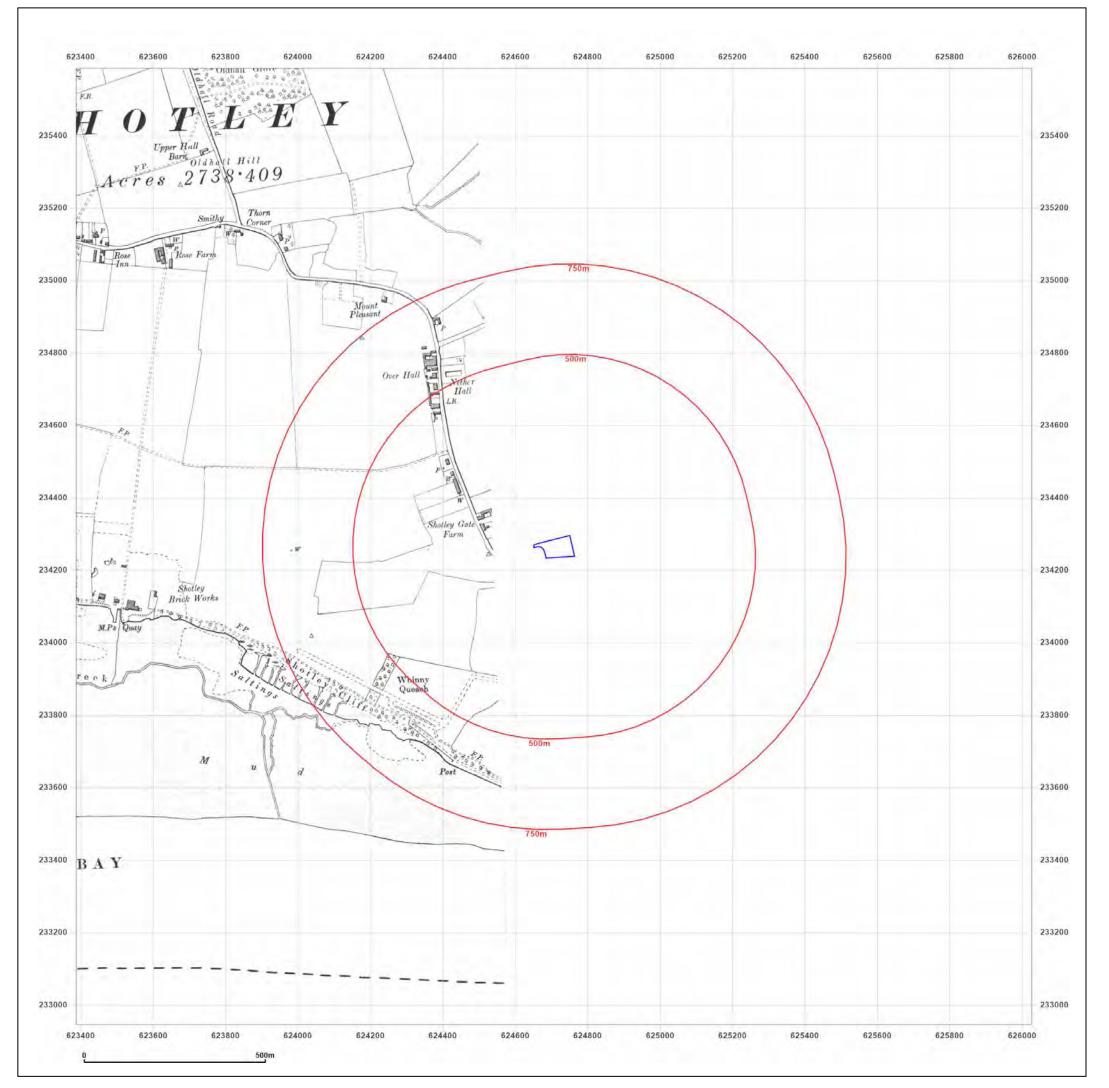


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

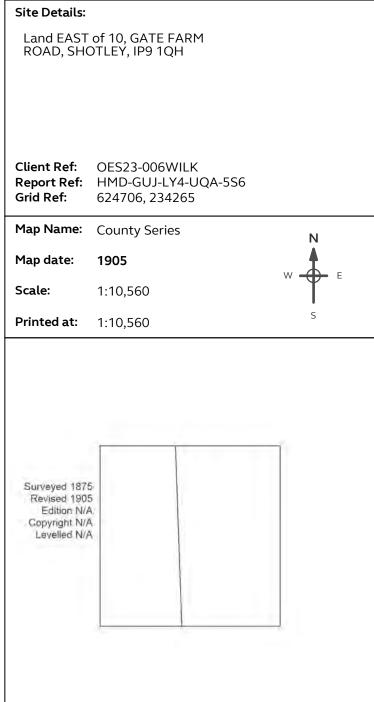
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





