Phase 1 Environmental Site Assessment

For proposed development at:

Flax Farm, Stansfield Road, Poslingford, Sudbury, CO10 8RD

Survey and Report by:
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Reviewed by
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1 Executive Summary

Background	Bright Green Environmental was instructed to undertake a Phase 1 Environmental Site Assessment of land and buildings at Flax Farm, Stansfield Road, Poslingford, Sudbury, CO10 8RD (the 'Site'). The purpose of the assessment was to evaluate the property's suitability for a residential scheme. A site visit was originally carried out on the 18th January 2019, an updated survey was carried out on 11th August 2021. This report is designed to support the application for Planning Permission.
The Site	The site is located off Stansfield Road, and is understood to form part of the wider flax farm holding. It consists of a large concrete apron, two main structures (in disrepair), what appears to be a former grain dryer or mill and hydrocarbon storage The site has changed very little other than the demolition and construction of agricultural buildings in that time. To the north remains a residential property known as Flax Farmhouse.
Site History	A review of historical mapping indicates that the Site and surroundings were used for agricultural purposes since 1884 (the date of the oldest published OS mapping reviewed).
Third Party Reports	Groundsure Report and Historical Mapping have been consulted
Preliminary Assessment Outcomes	There are a number of identified on-site sources of potential contamination. The site is considered **MODERATE RISK**.
Conclusions	It is possible that harm could arise future receptors from an identified hazard / contaminant. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is likely that the harm would be relatively mild. It is possible that land contamination related issues will arise as a cost/liability for the freehold owner of the Site. Some remedial works will be required in the long term to support a safe and suitable development and further investigation is required to clarify risks and to determine potential liability

2 Introduction

Appointment	Bright Green Environmental was instructed to undertake a Phase 1 Environmental Site Assessment of land and buildings at Flax Farm, Stansfield Road, Poslingford, Sudbury, CO10 8RD (the 'Site'). The purpose of the assessment was to evaluate the property's suitability for a residential scheme. A site visit was carried out on the 18th January 2019 to supplement the research, an updated survey was carried out on 11th August 2021. This report is designed to support the application for Planning Permission.
Objectives	The objectives of this assessment are to: • Review historical plans, geology, hydrogeology, site sensitivity, flood-plain issues, mining records and any local authority information available in order to complete a Desk Study in line with Environment Agency (EA) document Model Procedures for the Management of Contaminated Land (Contaminated Land Report 11 (CLR11)); • Assess the implications of any potential environmental risks, liabilities and development constraints associated with the site in relation to the future use of the site and in relation to off-site receptors; • Assess the desk study information and where possible, provide preliminary recommendations in relation to foundations, pavement construction and floor slabs; and, • Provide recommendations regarding future works required and undertake a preliminary pre-construction cost appraisal.
Scope of Works	Phase I: • Review of historical data from a Groundsure Data report for the site and surrounding areas including historical maps; • Review of publicly available on-line environmental data sources (Environment Agency), online historical planning applications and third-party environmental database search to identify to site setting and potential contamination; • Review of the site geology, hydrogeology and hydrology from geological and groundwater vulnerability maps; • Development of a conceptual site model in accordance with CLR 11 and Planning Guidance (if appropriate); • Conclusions as to the environmental risks present at the site (if any), specifically to the proposed development; • Submission of assessment report.
Assumptions and Limitations	Evaluations presented in this ESA are based exclusively on publicly available information, information provided by the site owner, and observations made during the Site visit. A copy of the study limitations is presented in Appendix A. An updated groundsure report has not been obtained as there is no evidence of any recent changes in use and the historical data remains unchanged.
Risk Classification	This report has considered environmental risks qualitatively in terms of a 'source-pathway-receptor' approach as detailed in Appendix B. In consideration of the information reviewed, a risk rating has been provided on the basis described in Appendix B with due respect to CIRIA publication C552 (2001).

3 Site Location, Land Use and Site Reconnaissance

3.1 Site Location and Current Land Use

Aerial Photograph of Flax Farm, Stansfield Road, Poslingford, Sudbury

Address	Flax Farm, Stansfield Road, Poslingford, Sudbury, CO10 8RD
Grid Reference	°06'52.7"N 0°35'26.1"E

Current Site Use	The site compromises part of a larger farm holding and consists of two main structures which are now unused and have fallen into significant disrepair. There are areas of hardstanding in front and around the sides of the building in various states of repair. The structures themselves are of varying construction, predominantly of corrugated sheeting (possibility of asbestos bonded material) and steel profile sheets in varying states or repair. To the rear is a former plant room (milling or grain drying) adjacent to which can be seen the former plinths which supported a hydrocarbon tank. The tank is no longer present but there is an element of hydrocarbon staining beneath the tank (unbunded).

Adjacent Land Uses	**North**	Stansfield Road (Metaled) beyond which is Flax Farm (Residential & Agricultural)
	East	Access track and agricultural fields beyond
	South	Agricultural fields
	West	Stansfield Road (Metaled) beyond which is Flax Farm (Agricultural / Industrial)

3.2 Historical Land Use

A review of the historical mapping of the site provided the following information:

On-site Potentially contaminative historical activities	Observing historical maps of the area, the site location has primarily been in agricultural use from the first available mapping in 1888 when Flax Farm is noted on the maps. The site appears to be agricultural fields, with two isolated ponds in the grounds of Flax Farm. By 1905 there appears to be a small structure at the junction of the access road and Stansfield Road and a further structure located on the northern boundary of the site by 1958. These appear to have been demolished by 1968 when a further small structure appears on the north west portion of the site. By 1984 the structures that are evident on site appear on the maps and there appears to be no significant changes up until the present day. The only sources of potential contamination are therefore considered to arise from demolition / construction activities, hydrocarbon storage and those typically associated with agricultural activities.
Off-site potentially contaminative historical activities	Historical maps from 1843, shows a range of small changes, mainly to what is referred to as Flax Farm which remains today to the north of Stansfield Road. These changes primarily concern the demolition and erection of buildings and structures. The one potential source of contamination could have been a pond located on the south west corner of flax farm which appears on maps in the early 1900's but has disappeared by 1958 when structures appear on the maps. However, given the age of such this is considered extremely unlikely. There is a record of an unspecified tank 29m to the north-west to the rear of the residential unit at Flax Farm although given its position the risk is considered negative at this time.

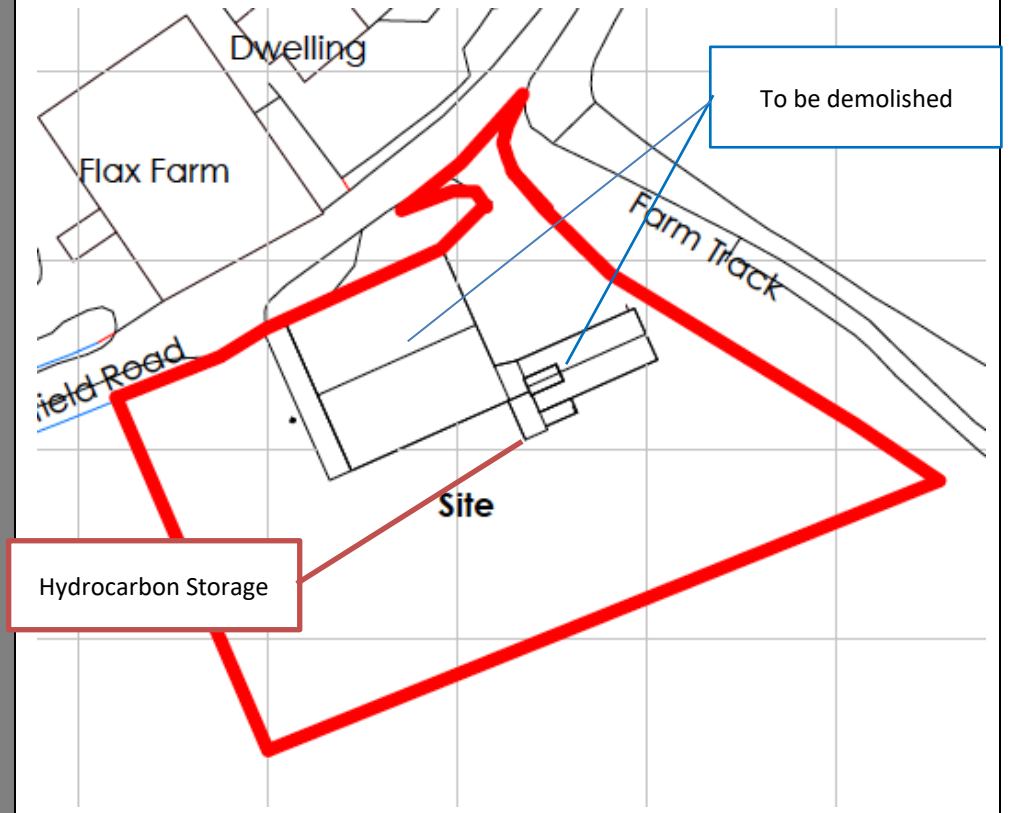
3.3 Site Photographs

The following are photos showing the site in context.