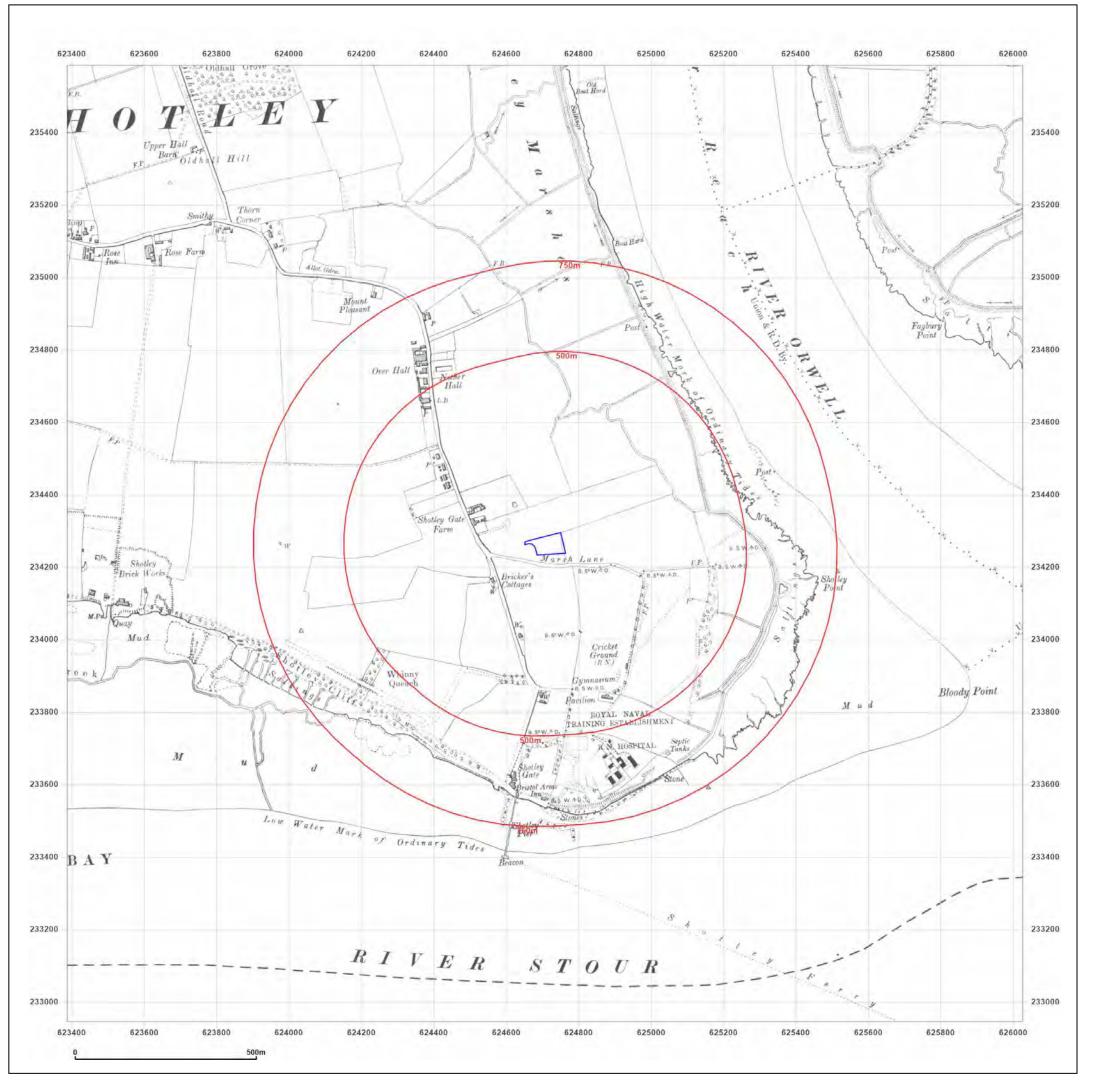




© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK
Report Ref: HMD-GUJ-LY4-UQA-5S6

Grid Ref: 624706, 234265

Map Name: County Series

Map date: 1925

Scale: 1:10,560

Printed at: 1:10,560

Surveyed 1874 Revised 1925 Edition N/A Copyright N/A Levelled N/A

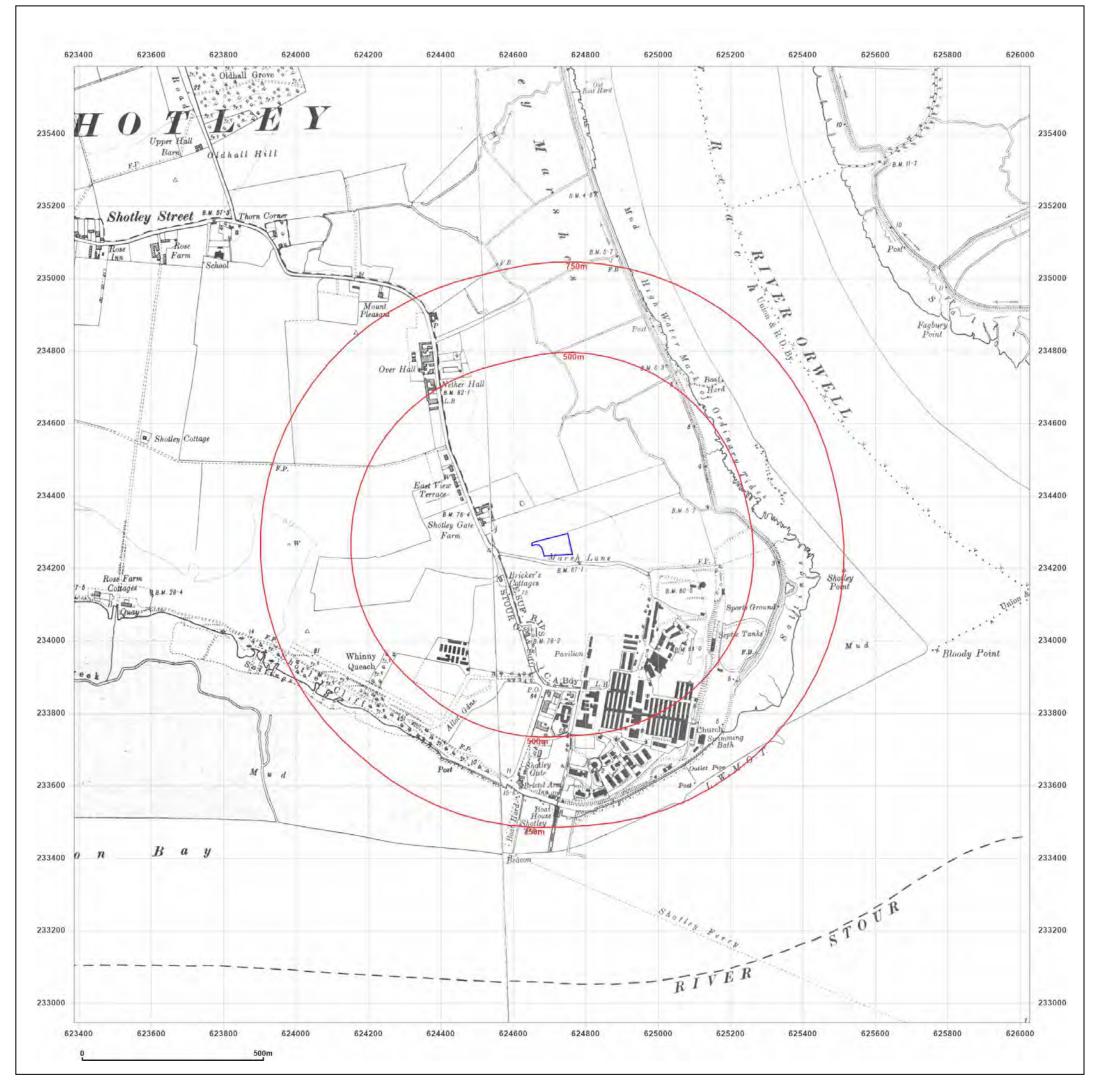


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

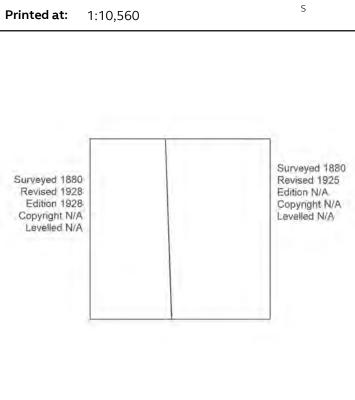
Client Ref: OES23-006WILK Report Ref: HMD-GUJ-LY4-UQA-5S6

Grid Ref: 624706, 234265

Map Name: County Series

1925-1928 Map date:

1:10,560 Scale:



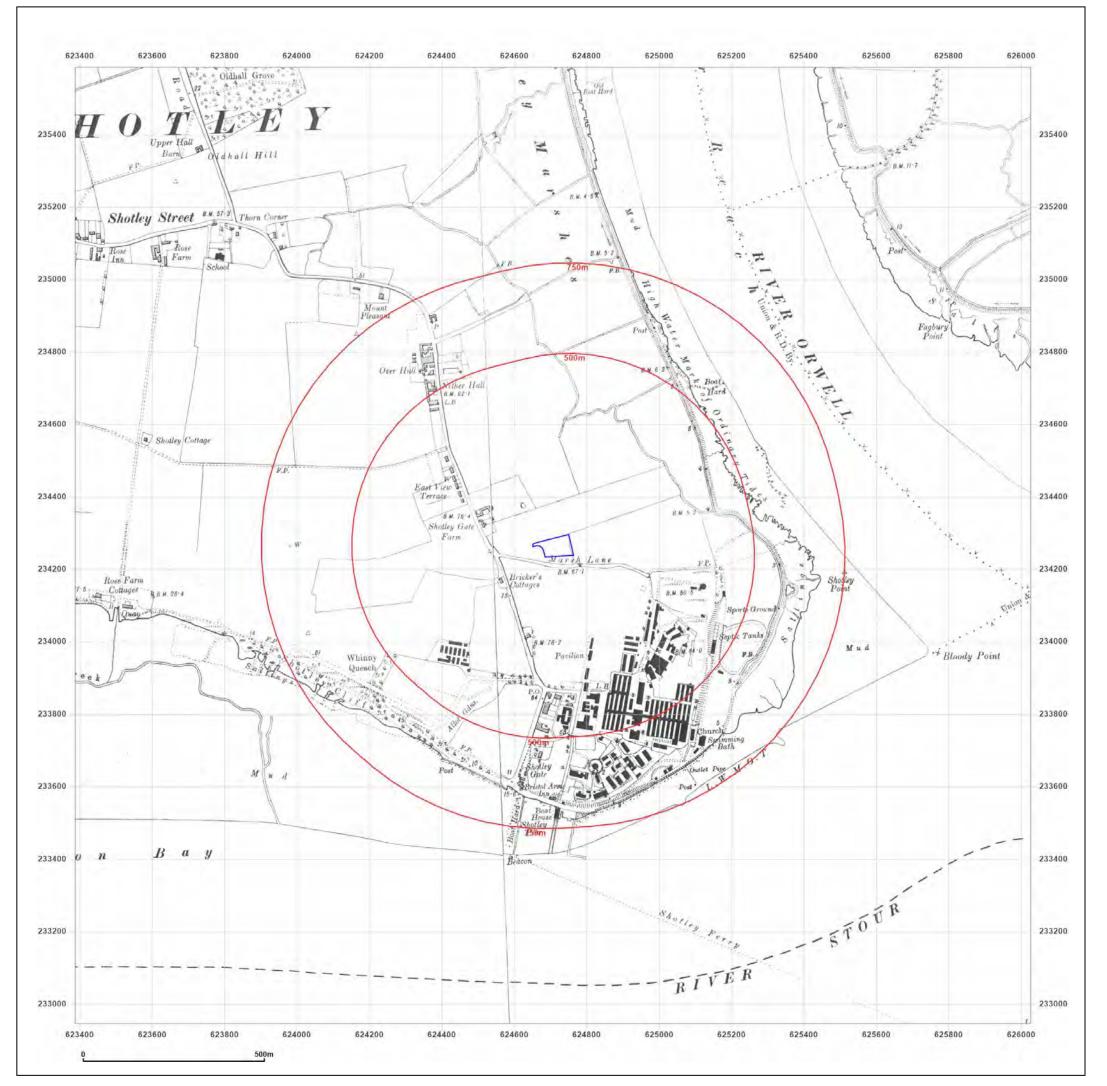


Produced by Groundsure Insights T: 08444 159000 E: info@groundsure.com W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK
Report Ref: HMD-GUJ-LY4-UQA-5S6