3.4 Site Reconnaissance & Preliminary Sampling

Date of Visit	Initial survey 18/10/2019 Update survey 11/08/2021	Inspection by	Simon Joynes
Access	Free access was available to the entire site.		
General Observations	The site is one of a redundant farm setting, consisting of a various element of hardstanding upon which are two large agricultural structures in various state of repair. There were evident waste arisings from excavations containing brick fragments etc and also a former hydrocarbon storage area to the rear with some localised staining. The buildings were predominantly of sheet profile material (both of metal and possibly asbestos bonded cement)  		
Current Potentially Contaminative Activities	There were no specific potentially contaminative activities identified at the time of attendance. Albeit the structures may contain asbestos cement material which will need to be considered in more detail. Likewise, the localised hydrocarbon staining are all sources of potential contamination. The base of the concrete slab is unknown and there has been various forms of construction and demolition over the years.		
Material Storage & Waste	Localised staining from former hydrocarbon storage		

Ground Sampling Activities	No sampling was undertaken at the time of the visit
Soil Sampling Observations	N/A
Analysis Results	N/A
Other Observations	None identified.
Photographic log	As above

4 Environmental Database and Public Records Review

4.1 Key Issues from Environmental Database and Public Records Review

From the review of information from the data sources listed in Appendix B, there are no activities within a 150m radius of the site which may have presented sources of contamination which could impact the Site.

4.2 Key Issues from Planning Review

Further to this, a review of the available online planning records, accessed online on the 22nd January 2018 was undertaken to identify the planning history of the site surrounding areas. Activities which may have the potential to represent sources of land contamination, are considered to have the potential to have impacted the Site or are pertinent in any risk assessment for the site are summarised below:

Planning Portal	West Suffolk District Council
Overview of identified information	*Application No. DC/17/1434/HH* *Date: 12th July 2017* *Status: Application Permitted* *Description: Single Storey and Two Storey Residential Extension, Flax Farmhouse*
Potentially contaminative activities identified	The application did not require or contain any form of environmental land assessment. It is worth noting that it is also in close proximity to the former unspecified tank noted earlier.

5 Environmental Setting

From the review of the information from the data sources listed in Appendix B, the following information has been identified in relation to the Environmental Setting of the Site:

Regional Geology	From the geological mapping consulted, the Site is reported to be underlain by superficial deposits comprising Lowestoft Formation, understood to comprise predominantly cohesive deposits with variable sand and gravel content, with Head (clay, silt, sand and gravel) deposits below the western end of the access track. The superficial deposits are underlain by Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation.
Site Specific Geology	No previous site investigation data was available for review.
Coal Mining and Mineral Sites	The Site is not in an area considered likely to have been affected by coal mining based upon the information within the Groundsure. Therefore, a site-specific report prepared by The Coal Authority was not deemed necessary for the Site.
Radon	The Enviroscreen Report details that the property is not in a radon affected area as less than 1% of properties are above the action level. No radon protection measures are necessary.
Hydrogeology	The superficial Lowestoft Formation and head Deposits are classified as Secondary Aquifers. The chalk bedrock is classified as a Principal Aquifer. There is also a risk a groundwater flooding noted on the site.
Groundwater Abstractions	There are no identified groundwater abstractions within 2km of the site.
Source Protection Zones	The Site is located within a Total Catchment Groundwater Source Protection Zone 3.
Hydrology	The following features were identified from the visit: • A stream runs parallel to the adjacent road and there are a number of surface water features within 100m which are not identifiable on mapping.
Surface Water Abstractions	No known abstraction points within 2000m of the Site.
Statutory Ecological Receptors	The site is designated as a Nitrate Sensitive Area and Cavendish Woods , an Ancient and Semi-Natural Woodland is located some 500m from the site at its closest point.

6 Third Party Reports

Bright Green Environmental has not been notified of the existence of any third-party reports.

7 Preliminary Risk Assessment

7.1 Sources Pathways and Receptors

Identified potential contaminant sources	**On-site**	• Asbestos Containing Materials • Historic Construction and Demolition Activities • Historic Farming Practices
	Off-Site	• Asbestos Containing Materials • Historic Construction and Demolition Activities • Historic Farming Practices
Potential contaminants of concern	**On-site**	• Heavy Metals, Hydrocarbons, asbestos, ammonia, ground gases, PAH's
	Off-site	• Heavy Metals, Hydrocarbons, asbestos, ammonia, ground gases, PAH's
Potential Receptors	Based on residential end-use, potential receptors comprise: • Human health for on-site residents • Human Health: Site neighbours and the general public; • Human Health: Construction workers; • Controlled waters (Secondary undifferentiated Aquifer, Principal Aquifer etc); • Buried services; and, • Ecological receptors and future planting (i.e. flora and fauna).	

Potentially active pathways	The following potential migration pathway risks have been identified: • Human Health: Future site users (Residential) – MODERATE RISK Direct contact with soils, ingestion of soil, or soil dust; ingestion of contaminated vegetables and produce, inhalation of dust, vapours of asbestos fibres, risk that contaminants posing a chronic risk to human health (in particular asbestos) are present. It is also unlikely that soils will have a significant ground gas generation potential to pose risk externally. Internally, there is potential for made ground, high organic content in shallow soils and absence of subfloor void / ventilation in building proposed for development. • Human Health: (Site neighbours and the general public) – LOW RISK Low risk of contaminants mobilising off-site at significant concentrations • Human Health: Construction workers; - MODERATE RISK Assuming standard PPE and working practices, Risk largely associated with damaged suspected asbestos containing materials on site. • Controlled Waters – LOW RISK Leaching of contaminants; run off to surface water receptors, infiltration of groundwater is considered to be low risk as contamination is unlikely to be present at high enough concentrations. Cohesive underlying deposits will also limit vertical contamination migration. • Buried services; LOW RISK Unlikely contamination at concentrations high enough to pose significant risk • Ecological receptors and future planting (flora and fauna) – LOW RISK Low likelihood of causing damage to the environment

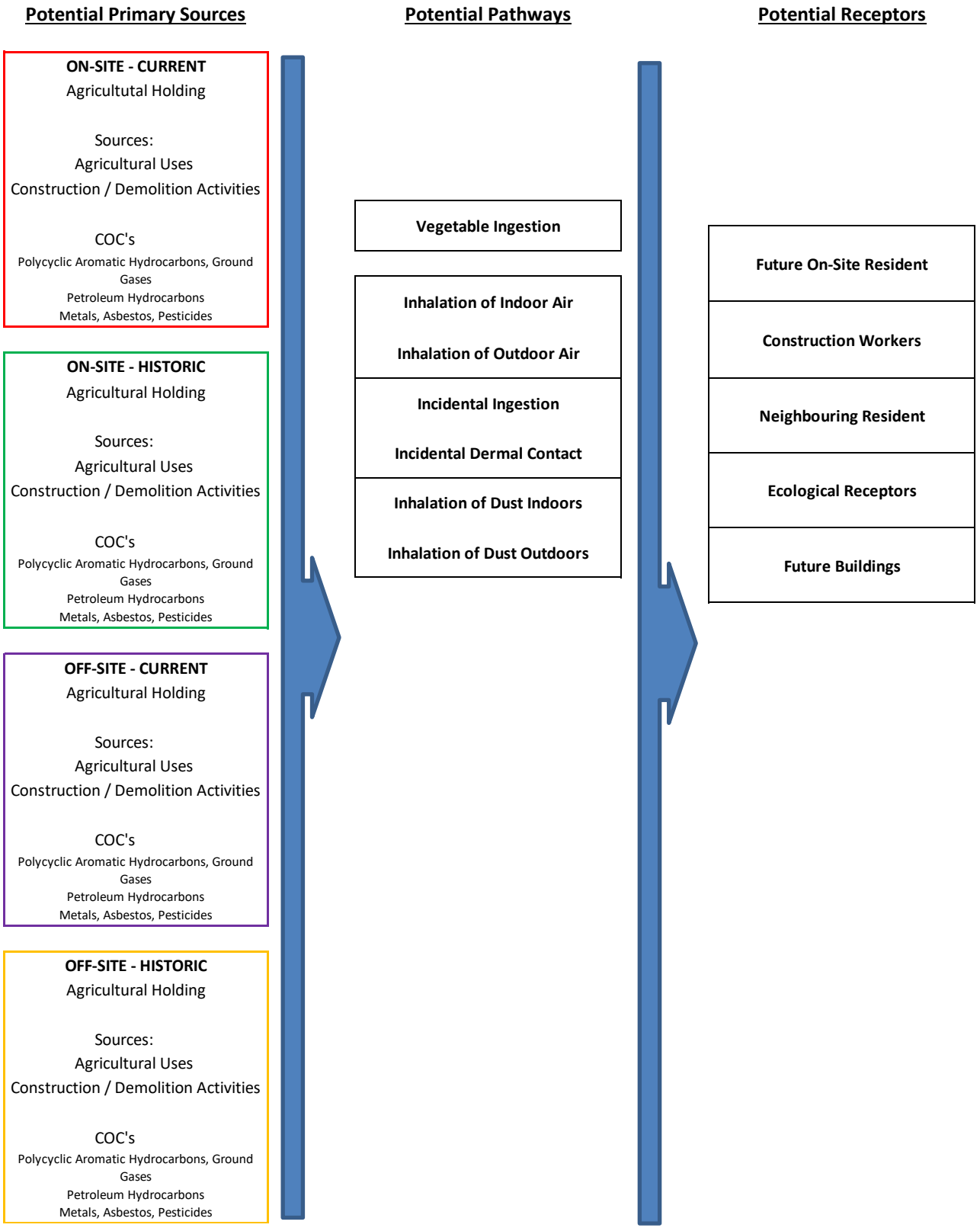
7.2 Preliminary Conclusions and Conceptual Site Model