Grid Ref: 624706, 234265

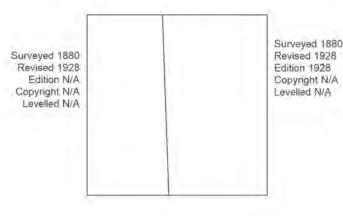
Map Name: County Series

Map date: 1928

Scale: 1:10,560

Printed at: 1:10,560

,



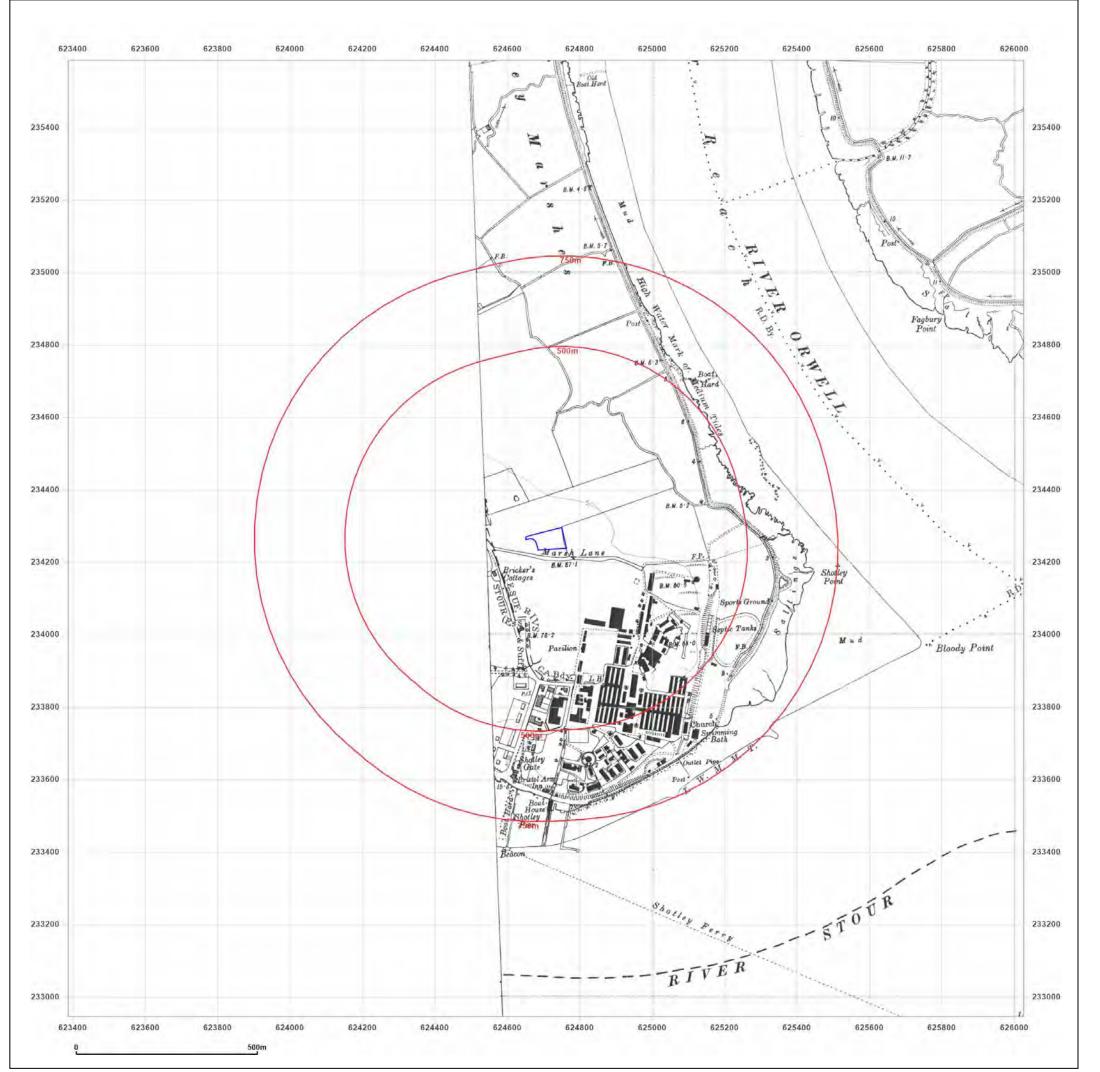


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK

Report Ref: HMD-GUJ-LY4-UQA-5S6 **Grid Ref:** 624706, 234265

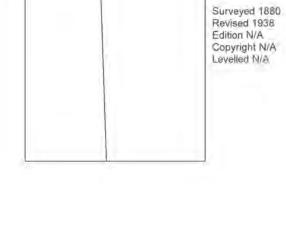
Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560