Conclusions	The history of the site is that typical of a farm setting which has been subject to construction and demolition activities over the years. There is a multitude of historic uses which may have taken place in conjunction with agriculture and there are potential risks associated with such. These risks are classified as Moderate risks from both the current and adjacent site uses.
Risk Rating	**Moderate Risk -** It is possible that harm could arise to the designated receptors from identified hazards / contaminants. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is likely that the harm would be relatively mild. It is possible that land contamination related issues will arise as a cost/liability for the freehold owner of the Site. Intrusive investigations will be required to clarify risks and to determine potential liability. Some remedial works may be required in the long term.
Conceptual Site Model	A preliminary conceptual site model is presented as Figure 1. A final refined conceptual site model has not been completed at this stage due to the wider evidence used in the ESA to conclude that the site is **Moderate Risk**.

8.0 Discussion and Conclusions

Conclusions	In conclusion, Bright Green Environmental considers that the risks to future residents and other receptors associated with the Site are **Moderate** albeit with appropriate mitigation (as identified necessary) the site is likely to be suitable for a residential/ garden use.
Recommendations	Bright Green Environmental considers that the risks to future residents and other receptors associated with the Site are **Moderate**. It is recommended that: • A demolition asbestos survey should be completed for the Buildings; • Prior to construction commencing it is recommended that an intrusive investigation is carried out at the site to provide site specific data on the nature of the near surface soil and the ground gas regime beneath the site and enable refinement of the conceptual site model and risk assessment.

Figures 1 – Conceptual Site Model



Appendices

Appendix A – Study Limitations

This section should be read before reliance is placed on any of the information, opinions, advice, recommendations or conclusions contained in this report.

1 This report has been prepared by Bright Green Environmental with the reasonable skill, care and diligence within the terms of the Appointment and with the resources and manpower agreed with the client. Bright Green Environmental does not accept responsibility for any matters outside the agreed scope.

2 This report has been prepared for the sole benefit of the Client unless agreed otherwise in writing. The contents of this report may not be used or relied upon by any person other than this party without the express written consent and authorisation of Bright Green Environmental.

3 Unless stated otherwise, no consultations with authorities or funders or other interested third parties have been carried out. Bright Green Environmental are unable to give categorical assurance that the findings will be accepted by these third parties as such bodies may have unpublished, more stringent objectives. Further work may be required by these parties.

4 All work carried out in preparing this report has used, and is based on, Bright Green Environmental's professional knowledge and understanding of current relevant legislation. Changes in legislation or regulatory guidance may cause the opinion or advice contained in this report to become inappropriate or incorrect. In giving opinions and advice, pending changes in legislation, of which Bright Green Environmental is aware, have been considered. Following delivery of the report, Bright Green Environmental have no obligation to advise the Client or any other party of such changes or their repercussions.

5 This report is only valid when used in its entirety. Any information or advice included in the report should not be relied upon until considered in the context of the whole report.

6 Whilst this report and the opinions made are correct to the best of Bright Green Environmental belief, Bright Green Environmental cannot guarantee the accuracy or completeness of any information provided by third parties. Bright Green Environmental has taken reasonable steps to ensure that the information sources used for this investigation provided accurate information and has therefore assumed this to be the case.

8 This report has been prepared based on the information reasonably available during the project programme. All information relevant to the scope may not have been received. This report refers, within the limitations stated, to the condition of the site at the time of the inspections. No warranty is given as to the possibility of changes in the condition of the site since the time of the investigation.

9 The content of this report represents the professional opinion of experienced environmental consultants. Bright Green Environmental does not provide specialist legal or other professional advice. The advice of other professionals may be required.

10 Unless otherwise stated the report provides no comment on the nature of building materials, operational integrity of the facility or on any regulatory compliance issues.

11 Unless otherwise stated, samples from the site (soil, groundwater, building fabric or other samples) have not been obtained.

12 Bright Green Environmental has relied upon the accuracy of documents, oral information and other material and information provided by the Client and others, and Bright Green Environmental assumes no liability for the accuracy of such data, although in the event of apparent conflicts in information, Bright Green Environmental would highlight this and seek to resolve.

13 Unless otherwise stated, the scope of works has not included an environmental compliance review, health and safety compliance review, hazardous building materials assessment, Interviews or contacting Local Authority, requests for information to the petroleum officer, sampling or analyses of soil, ground water, surface water, air or hazardous building materials or a chain of title review.

Appendix B – Desk Study and Qualitative Risk Assessment Approach –Phase 1 Environmental Site Assessment

Phase 1 Environmental Site Assessment (ESA)
Unless otherwise stated, this assessment has been undertaken on the basis of a continued (same) site use and the assessment of risk has also been made on this basis. In the UK a change of use which requires planning permission will typically act as a trigger for further investigation and remediation, especially where redevelopment is for a more sensitive end use (e.g. residential). As such it is possible that a site may be classified as low or medium risk for continued use whilst having contamination present that would require remediation in a redevelopment scenario. If it is likely that the purchase of the Site is for redevelopment (even in part) then further assessment may be required beyond this ESA.

General
The work was conducted in general accordance with:

1. Investigation of potentially contaminated sites – Code of Practice (British Standard 10175: 2011+A1:2013).

2. Model Procedures for the Management of Land Contamination Contaminated Land Report (CLR) 11, dated 2004.

The purpose of the ESA was to identify current or historical environmental conditions associated with the property.
The scope of works typically includes:

1. Environmental Setting – Overview of the local physical setting including geology, hydrogeology, surface water, wetlands, groundwater, topography, surrounding land use, and any other observations deemed relevant. Appropriate reviews of publicly available information and a visual curb-assessment review of adjacent areas surrounding the subject site.

2. Site History Research – Review of site history including a review of relevant facility documents (if available) and publicly available historical information. Typically, a set of historical maps will be obtained from an appropriate provider although these will not be included within the issued report.

3. Publicly Available Regulatory Documentation Review – Review of readily/publicly available regulatory information for the site and vicinity including hazardous and non-hazardous waste management, waste storage, treatment, and disposal facilities; spills; contaminated properties; and other local information that may be industry standard for conducting ESA. Typically, a Landmark Envirocheck or Groundsure Report, or similar, will have been obtained for the Site although this will not be included within the issued report.

4. Regulatory consultations – Informal consultation with the Contaminated Land Officer (or similar will typically be undertaken, where possible, solely to understand the position of the Local Authority in relation to the inspection of the site under Part 2A of the Environmental Protection Act.

5. Site Reconnaissance – A site reconnaissance visit to view and assess the current operational conditions at the site and to identify potential contaminating land uses will be conducted. The site reconnaissance includes viewing the accessible areas of the site. It will be stated within the report where a Site Reconnaissance has not been undertaken.

6. Reporting – Submission of an initial summary report within 48 hours of the site reconnaissance visit, and a subsequent Phase I ESA report.

The following information/data sources were reviewed to provide information on the environmental setting at the site and surrounding area:

- Groundsure Reports;
- Ordnance Survey (OS) historical map extracts;
- British Geological Survey (BGS) maps;
- Environment Agency (EA) website;
- Natural England (MAGIC) website;
- OS Landranger maps;
- Public records search.

Planning

Where sites have been recently developed then it is likely that they will have been subject to planning permission which will include the completion of a Preliminary Risk Assessment, a Site Investigation, a Remediation Strategy and any identified remedial works reported as a Verification Report. Unless otherwise stated, the scope of works does not include obtaining this information or confirming with the planning authority that relevant land contamination conditions have been discharged. If this information has been provided, then it will be reviewed in accordance with the agreed scope of works.

Regulatory and Legislative Context

Land contamination is generally dealt with by the following types of regulation:

1. Acts of Parliament to investigate and remedy harm caused by land contamination;

2. Conditions placed upon Planning Permissions for the redevelopment of land; and,

3. Acts of Parliament and Regulations for the control of waste.

In England land contamination is identified and dealt with through Acts / Regulations including:

1. The Contaminated Land (England) (Amended) Regulations (2012);

2. Part IIA of the Environmental Protection Act (1990);

3. The Environment Act 1995;

4. The Town and Country Planning Act (1990);

5. The Environmental Permitting (England and Wales) (Amended) Regulations (2011);

6. The Water Resources Act (1991);

7. The Water Act (2003);

8. The Environmental Damage (Prevention and Remediation) Regulations 2009; and,

9. The Groundwater (England and Wales) Regulations (2009).

Part IIA of the Environmental Protection Act 1990

Part IIA of the Environmental Protection Act 1990 (which was inserted by Section 57 of the Environment Act 1995) created a regime for the identification and remediation of contaminated land. Section 78A (2) of the Environmental Protection Act 1990 defines contaminated land for the purposes of Part IIA as:

> *'any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that;*
>
> *(a) significant harm is being caused or there is a significant possibility of such harm being caused; or*
>
> *(b) significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused.'*

Harm is defined under section 78A of the Environmental Protection Act as meaning 'harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property'. Types of harm are related to specific receptors in order to determine whether they can be regarded as "significant", as defined in the DEFRA (2012) statutory guidance.

Part IIA sets the definition of contaminated land within the context of the 'suitable for use' approach. The 'suitable for use' approach underlies these objectives, and is based on the principles of risk assessment, including the concept of the 'pollutant linkage'.

In the event that there are unacceptable levels of risk posed by a site, a remediation notice can be served under the contaminated land regime introduced under Part IIA of the Environmental Protection Act 1990.

Regulation of Development on Land Affected by Contamination

Management of risks from contamination in development of land is also regulated in the England under the Town and Country Planning Act 1990. Land contamination is a material planning consideration within this planning regime. The Local Planning Authority may impose conditions on the development during planning that include preliminary risk assessment, site investigation, risk assessment and remediation. The Environment Agency may use its role as a statutory consultee to provide the Local Planning Authority with advice.

Assessment of risk is again based on the pollutant linkage concept. The aim of risk management in the development should be to render the land suitable for the proposed use and, therefore, to prevent consideration of the site under Part IIA.

The National Planning Policy Framework (NPPF) (2012) provides high level guidance on the relationship between development and the management of risks from land contamination caused by historical use. The interpretation of the NPPF is left to local decision-makers, but with the expectation that good practice developed using the pre-existing Planning Policy Statements will be maintained. The Building Regulations 2010, made under the Building Act 1984, also require measures to be taken to protect new buildings and their occupants from the effects of contamination. Guidance on the requirements is provided in Approved Document C - Site preparation and resistance to contaminants and moisture, published by ODPM in 2004.

Voluntary Remediation Action

Voluntary remediation action on contamination resulting from historical activities can often anticipate future remediation requirements, such as through the Planning regime, and is encouraged, especially where the site is not being assessed under Part IIA.

Environmental Damage

The Environmental Damage (Prevention and Remediation) Regulations 2009 came into force on 1st March 2009 to implement EC Directive 2004/35 on environmental liability with regard to the prevention and remedying of environmental damage.

These Regulations do not apply retrospectively; environmental damage that took place before the Regulations came into force (1st March 2009), or damage that takes place (or is likely to take place) after that date but is caused by an incident, event or emission that occurred before that date are exempt from the requirements of the Regulations.

The Regulation is concerned with preventing environmental damage. It requires that all operators of activities that cause an imminent threat of environmental damage to take all reasonably practical steps to prevent the damage. Where damage has already been caused, the operator must take all reasonably practical steps to prevent further damage from occurring.

Non-statutory regulatory technical guidance documents

The non-statutory regulatory technical guidance for England on the assessment of land contamination, primarily released as part of the Contaminated Land Exposure Assessment (CLEA) methodology (DEFRA and EA) has recently been updated. The following documents currently present guiding principles in investigating and assessing potentially contaminated land, which are generally adopted in considering sites within any of the legal frameworks discussed above, or when considering voluntary remediation action:

1. Contaminated land Risk Assessment, A Guide to Good Practice, CIRIA C552 (CIRIA 2001).

2. Investigation of potentially contaminated sites – Code of Practice (British Standard 10175: 2011+A1:2013).

3. Contaminated Land Report CLR11 Model Procedures for the Management of Land Contamination. (DEFRA and EA, 2004).

4. Human health toxicological assessment of contaminants in soil Environment Agency Science Report SC050021/SR2 (EA, 2009).

5. Updated technical background to the CLEA model Environment Agency Science Report SC050021/SR3 (EA, 2009).

6. Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values Environment Agency Science Report SC050021/SR7 (EA, 2008).

7. An ecological risk assessment framework for contaminants in soil. Environment Agency Science Report SC070009/SR1 and related reports S2a-e.

8. Groundwater Protection: Policy and Practice, Environment Agency GP3 Parts 1-4.

9. Remedial Targets Methodology: Hydrogeological Risk Assessment for Land Contamination (EA of England and Wales, 2006) developed in consultation with the Scottish Environment Protection Agency (SEPA) and the Northern Ireland Heritage and Environment Service.

10. Assessing risks posed by hazardous ground gases to buildings Report C665 (CIRIA, 2007).

11. BS 8485:2007 Code of practice for the characterization and remediation from ground gas in affected developments (British Standards Institution, 2007).

12. Risk Based Corrective Action (RBCA) Methodology (ASTM designation E1739-95, E2081-00).

13. DoE Industry Profiles.

Qualitative Risk Assessment and Risk Classification

In the context of land contamination, there are considered to be three essential elements to any risk:

- A contaminant **source** – a substance that is in, on, under, adjacent to or nearby the land/property and has the potential to cause harm to human health, property, specified ecological receptors, or to cause pollution of controlled waters;
- A **receptor** – in general terms, something that could be adversely affected by a contaminant, such as people (human health), property, an ecological system, or a water body; and
- A **pathway** – a route or means by which a receptor can be exposed to, or affected by, a contaminant source.

Each of these elements can exist independently, but they create a risk only where they are linked together, so that a particular contaminant affects a particular receptor through a particular pathway. This kind of linked combination of contaminant source–pathway–receptor is described as a pollutant linkage.

Without a pollutant linkage, there is not a risk – even if a contaminant is present. Even where there is a pollutant linkage and therefore some measure of risk, the question still needs to be asked as to whether the level of risk justifies remediation. In the context of land contamination 'risk' is a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

Environment Agency publication CLR11: Model Procedures for the Management of Contaminated Land, (2004) provides a framework for making such an assessment in the form of three tiers of risk assessment:

- Preliminary Risk Assessment (PRA);
- Generic Quantitative Risk Assessment (GQRA); and,
- Detailed Quantitative Risk Assessment (DQRA).

The assessment undertaken herein may be described as a *Preliminary Risk Assessment* as it considered sources, pathways and receptors in a qualitative manner only.

As the assessment considers only on-going continued (same) use of the Site (with no redevelopment) then these are further considered qualitatively in the context of the likelihood of a trigger which would result in potential environmental liabilities arising for the site owner relating to land contamination. This report has therefore considered environmental risks qualitatively in terms of a 'source-pathway-receptor' approach. In consideration of the information reviewed a risk rating has been provided on the following basis which is broadly in line with CIRIA C552 (2001):

Very high risk - High probability that severe harm could arise to a designated receptor from an identified hazard OR there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised is likely to result in substantial liability. Urgent investigation and remediation are likely to be required in the context of an on-going use.

High risk - Harm is likely to arise to a designated receptor from an identified hazard/contaminants. This risk, if realised, is likely to result in substantial liability. Urgent investigation is required, and remedial works may be necessary in the short term and are likely over the long term. It is therefore considered likely that land contamination issues will arise as a cost/liability for the freehold owner of the Site. Further work is recommended to clarify the risk and understand the liabilities.

Moderate risk - It is possible that harm could arise to a designated receptor from an identified hazard / contaminants. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is likely that the harm would be relatively mild. It is possible that land contamination related issues will arise as a cost/liability for the freehold owner of the Site. Investigation is normally required to clarify risks and to determine potential liability. Some remedial works may be required in the long term.

Low risk – Whilst it may be possible that harm could arise to a designated receptor from an identified hazard/contamination but it is likely that this harm, if realised, would at worst normally be mild. It is considered unlikely that land contamination issues will arise as a liability/cost for the freehold owner of the Site based on continued use.

Very low risk - It is a low possibility that harm could arise to a designated receptor. On the event of such harm being realised it is not likely to be severe. It is considered unlikely that land contamination issues will arise as a liability/cost for the freehold owner of the Site based on continued use.