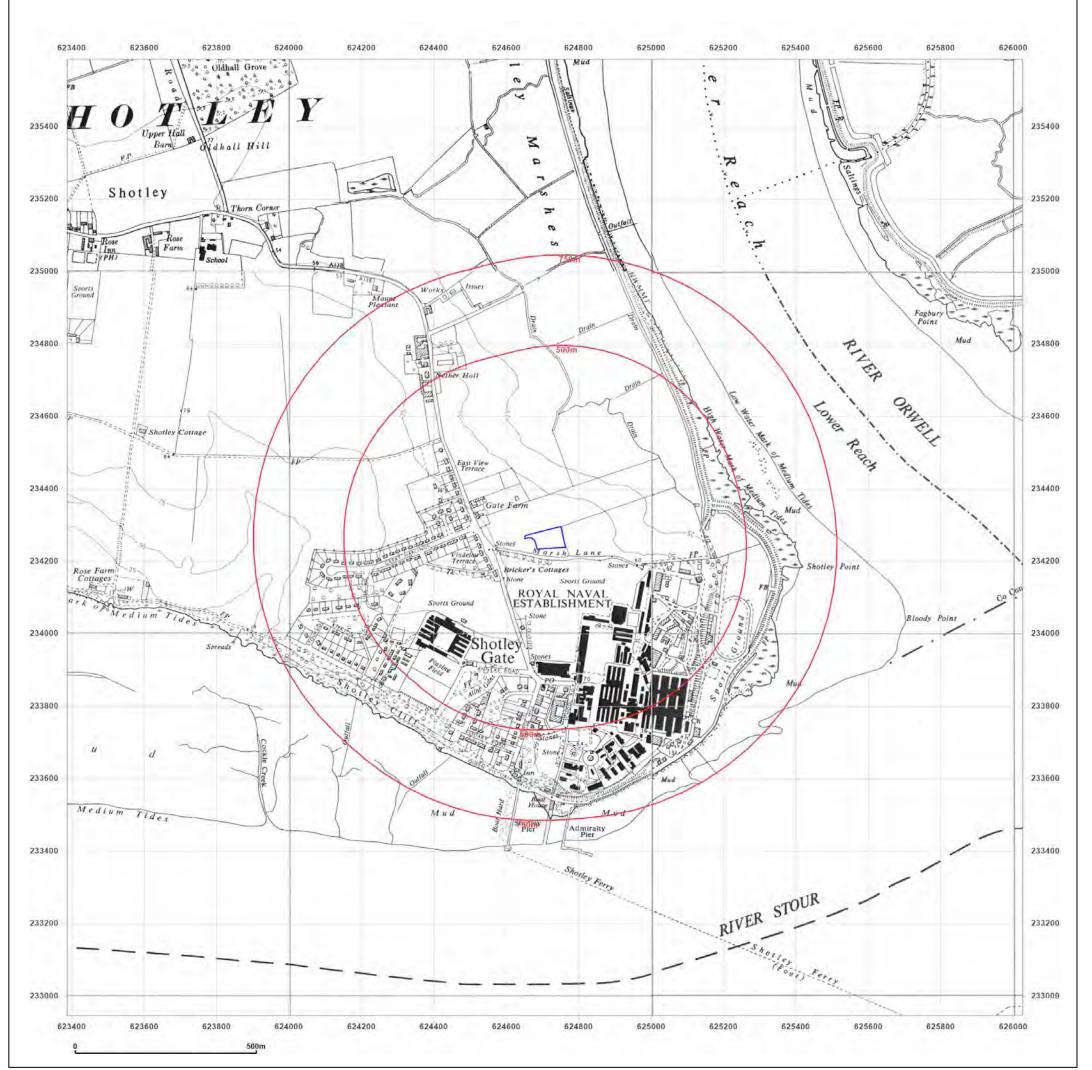


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

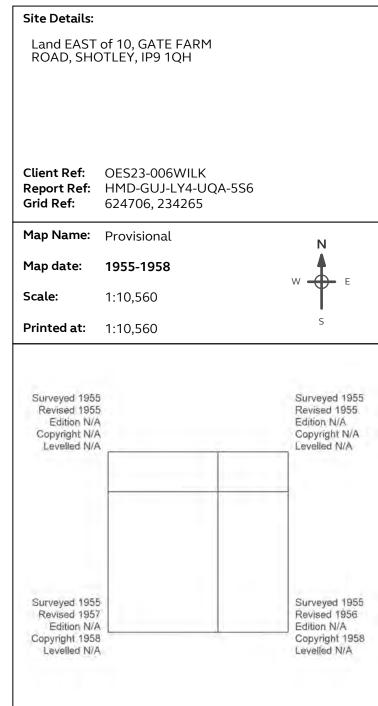
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