Appendix C –Groundsure Reports and Maps

McKenna

LAWN FARM, UPPER TYE,
SUDBURY, CO10 0QA

Groundsure Reference:	GS-5751928
Your Reference:	Flax_Farm
Report Date	15 Jan 2019
Report Delivery Method:	Email - pdf

Enviro Insight

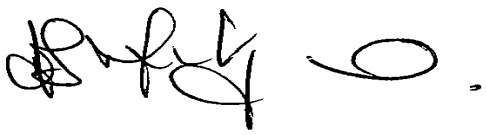
Address: FLAX FARM, STANSFIELD ROAD, POSLINGFORD, CO10 8RD

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Enviro Insight

Address:	**FLAX FARM, STANSFIELD ROAD, POSLINGFORD, CO10 8RD**
Date:	**15 Jan 2019**
Reference:	**GS-5751928**
Client:	**McKenna**

NW N NE

W E

SW S SE

Aerial Photograph Capture date:	09-Apr-2017
Grid Reference:	577473,249411
Site Size:	0.20ha

Report Reference: GS-5751928
Client Reference: Flax_Farm

Contents Page

Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	0	0	0
1.2 Additional Information – Historical Tank Database	0	1	0	0
1.3 Additional Information – Historical Energy Features Database	0	0	0	0
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	0
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	0	0	0

Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	0
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	0	0	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	0	0	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	1	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	#250GWV#	#500GWV#	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	6	4	16	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	Yes	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	None identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Limited potential
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	High

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	5	1
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	3	1
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	2	0	0	0	2	0
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

10.1 Coal mining areas within 75m of the study site	None identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	Identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

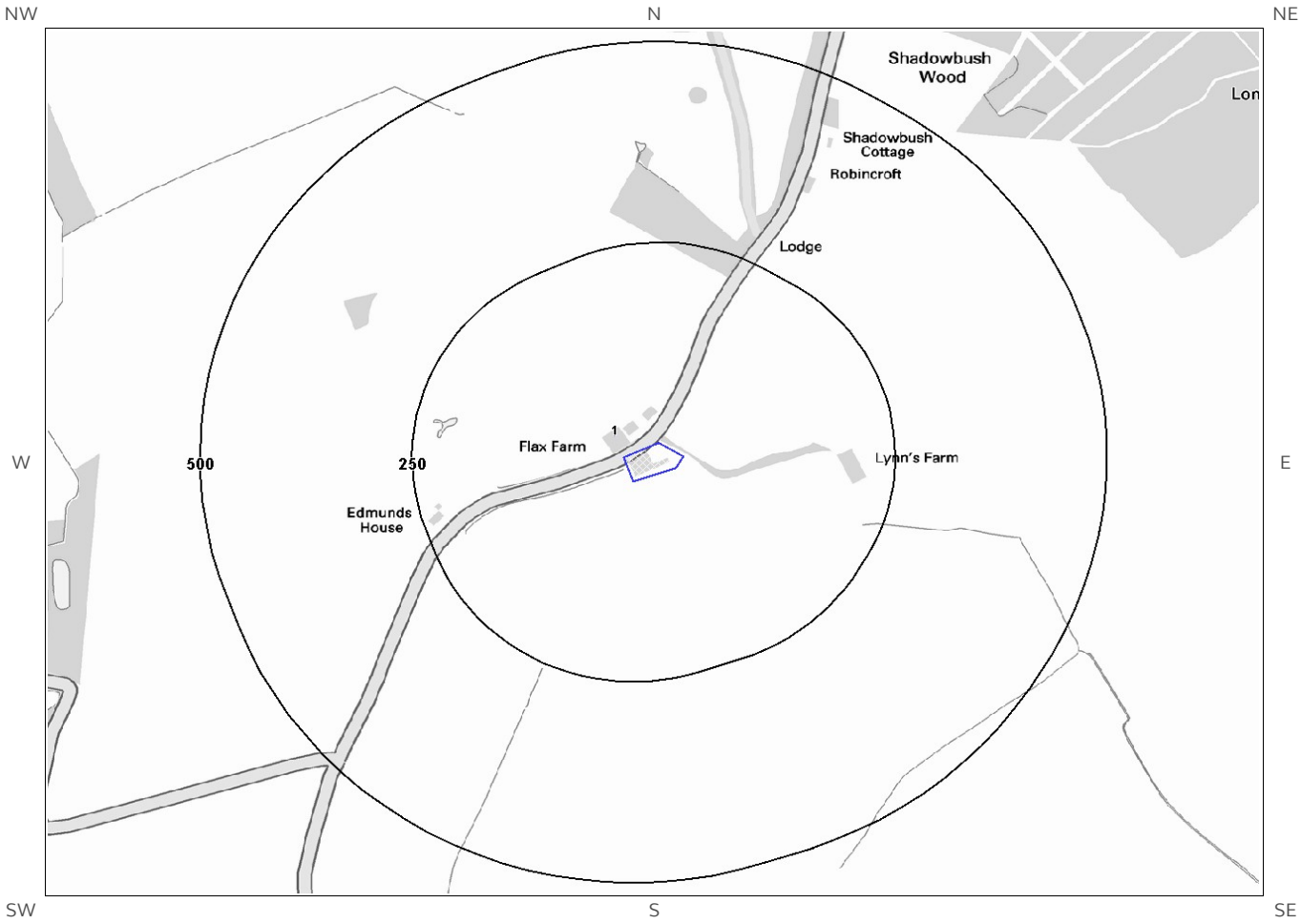
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier “A” on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as “Not Shown”.

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



Site Outline

250
500
Search Buffers (m)

Historical 1:10,000 and 1:10,560 scale mapping

Industrial Land Use

Potentially Infilled Land

Historical 1:2,500, 1:1,250 and 1:500 scale mapping

Energy Features

Petrol Stations

Historical military sites

Tanks

Garages

1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 0

Database searched and no data found.

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary: 1

ID	Distance (m)	Direction	Use	Date
1	29	NW	Unspecified Tank	1958

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary: 0

Database searched and no data found.

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 0

Database searched and no data found.

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 0

Database searched and no data found.

2. Environmental Permits, Incidents and Registers Map

Site Outline

250
500
Search Buffers (m)

Recorded Pollution Incident

Dangerous Substances (List 1)

Dangerous Substances (List 2)

Water Industry Referrals

Licenced Discharge Consents

Red List Discharge Consents

RAS 3 & 4 Authorisations

Part A(1) Authorised Processes and Historic IPC Authorisations

Part A(2) and Part B Authorised Processes

COMAH / NIHHS Sites

Sites Determined as Contaminated Land

Hazardous Substance Consents and Enforcements

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site: 0

Database searched and no data found.

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations: 0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site: 0

Database searched and no data found.

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site: 0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site: 0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site: 0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

0

Database searched and no data found.

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0

Database searched and no data found.

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3. Landfill and Other Waste Sites Map

Site Outline

250
500
Search Buffers (m)

EA/NRW Active Landfill

EA/NRW Historic Landfill

BGS / DoE Survey Landfill

Historic and Planned Waste Sites

EA/NRW Licensed Waste Site

Local Authority/Historical Mapping Landfill Records

3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

0

Database searched and no data found.

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

0

Database searched and no data found.

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

0

Database searched and no data found.

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

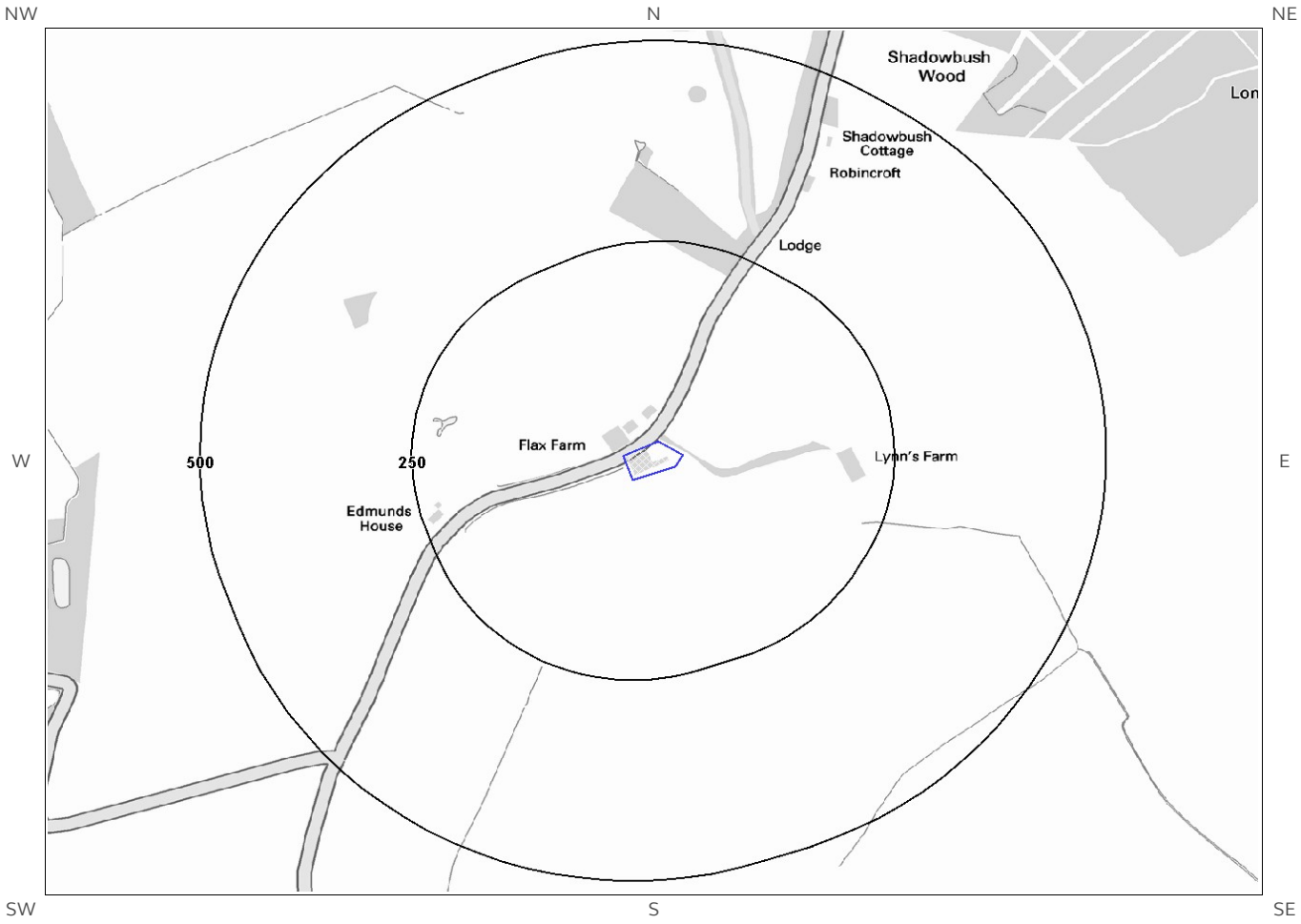
Database searched and no data found.

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

0

Database searched and no data found.

4. Current Land Use Map



Site Outline

Search Buffers (m)
250
500

Current Industrial Sites

Petrol & Fuel Sites

Electricity Transmission Cables

Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 0

Database searched and no data found.

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 0

Database searched and no data found.

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site: 0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

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5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON

5.3 Bedrock and Solid Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LCCK-CHLK	LEWES NODULAR CHALK FORMATION, SEAFORD CHALK FORMATION, NEWHAVEN CHALK FORMATION AND CULVER CHALK FORMATION (UNDIFFERENTIATED)	CHALK

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology

Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

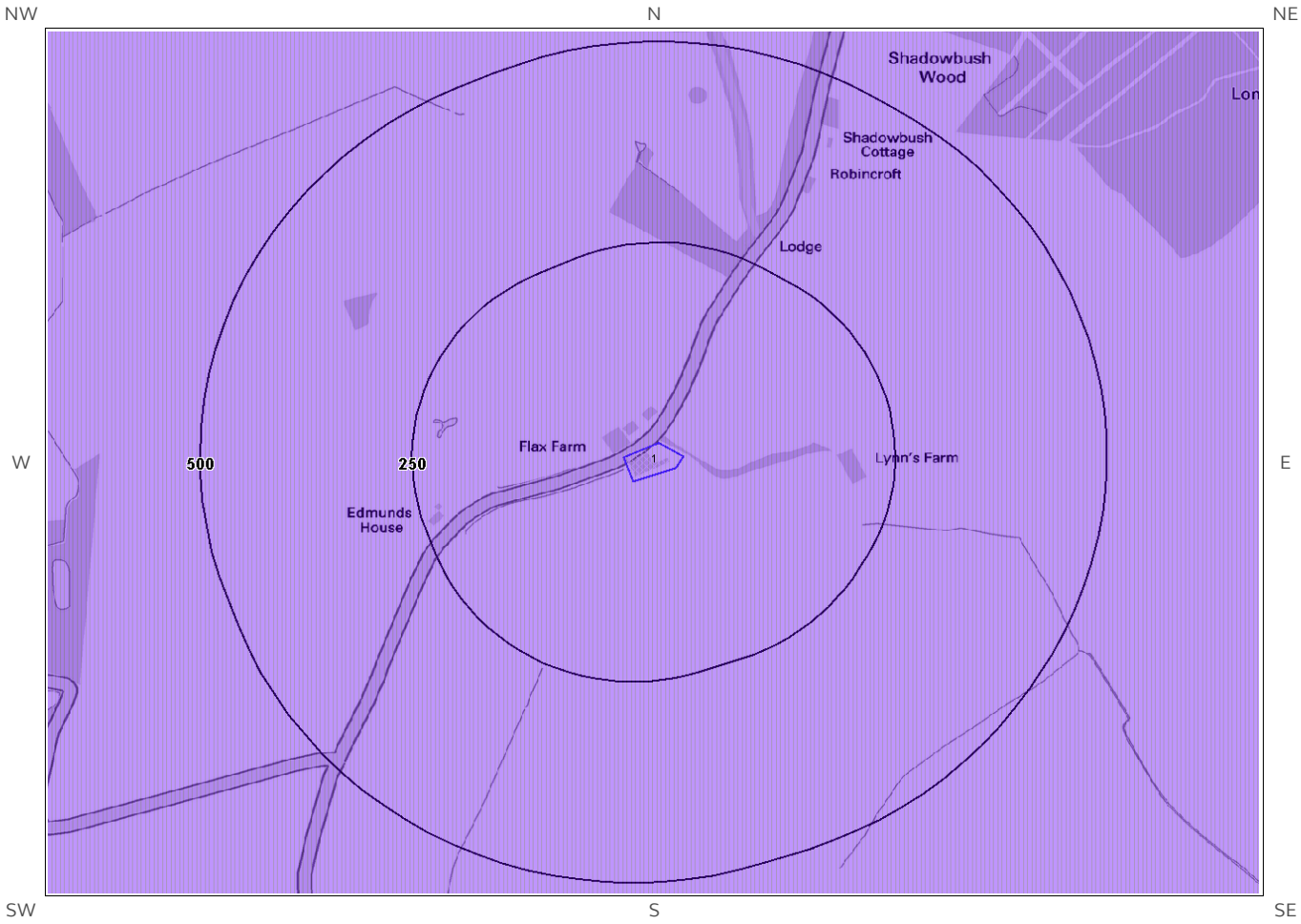
Secondary (B) Aquifer - Lower Permeability Layers

Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

6b. Aquifer Within Bedrock Geology and Abstraction Licences



Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

Groundwater Abstraction Licence

Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

Surface Water Abstraction Licence

6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences

Site Outline

250
500
Search Buffers (m)

Source Protection Zone 1 - Inner Catchment

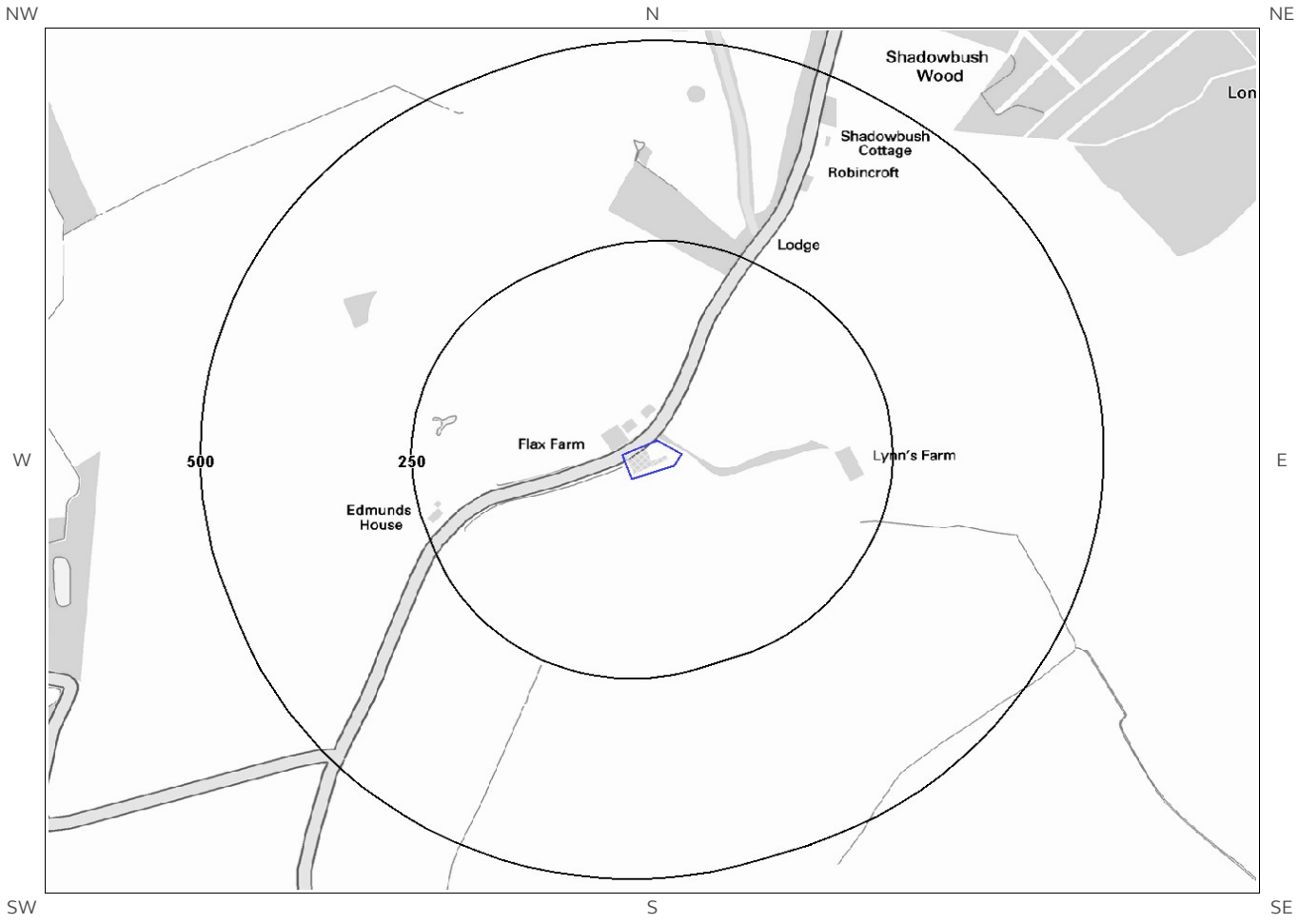
Source Protection Zone 2 - Outer Catchment

Source Protection Zone 3 - Total Catchment

Source Protection Zone 4 - Zone of Special Interest

Potable Water Abstraction Licence

6d. Hydrogeology – Source Protection Zones within confined aquifer



Site Outline

250
500
Search Buffers (m)

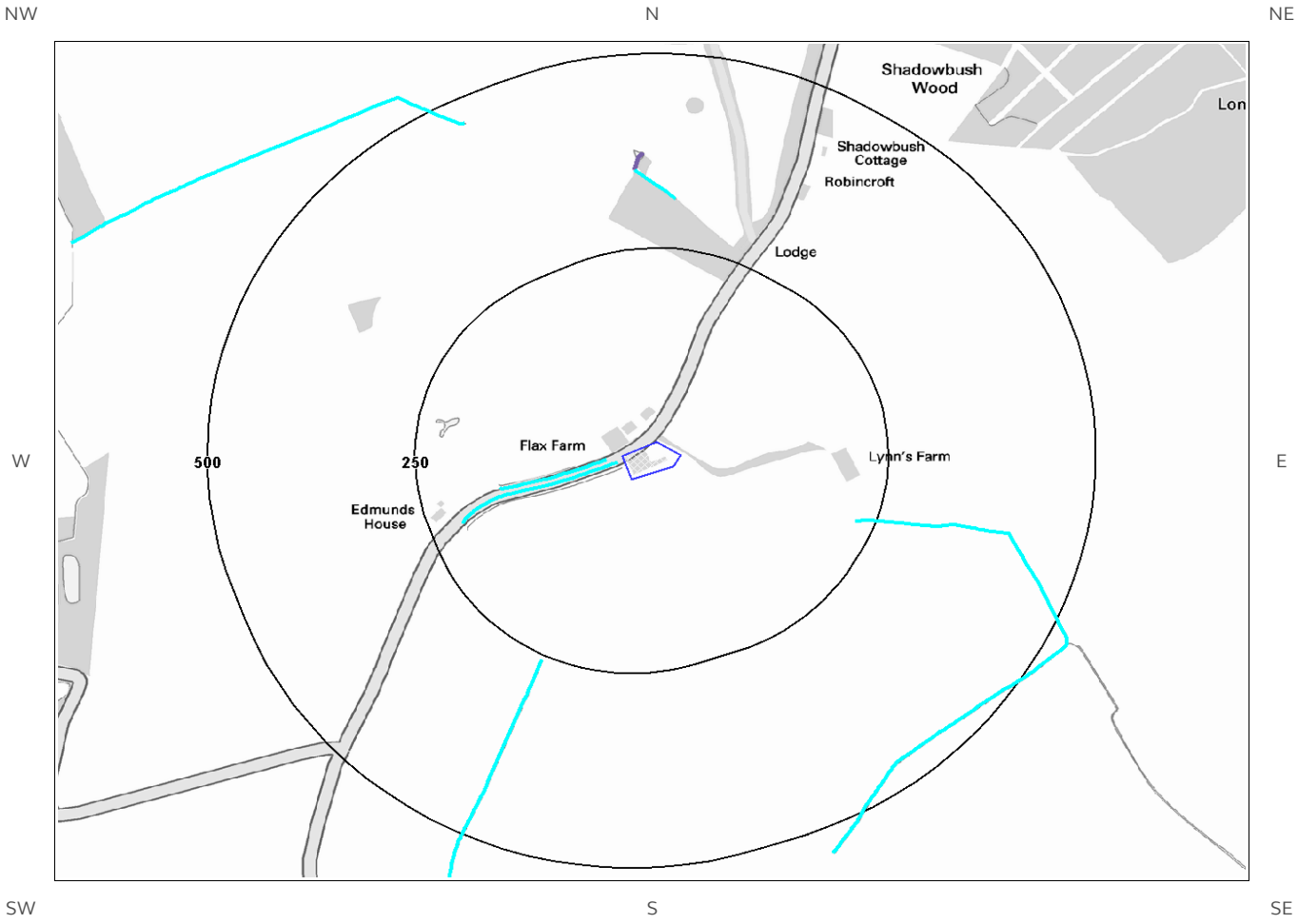
Source Protection Zone 1 - Inner Catchment

Source Protection Zone 2C - Outer Catchment within Confined Aquifer

Source Protection Zone 3C - Total Catchment within Confined Aquifer

Potable Water Abstraction Licence

6e. Hydrology – Watercourse Network and River Quality



Site Outline

250
500
Search Buffers (m)

Tidal River
Inland River
Underground or Elevated Tidal River
Underground or Elevated Inland River
Foreshore
General Quality Assessment: Chemistry

Canal
Underground or Elevated Canal
Lock or Flight of Locks
Lake, Reservoir, or Marsh
Drain or Transfer
General Quality Assessment: Biology

6.Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site None identified

Database searched and no data found.

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site — None identified

Database searched and no data found.

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site — None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site — Identified

The following Source Protection Zones records are represented on the SPZ and Potable Water Abstraction Map (6c):

ID	Distance (m)	Direction	Zone	Description
1	0	On Site	3	Total catchment

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site — None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site — Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Major Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.
327	N	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site — None identified

6.9.1 Biological Quality:

Database searched and no data found.

6.9.2 Chemical Quality:

Database searched and no data found.

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	7 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	7	Not Specified	Inland river not influenced	Catchment Area: Stour Anglian

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	W		by normal tidal action.	Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	20 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	20 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	44 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	44 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	61 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	61 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	227 E	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	227 E	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	256 SW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	256 SW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	277 SW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	277 SW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				conditions) Average Width in Watercourse Section (m): Not Provided
8	287 SW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	287 SW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	314 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	314 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	342 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	342 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
11	351 N	Not Specified	Lake, loch or reservoir.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.7
Not shown	351 N	Not Specified	Lake, loch or reservoir.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.7
12	466 SE	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	466 SE	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
13	468 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	468 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Stour Anglian Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

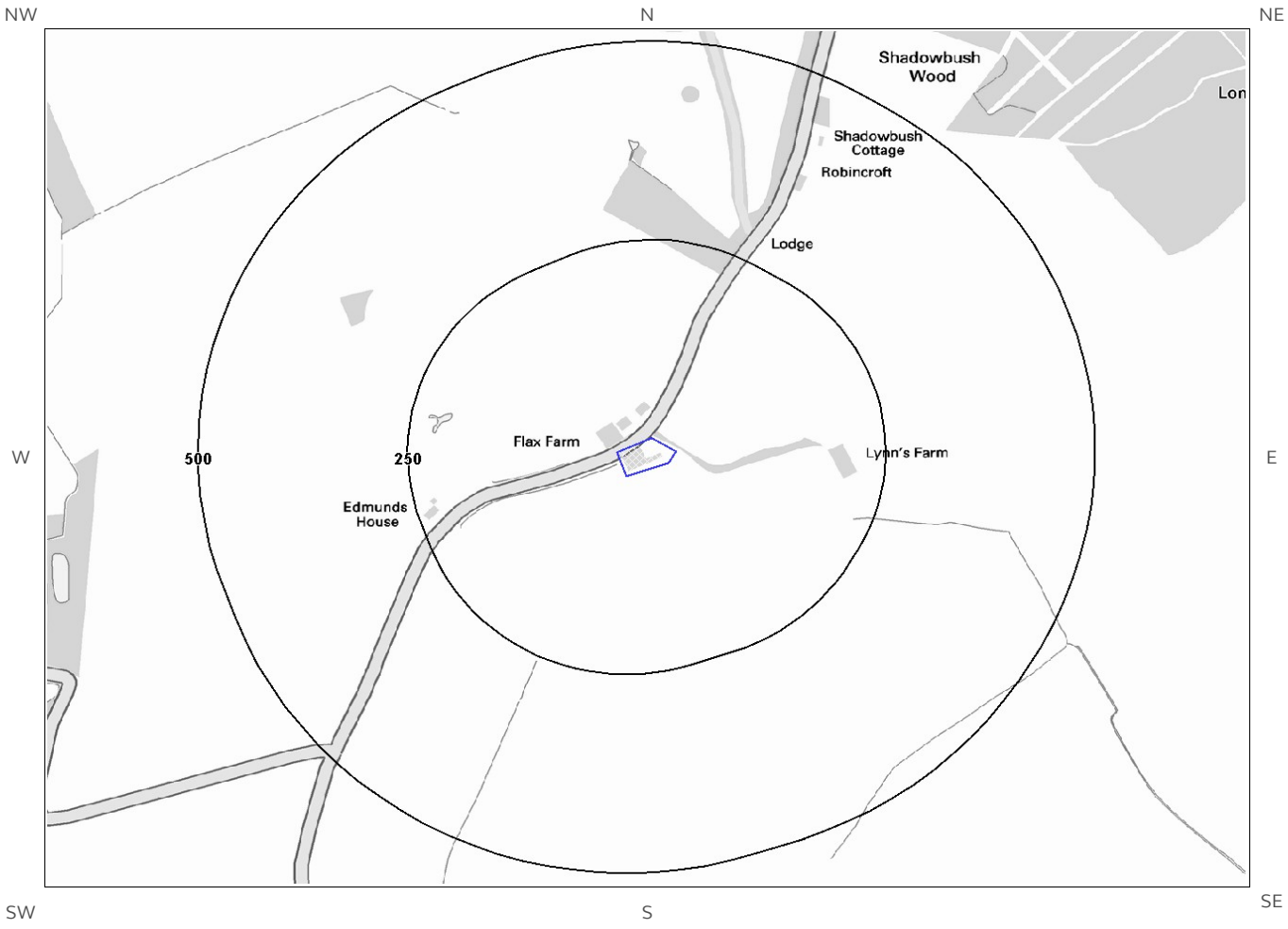
6.11 Surface Water Features

Surface water features within 250m of the study site Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
7	W
20	W
58	W
227	E

7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



Site Outline

100
250
Search Buffers (m)

Zone 2 Floodplain

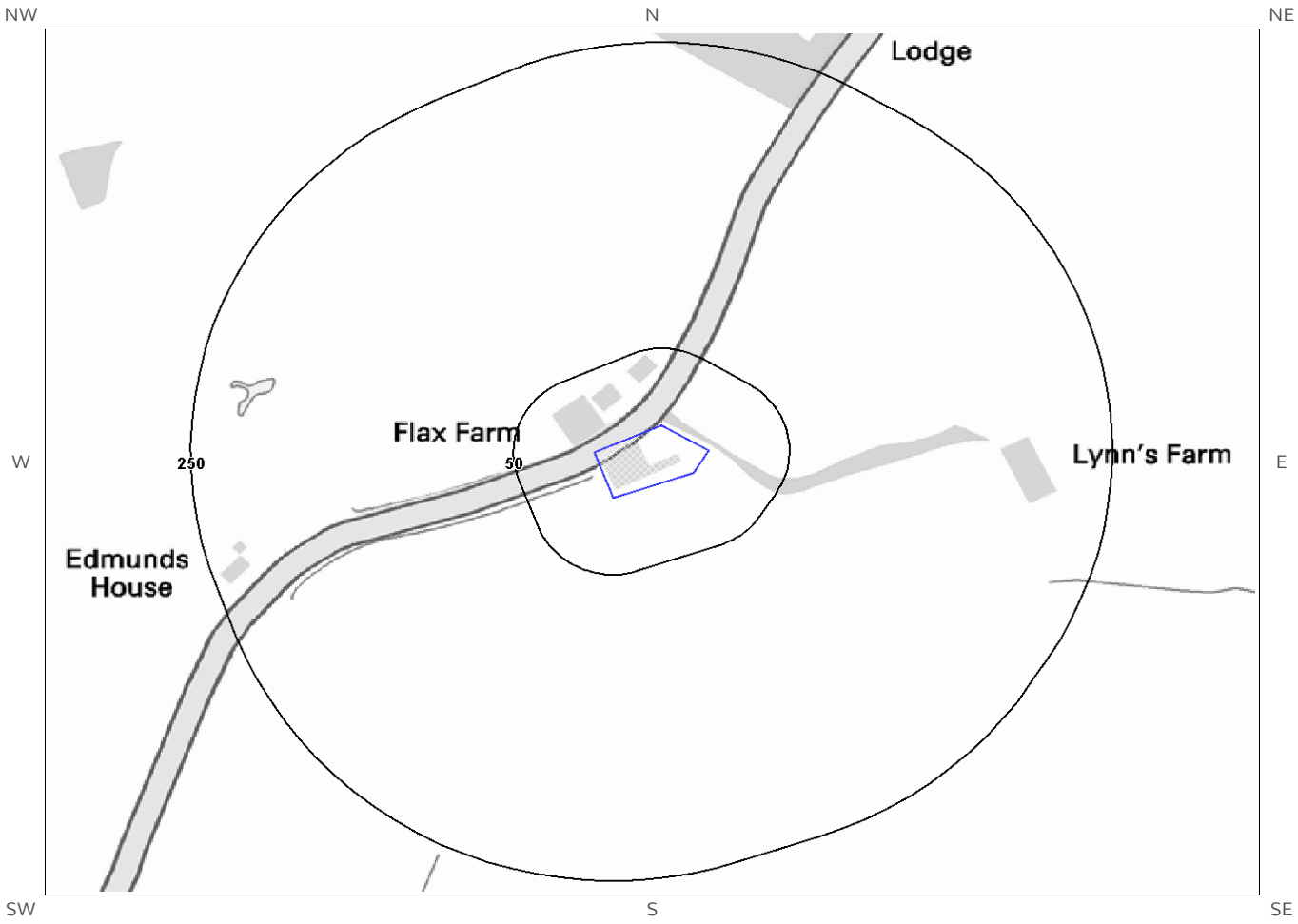
Zone 3 Floodplain

Flood Defences

Area used for Flood Storage

Area Benefiting from Flood Defences

7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



Site Outline

100
250
Search Buffers (m)

RoFRaS Rating

Very Low

Low

Medium

High

7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m — None identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m — None identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite — Very Low

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

7.4 Flood Defences

Flood Defences within 250m of the study site — None identified

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site — None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site	None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site	Identified
Clearwater Flooding or Superficial Deposits Flooding	Clearwater Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.

7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result	High

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map

8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site | Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

6

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
1	516	NE	Cavendish Woods	Natural England
2A	601	NE	Cavendish Woods	Natural England
3	717	NE	Cavendish Woods	Natural England
4	881	NE	Cavendish Woods	Natural England
5B	966	E	Cavendish Woods	Natural England
Not shown	1702	E	Cavendish Woods	Natural England

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

4

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
11	516	NE	LONG WOOD	Ancient and Semi-Natural Woodland
12A	601	NE	LONG WOOD	Ancient and Semi-Natural Woodland
13B	975	E	KINGS WOOD	Ancient and Semi-Natural Woodland
Not shown	1702	E	NORTHEY WOOD	Ancient and Semi-Natural Woodland

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

0

Database searched and no data found.

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

4

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
7	0	On Site	Existing	DEFRA
8	0	On Site	Existing	DEFRA
9	564	N	Existing	DEFRA
10	564	N	Existing	DEFRA

8.14 Records of Green Belt land within 2000m of the study site:

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure Geo Insight, available from our website. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell*[*] hazard rating identified on the study site — Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site — Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site — Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site — Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site — Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site — Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

* This indicates an automatically generated 50m buffer and site.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing
ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site — None identified

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary — Identified

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Chalk	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

Past underground mine workings are uncommon, localised and of limited area. The rock types present in this area are such that minor mineral veins may be present within them on which it is possible that there have been attempts to work these by underground methods and/or it is possible that small scale underground extraction of other materials may have occurred. All such occurrences are likely to be restricted in size and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site — None identified
Guidance: No Guidance Required.

Contact Details

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enquiries@bgs.ac.uk

Environment Agency
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Ordnance Survey
Adanac Drive, Southampton
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Tel: 08456 050505

Local Authority
Authority: St Edmundsbury Borough Council
Phone: 01284 763233
Web: http://www.stedmundsbury.gov.uk/
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Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:

https://www.groundsure.com/terms-and-conditions-may25-2018