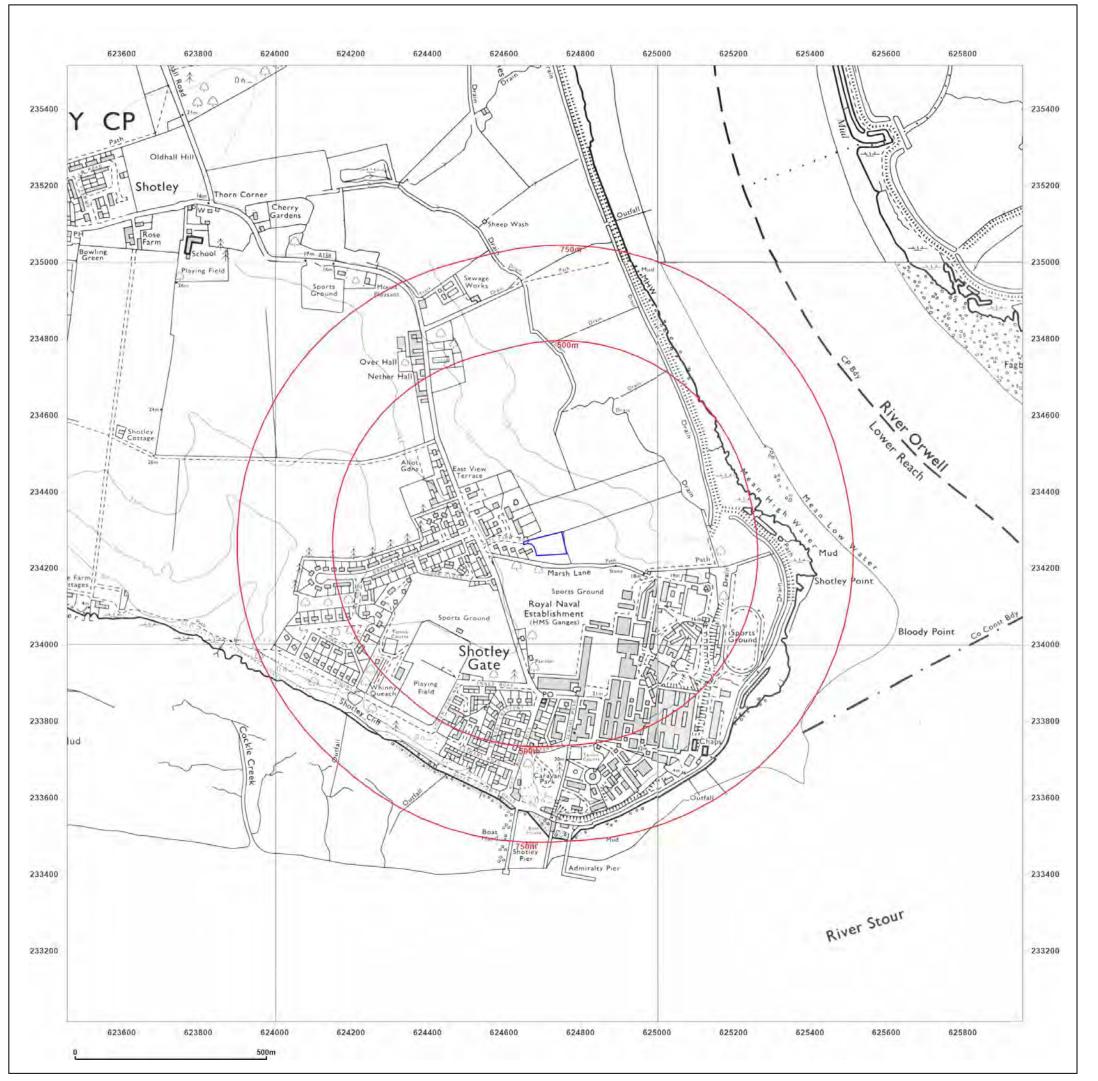




© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





Site Details: Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

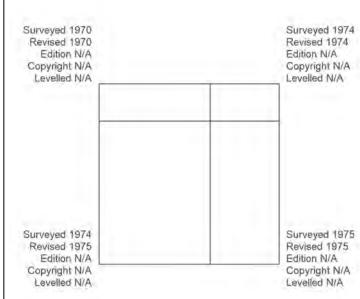
Client Ref: OES23-006WILK
Report Ref: HMD-GUJ-LY4-UQA-5S6
Grid Ref: 624706, 234265

Map Name: National Grid

Map date: 1970-1975

Scale: 1:10,000

Printed at: 1:10,000



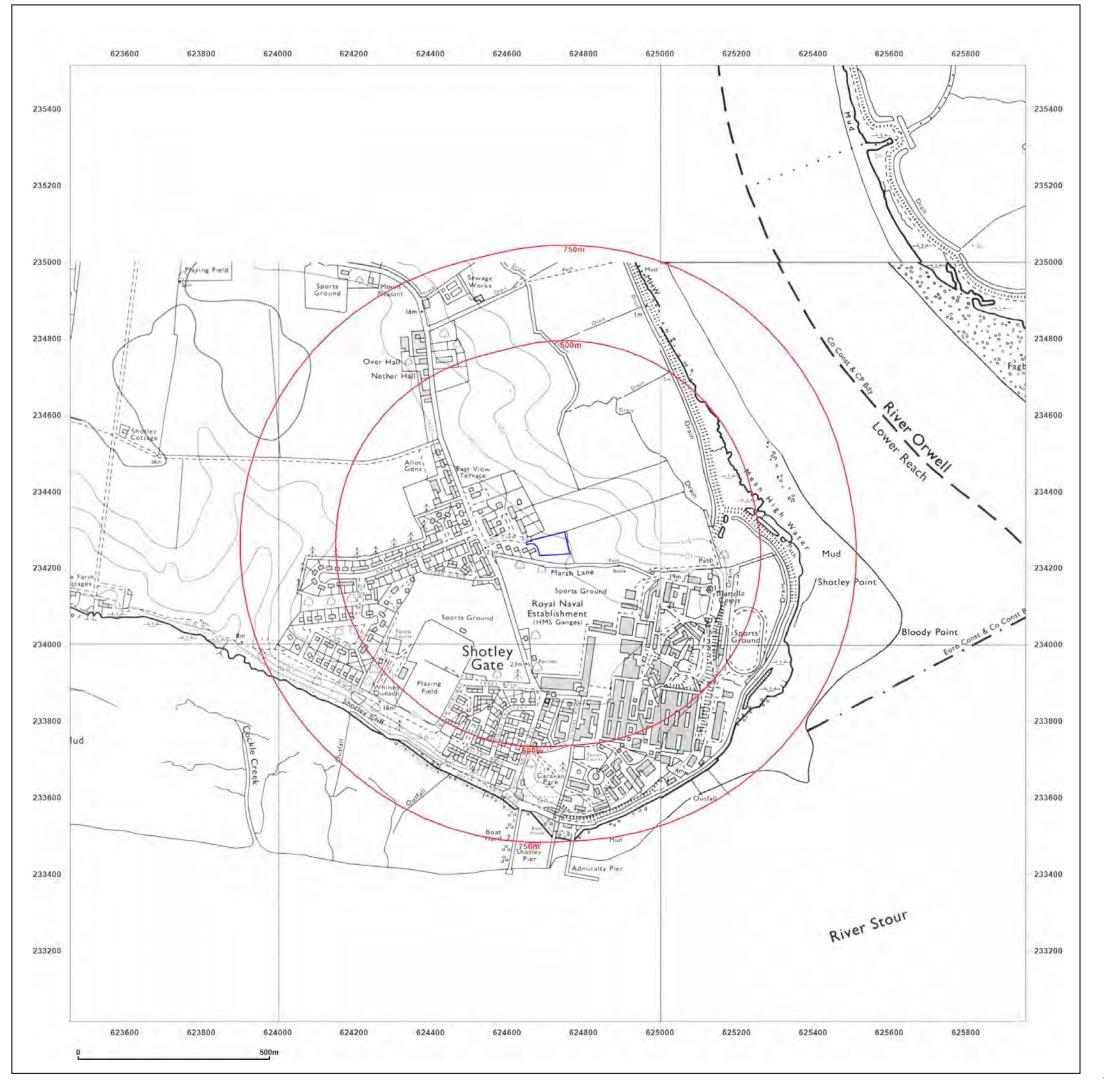


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

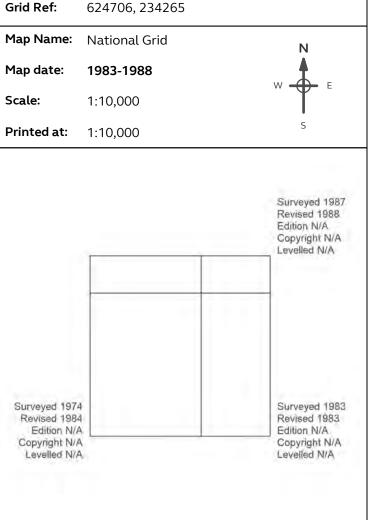
Map legend available at:





Land EAST of 10, GATE FARM ROAD, SHOTLEY, IP9 1QH

Client Ref: OES23-006WILK Report Ref: HMD-GUJ-LY4-UQA-5S6





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

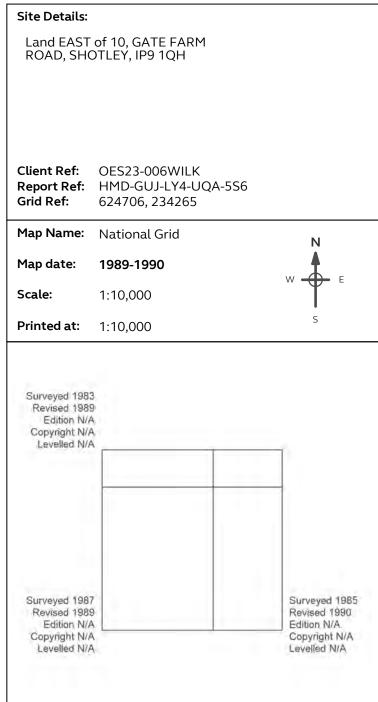
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:





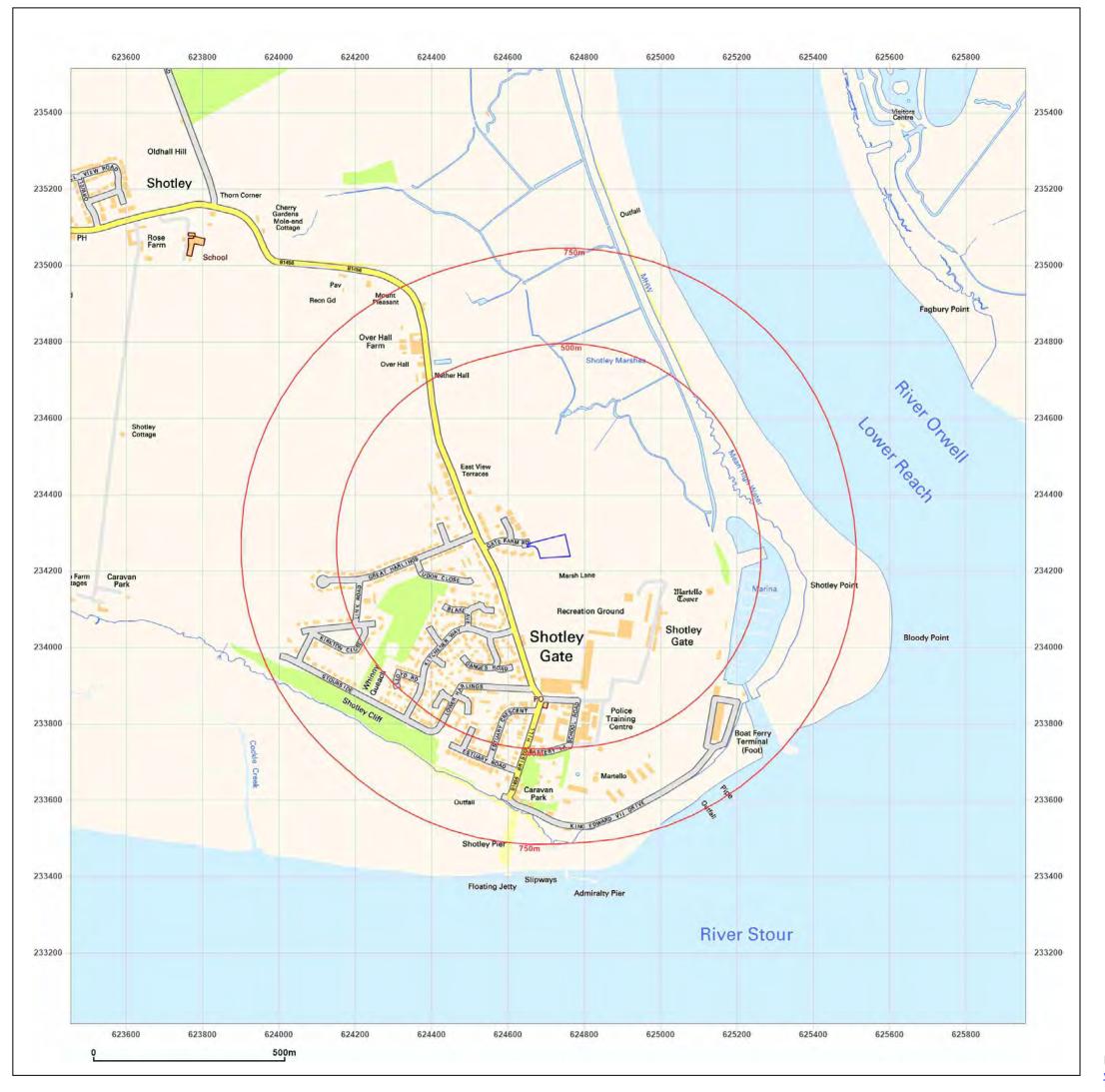




© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:







Client Ref: OES23-006WILK
Report Ref: HMD-GUJ-LY4-UQA-5S6
Grid Ref: 624706, 234265

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



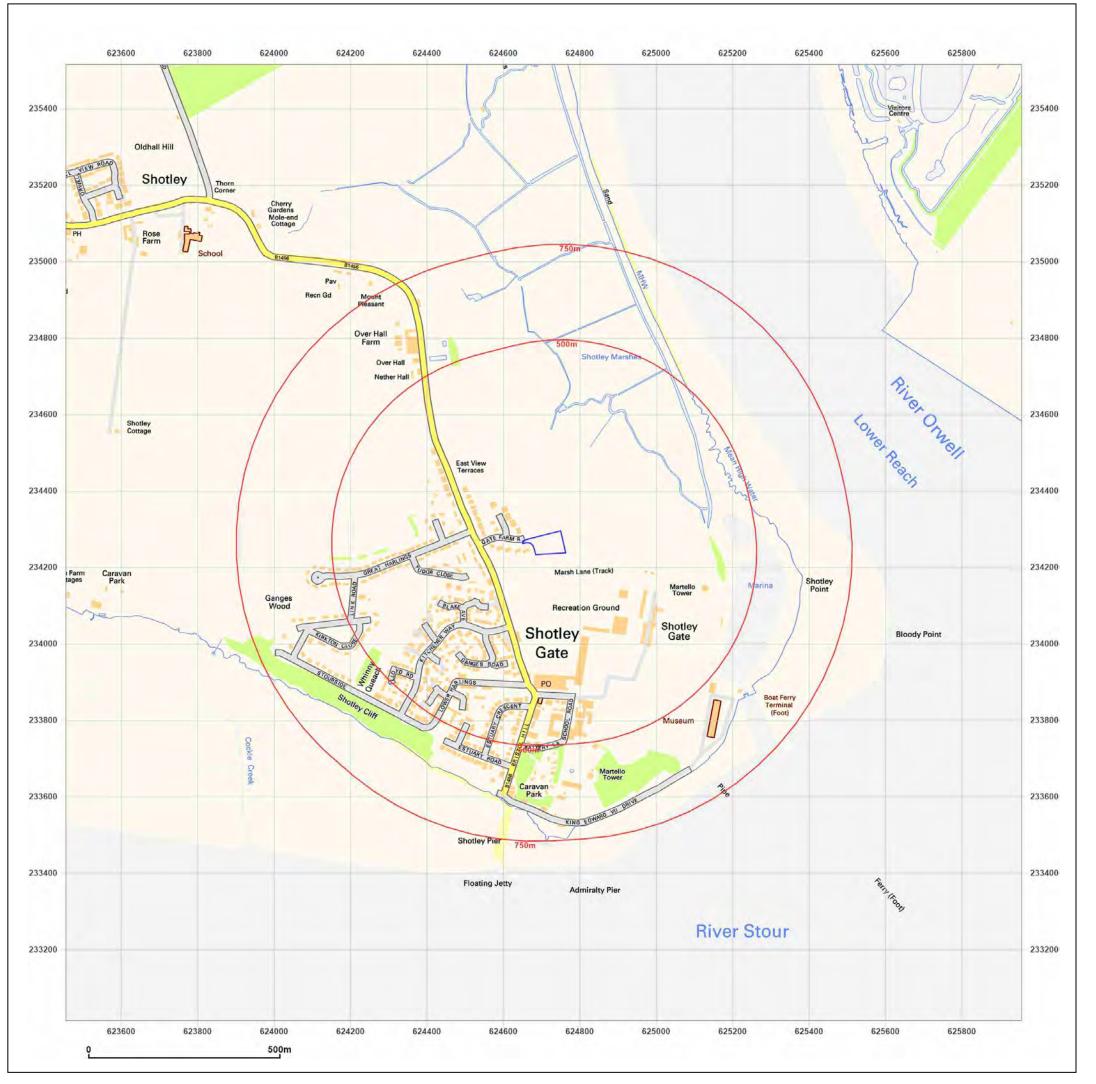


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

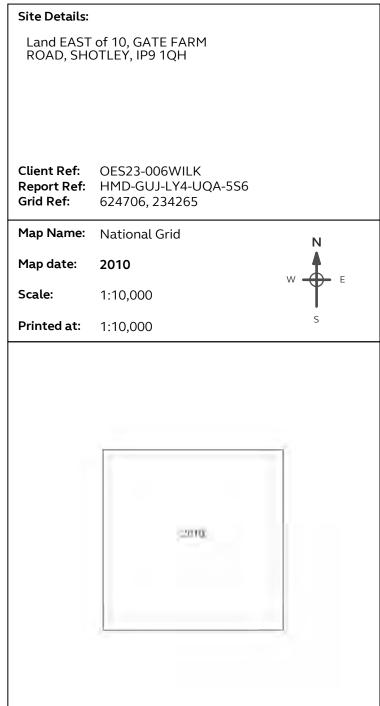
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:









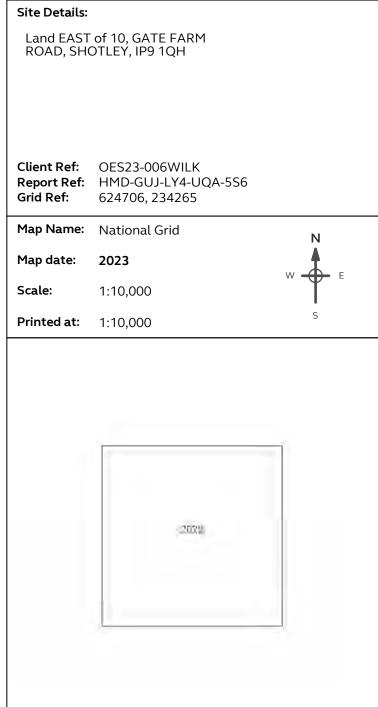
© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at:









© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2023

Map legend available at: