

FLOODPLAN
LIMITED



Project Title: 00172 29a Combs Lane

Product: Level 2 Flood Risk Assessment

Date: 19 February 2022

Find us at:

Web: www.floodplanreports.co.uk

Email: Reports@floodplanreports.co.uk

Blank Page

Table of Contents

1.	Introduction	7
1.1.	Purpose of the report	7
1.2.	Location of subject site.....	8
1.3.	Site Proposals.....	9
2.	Assessment of NPPF	10
2.1.	Introduction to NPPF.....	10
2.2.	Flood risk classifications	10
2.3.	Flood risk vulnerability classification	10
2.4.	Suitable development matrix.....	11
3.	Nppf site assessment.....	12
3.1.	Flood zone classification.....	12
3.2.	Land vulnerability classification	12
3.3.	Site Suitability (NPPF).....	12
4.	Site Flood Risk.....	13
4.1.	Third party flood risk data summery.....	13
4.2.	surface water flooding	13
4.3.	Tidal and Fluvial flooding	14
4.4.	Groundwater flooding	15
4.5.	Reservoir flooding.....	15
4.6.	Canal and artificial water flooding.....	15
4.7.	Historic Flooding.....	15
5.	Further site assessment	16
5.1.	Site access and egress routes	16
5.2.	Flood compensation.....	16
5.3.	Flood Warning Areas	16
5.4.	Awareness of flood risk	16
5.5.	Sequential Test	16
5.6.	Exception test.....	16
6.	Findings and recommendations.....	17
6.1.	Findings.....	17
6.2.	Recommendations.....	17

List of Appendices 18

Appendix A: Development Plan 18

Appendix B: Groundsure Flood Report..... 18

Disclaimer

This document has been created for the purpose of a Flood Risk Assessment only and should only be used by Ms J. Stuart for its intended purpose. FloodPlan Limited accepts no responsibility or liability for misuse of the document.

The copyright for this document (including its electronic form) shall remain vested in FloodPlan Limited but Ms J. Stuart shall have a license to copy/reproduce and use the document for the purpose for which it was provided. This document shall not be reproduced in whole or in part or relied upon by third parties for any use whatsoever without the express written authority of FloodPlan Limited.

Report Revision Log

Report Reference	Date Issued	Issued To	Notes
00172 29a Combs Lane	21/02/2022	Client	

1. INTRODUCTION

1.1. PURPOSE OF THE REPORT

FloodPlan have been commissioned on behalf of Ms J. Stuart to produce a Flood Risk Assessment for land adjacent 29a Combs Lane, Stowmarket, IP14 2DB. This assessment has been conducted with the understanding that the document will be used as part of a planning permission proposal by Ms J. Stuart.

1.2. LOCATION OF SUBJECT SITE



Figure 1: Site Location

1.3. SITE PROPOSALS

The development proposals show the proposals to construct a 4-bedroom house (residential). Development proposals can be seen below and in Appendix A: Development Plan.

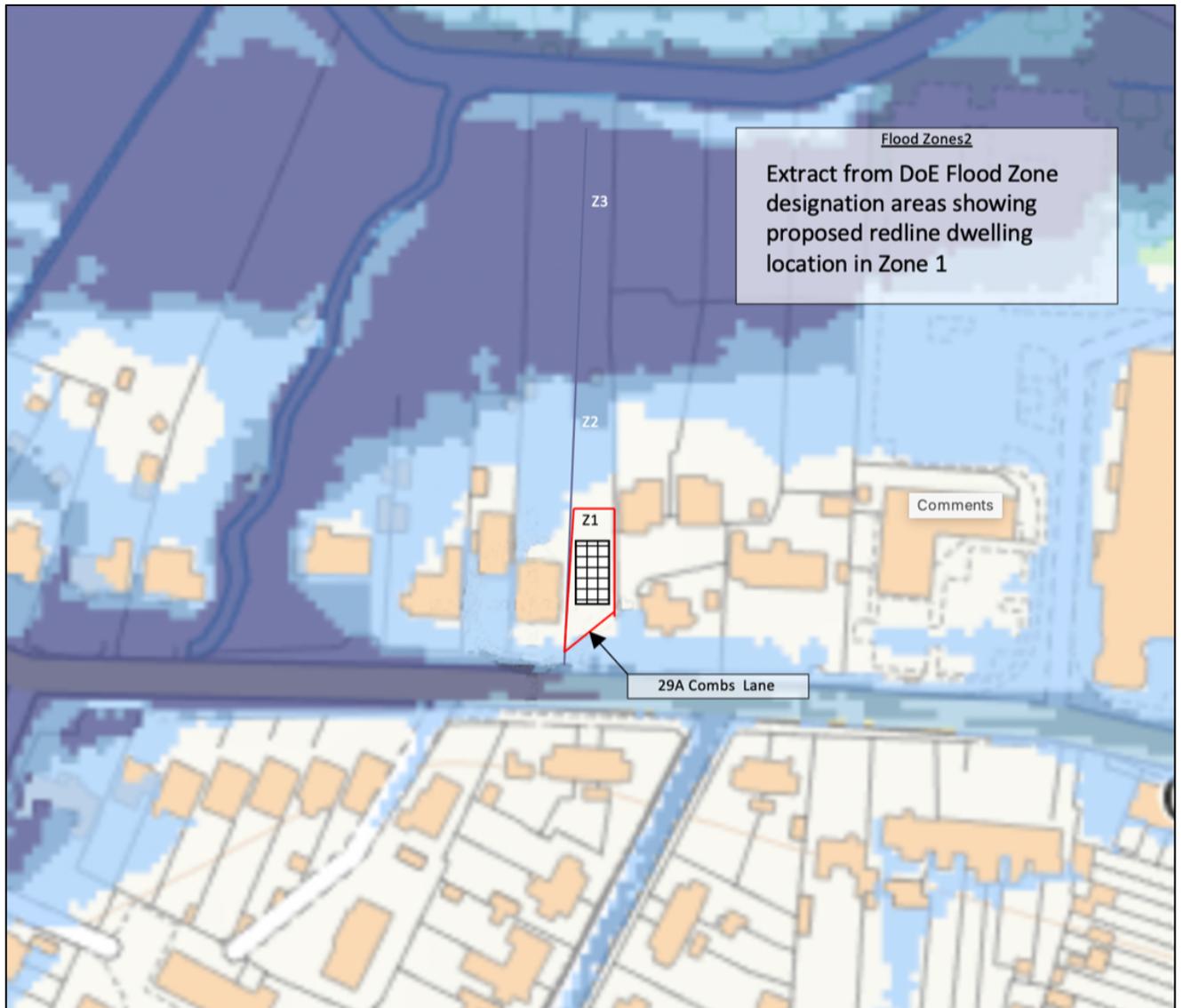


Figure 2: Development Proposal

2. ASSESSMENT OF NPPF

2.1. INTRODUCTION TO NPPF

The National Planning Policy Framework (NPPF) document provides guidance to local planning authorities to ensure the effective implementation of the planning policy. The policy seeks to direct development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. For these purposes:

- “areas at risk of flooding” means land within Flood Zones 2 and 3; or land within Flood Zone 1 which has critical drainage problems, and which has been notified to the local planning authority by the Environment Agency.
- “flood risk” means risk from all sources of flooding – including from rivers and the sea, directly from rainfall on the ground surface and rising groundwater, overwhelmed sewers, and drainage systems, and from reservoirs, canals and lakes and other artificial sources.

Flood risk (from river and sea) are categorised into one of the below:

2.2. FLOOD RISK CLASSIFICATIONS

Flood Zone	Probability of flooding
Zone 1	Low probability
Zone 2	Medium probability
Zone 3a	High probability
Zone 3b	Functional Floodplain

2.3. FLOOD RISK VULNERABILITY CLASSIFICATION

NPPF categorises land by vulnerability. A summary of categories can be seen below:

Vulnerability Class	Infrastructure
Essential Infrastructure	Power stations, water treatment works, wind turbines etc.

Highly vulnerable	Police stations, basement dwellings, caravans, mobile homes etc
More vulnerable	Hospitals, residential buildings, landfill sites, drinking establishments etc
Less Vulnerable	Emergency services stations, shops and building that offer professional services etc
Water compatible development	Pumping stations, docks, marinas etc

2.4. SUITABLE DEVELOPMENT MATRIX

The below table outlines the suitable development type for the flood zone classification assigned by the Environment Agency flood maps.

Flood risk vulnerability classification	Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Zone 1	Blue	Blue	Blue	Blue	Blue
Zone 2	Blue	Blue	Exception Test Required	Blue	Blue
Zone 3a	Exception Test Required	Blue	Red	Exception Test Required	Blue
Zone 3b Functional floodplain	Exception Test Required	Blue	Red	Red	Red

Figure 3: Suitable Development Matrix

Key: Blue Development is appropriate; Red Development should not be permitted; Green Development is appropriate with the passing of an Exception Test.

3. NPPF SITE ASSESSMENT

3.1. FLOOD ZONE CLASSIFICATION

As per Figure 4, the site is wholly within flood zone 1.

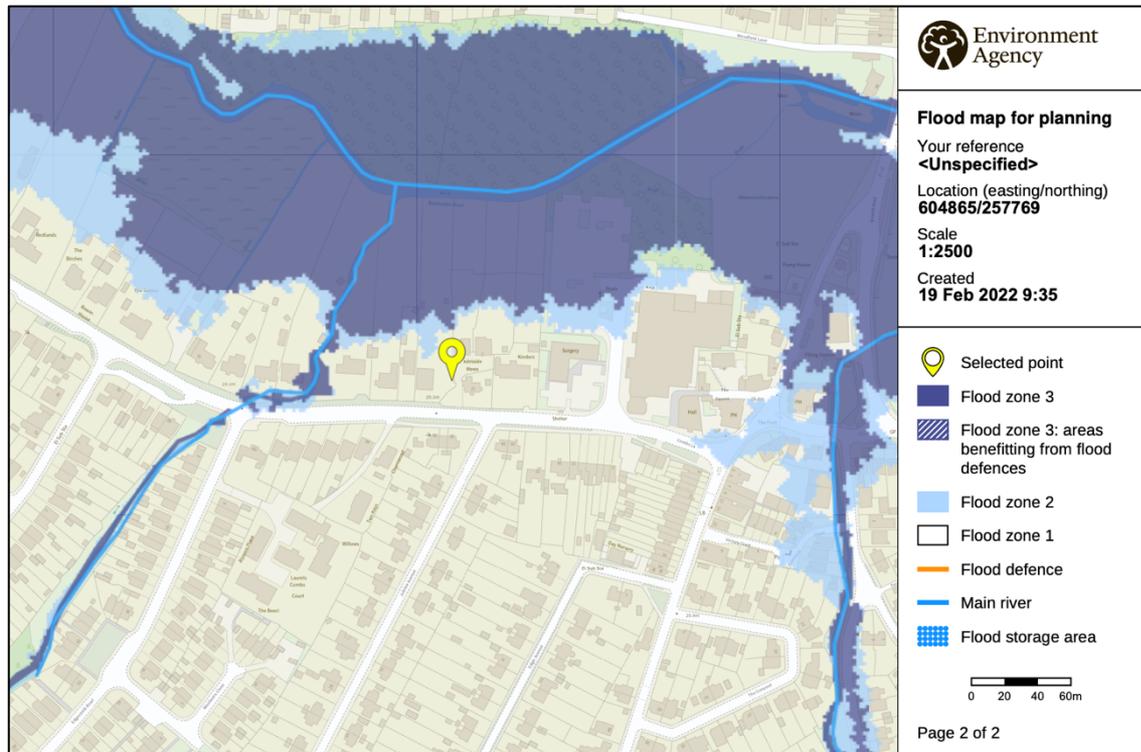


Figure 4: Flood Zone

3.2. LAND VULNERABILITY CLASSIFICATION

The existing site is a greenfield amenity area and is therefore designated as 'less vulnerable' by NPPF. The proposed development will be designated 'more vulnerable'. The development therefore increases the vulnerability classification of the site.

3.3. SITE SUITABILITY (NPPF)

'More vulnerable' development is suitable for flood zone 1, as per Figure 3.

4. SITE FLOOD RISK

4.1. THIRD PARTY FLOOD RISK DATA SUMMERY

A 'Groundsure' flood report has been acquired for advising this assessment. The full report can be found in Appendix B. The main findings are summarised below:

Type of Risk	Assessment of Risk
Overall Flood Risk	High
Rivers and the Sea	High
Surface Water	Highly Significant
Groundwater	Low
Historic Flood	Not Identified
Flood Defences	No
FloodScore™ – insurance rating	High

4.2. SURFACE WATER FLOODING

The Environment Agency surface water flood map Figure 5, shows the site is at a very low risk from surface water flooding. It should be noted that the access road experiences significant flood risk.

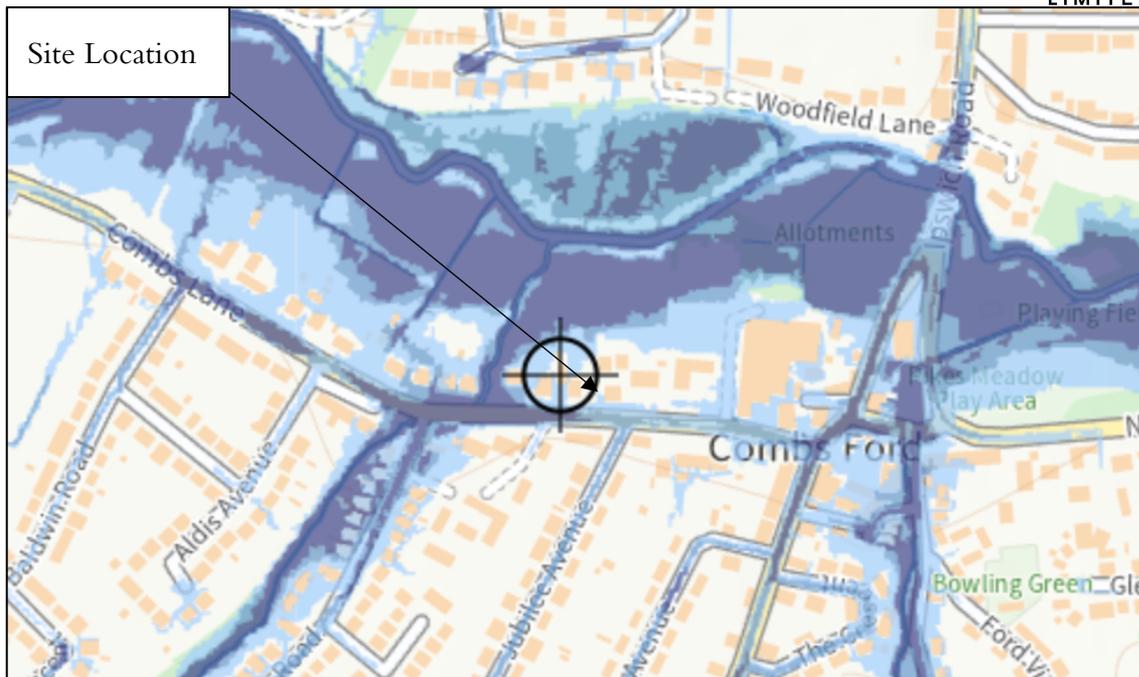


Figure 5: EA Surface Water Flood Map

Where the dark blue shaded area denotes high risk of surface water flooding; the light blue denotes low risk with white areas having very low risk of surface water flooding. The risk classification is comparable to the 'Groundsure' flood report.

4.3. TIDAL AND FLUVIAL FLOODING

The site is classified as having a very low risk of flooding from tidal or river sources by the EA mapping and a high classification by the Groundsure flood report.

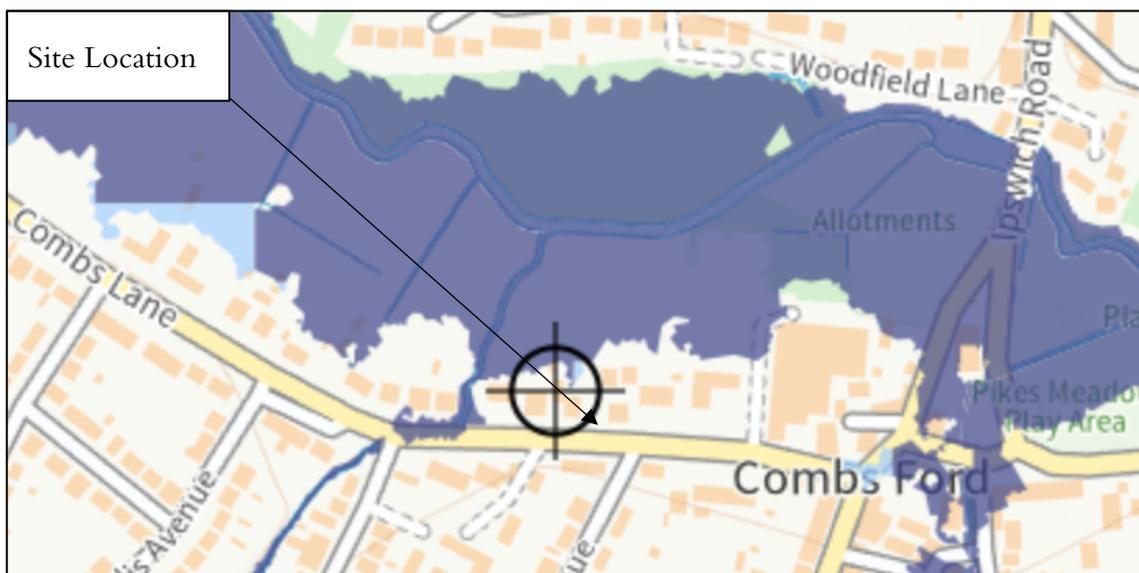


Figure 6: EA Tidal and Fluvial Flood Map

Where the dark blue shaded area denotes high risk of tidal and pluvial flooding; the light blue denotes low risk with the lightest blue areas having a very low risk of flooding.

4.4. GROUNDWATER FLOODING

The 'Groundsure' flood report indicates that the site has a low risk of groundwater flooding.

4.5. RESERVOIR FLOODING

The site is not believed to be at risk of flooding from reservoir sources.

4.6. CANAL AND ARTIFICIAL WATER FLOODING

The site is not believed to be at risk of flooding from artificial water sources.

4.7. HISTORIC FLOODING

The 'Groundsure' flood report failed to identify any historic flood events.

5. FURTHER SITE ASSESSMENT

5.1. SITE ACCESS AND EGRESS ROUTES

The access experiences some surface water risk. Site users should be made aware.

5.2. FLOOD COMPENSATION

The development is not expected to significantly displace flood water. All surface water generated by the site proposals should be subject to a full SuDS design.

5.3. FLOOD WARNING AREAS

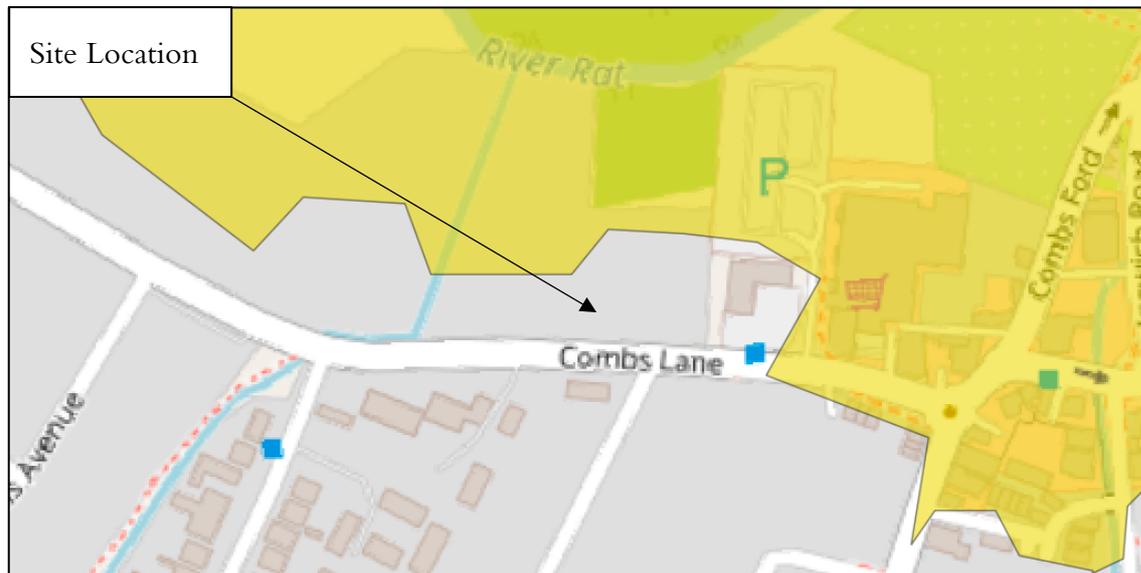


Figure 7: Flood Warning Areas

The site is outside the warning area.

5.4. AWARENESS OF FLOOD RISK

The developer should be aware that the site is not immune from flooding. It is recommended that all residents take the opportunity to develop emergency and non-emergency plans.

5.5. SEQUENTIAL TEST

Not applicable

5.6. EXCEPTION TEST

Not applicable

6. FINDINGS AND RECOMMENDATIONS

6.1. FINDINGS

The development plans the construction of a four-bedroom residential house. NPPF categorises residential development as ‘more vulnerable’. More vulnerable developments are suitable for flood zone 1.

6.2. RECOMMENDATIONS

This report recommends the following be considered to lower the risk and/or consequences that flooding may cause to the proposed development:

- A bespoke evacuation plan should be considered.
- A suitable SuDS design should be in place

List of Appendices

Appendix A: Development Plan

Appendix B: Groundsure Flood Report



Appendix A: Development Plan



Flood Zones2

Extract from DoE Flood Zone designation areas showing proposed redline dwelling location in Zone 1

Z3

Z2

Z1



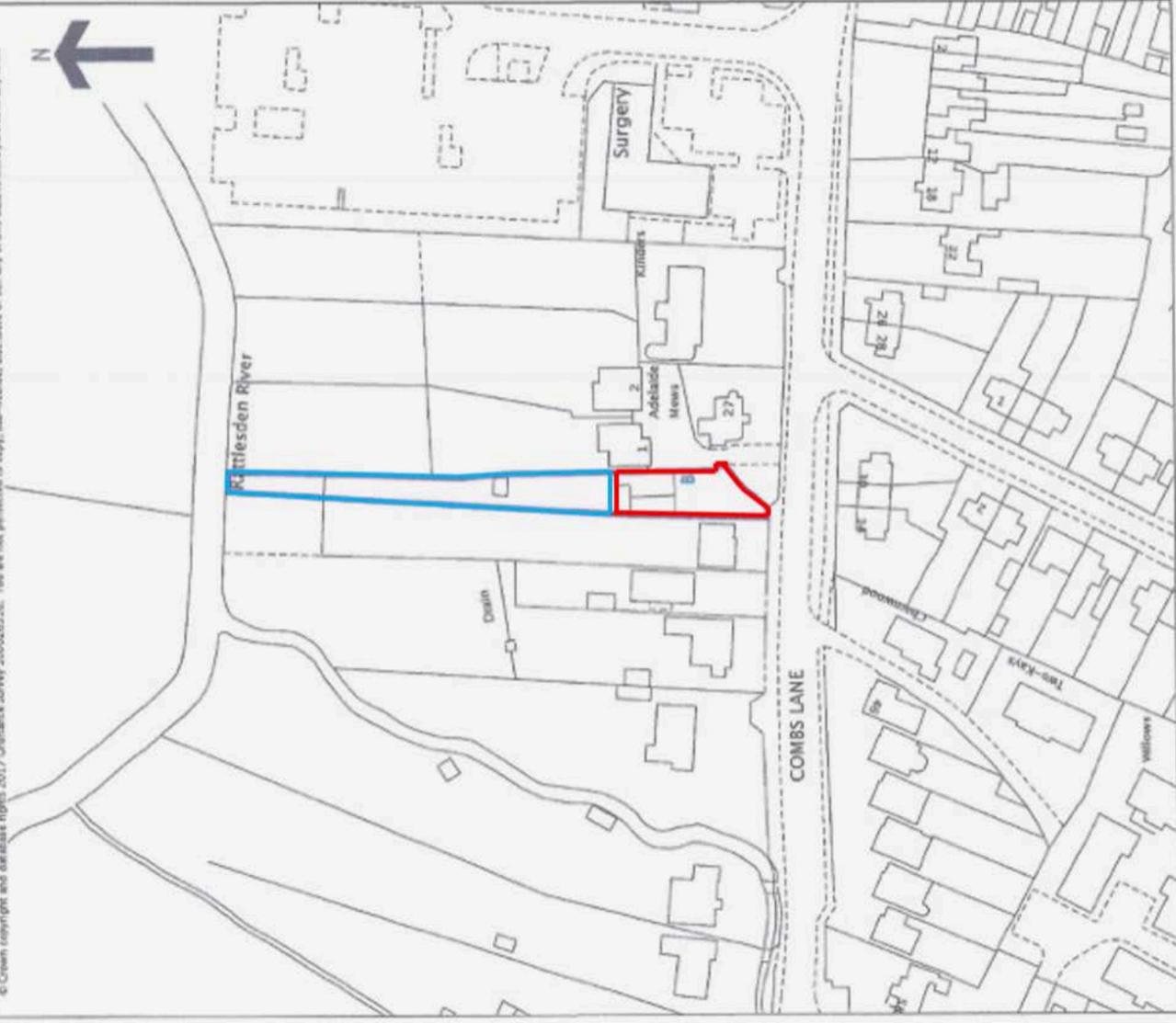
Comments

29A Combs Lane

HM Land Registry
Official copy of
title plan

Title number SK375197
Ordnance Survey map reference TM0457NE
Scale 1:1250 enlarged from 1:2500
Administrative area Suffolk : Mid Suffolk

© Crown copyright and database rights 2017 Ordnance Survey 100020313E. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.



Location of siting of proposed
development within DoE Flood Zone 1,
outlined in Red



Appendix B: Groundsure Flood Report

604861 257768

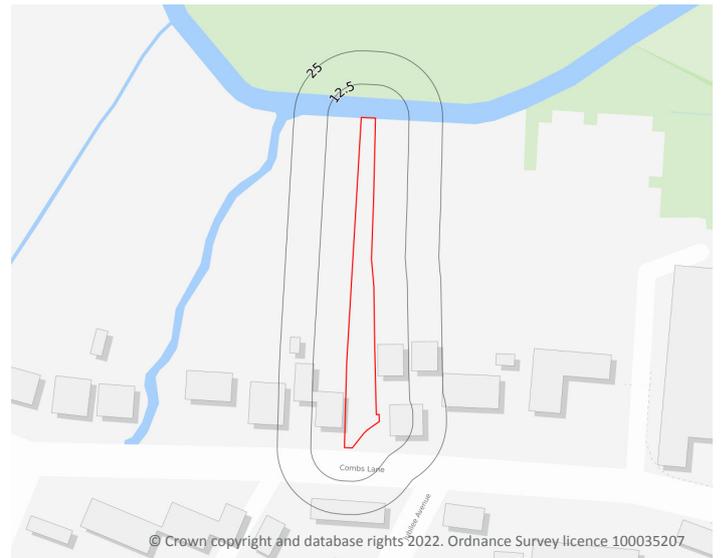
Overall Flood Risk



HIGH

Groundsure Flood complies with relevant Law Society practice notes on flood risk in property transactions.

Site plan



Search Results

	Rivers and the Sea High	page 3		Historic Flood Not identified	
	Surface Water Highly Significant	page 4		Flood Defences No	
	Groundwater Low			FloodScore™ insurance rating High	page 6

Full assessments for other environmental risks are available in additional Groundsure searches including the Groundsure Avista 7 in 1 report. Contact Groundsure or your search provider for further details.

Overview of findings and recommendations

To save you time when assessing the report, we only provide maps and data tables of features within the search radius that we have identified to be of note. These relate to environmental risks that may have liability implications, affect insurance premiums, property values and/or a lender's willingness to lend.

You can view the fully comprehensive library of information we have searched on **page 6**.



Flooding

Flooding

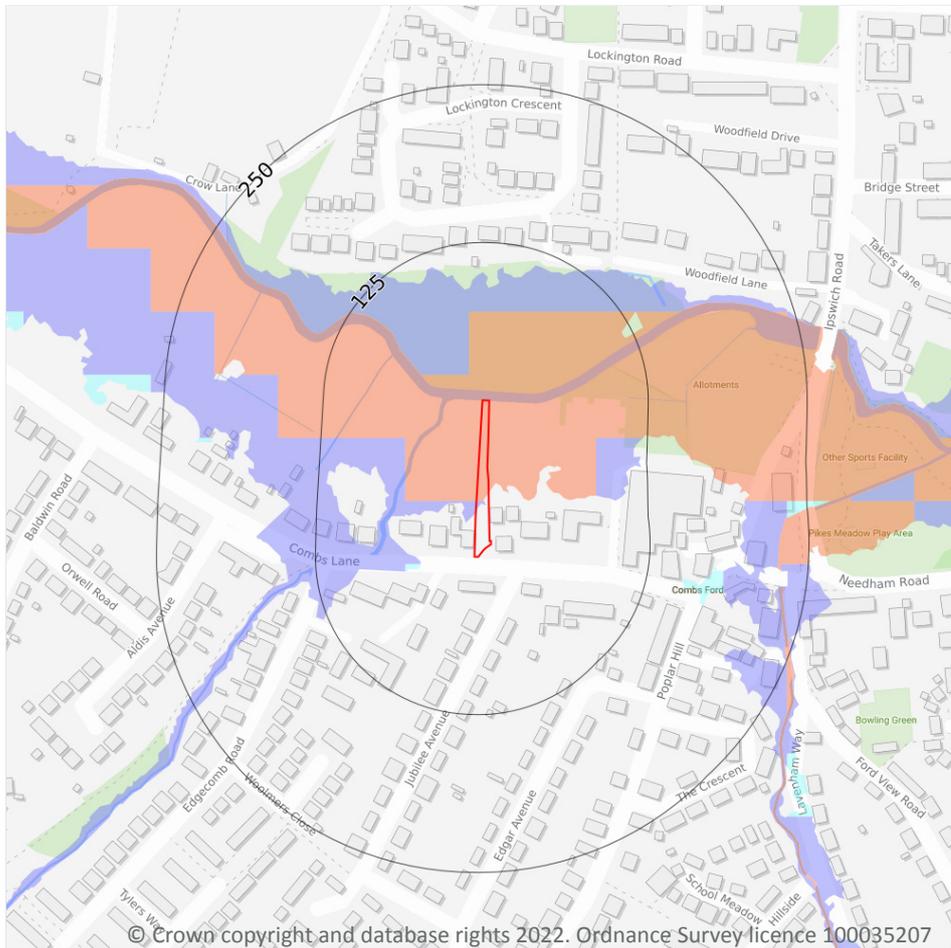
An elevated level of flood risk has been identified at the property.

Next steps for consideration:

- check to see if the property is eligible for the Flood Re scheme, which enables many properties at risk of flooding to be insured at reasonable rates: <http://www.floodre.co.uk/homeowner/about-us/>
- investigate the insurance on offer for the property to ensure any implications on premiums are fully understood before completion
- the assessment in this report is based on the highest flood risk found within the site boundary. The detailed maps within the flood section clearly highlight which parts of the site are affected by flooding, allowing you to visualise whether flood risk affects the buildings or the associated land. If you would prefer an assessment that provides separate flood ratings for the main dwelling and the associated land, Groundsure can provide this for a fee of £35 plus VAT
- if the property has recently been constructed, the flood risk assessment contained within this report will not take into account any measures put in place by the developer to deal with flooding. You should seek further information from the developer on flood risk mitigation for the site
- investigate the various forms of flood resistance and resilience measures that will help protect your property in the event of a flood



Flooding / Risk of flooding from rivers and the sea



— Site Outline

Search buffers in metres (m)

River and coastal flooding:

High

Medium

Low

Very Low

Historical Flood Events

Areas Used for Flood Storage

Areas Benefiting from Flood Defences

Proposed Flood Defence Scheme

Flood Defences

Risk of flooding from rivers and the sea

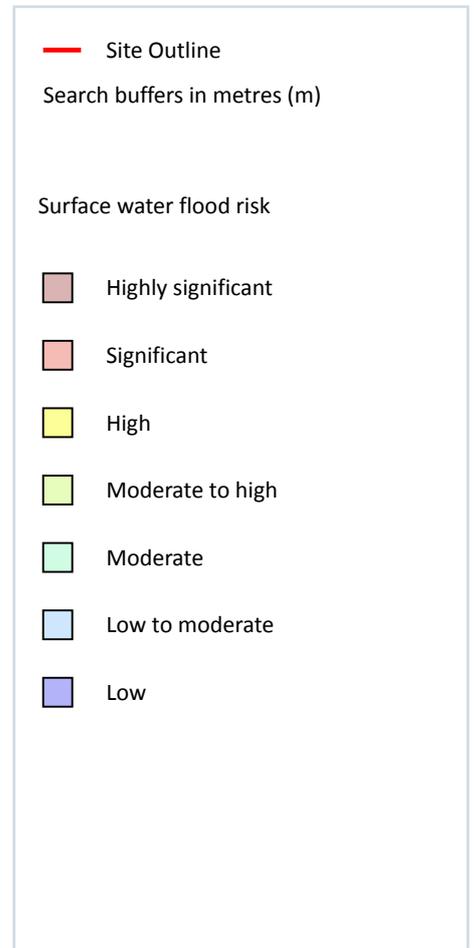
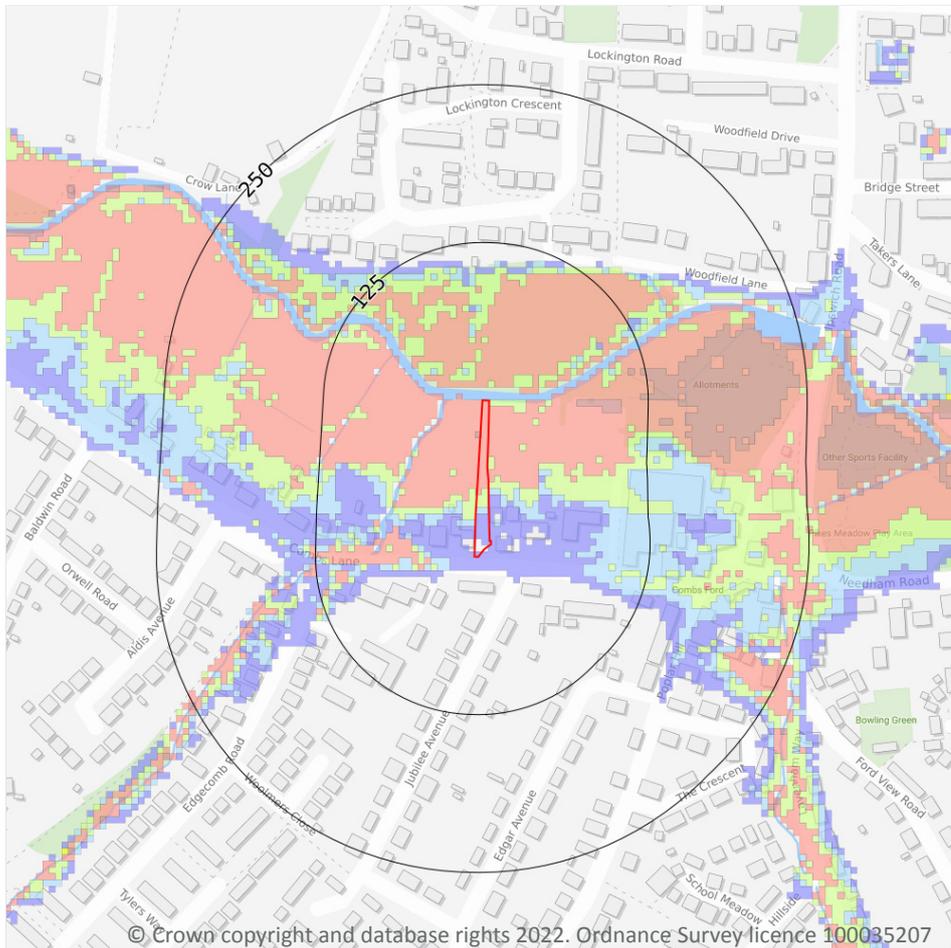
The property has a High chance of flooding in any given year, according to Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) data. This could cause problems with insuring the property against flood risk. However, if built before 2009, it may be eligible for insurance assistance from the Flood Re scheme: <http://www.floodre.co.uk/>

RoFRaS/FRAW assesses flood risk from rivers and the sea in England and Wales, using local data and expertise. It shows the chance of flooding from rivers or the sea, taking account of flood defences and the condition those defences are in. The model uses local water level and flood defence data to model flood risk. See page **page 6** for explanation of the levels of flood risk.

Please see **page 2** for further advice.

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

Flooding / Surface water flood risk



Surface water flood risk

The property is likely to be prone to flooding following extreme rainfall, which may have an impact on insuring the property against flood risk. However, if built before 2009, it may be eligible for insurance assistance from the Flood Re scheme: <http://www.floodre.co.uk/>

The area in which the property is located has been assessed to be at a Highly Significant risk of surface water flooding. This area is considered to have a 1 in 30 probability of surface water flooding due to rainfall in a given year to a depth of greater than 1m. However, as is the case with probability statistics and predictions, this information should be used as a guideline only. The area may flood several years in a row, or not at all for many years. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

These risk calculations are based on Ambiantal Risk Analytics maps.

Datasets searched

This is a full list of the data searched in this report. If we have found results of note we will state "Identified". If no results of note are found, we will state "Not identified". Our intelligent filtering will hide "Not identified" sections to speed up your workflow.

Flooding

Risk of flooding from rivers and the sea **Identified**

Flood storage areas: part of floodplain Not identified

Historical flood areas Not identified

Areas benefiting from flood defences Not identified

Flood defences Not identified

Proposed flood defences Not identified

Surface water flood risk **Identified**

Groundwater flooding Not identified

Flood information

The Flood Risk Assessment section is based on datasets covering a variety of different flooding types. No inspection of the property or of the surrounding area has been undertaken by Groundsure or the data providers. The modelling of flood hazards is extremely complex and in creating a national dataset certain assumptions have been made and all such datasets will have limitations. These datasets should be used to give an indication of relative flood risk rather than a definitive answer. Local actions and minor variations, such as blocked drains or streams etc. can greatly alter the effect of flooding. A low or negligible modelled flood risk does not guarantee that flooding will not occur. Nor will a high risk mean that flooding definitely will occur. Groundsure's overall flood risk assessment takes account of the cumulative risk of river and coastal data, historic flood events and areas benefiting from flood defences provided by the Environment Agency/Natural Resources Wales (in England and Wales) and surface water (pluvial) and groundwater flooding provided by Ambient Risk Analytics. In Scotland the river and coastal flood models are also provided by Ambient Risk Analytics.

Risk of flooding from rivers and the sea

This is an assessment of flood risk for England and Wales produced using local data and expertise, provided by the Environment Agency (RoFRaS model) and Natural Resources Wales (FRAW model). It shows the chance of flooding from rivers or the sea presented in categories taking account of flood defences and the condition those defences are in. The model uses local water level and flood defence data to model flood risk.

The categories associated with the Environment Agency and Natural Resources Wales models are as follows:

RoFRaS (rivers and sea) and FRAW (rivers):

Very Low - The chance of flooding from rivers or the sea is considered to be less than 1 in 1000 (0.1%) in any given year.

Low - The chance of flooding from rivers or the sea is considered to be less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) in any given year.

Medium - The chance of flooding from rivers or the sea is considered to be less than 1 in 30 (3.3%) but greater than 1 in 100 (1%) in any given year.

High - The chance of flooding from rivers or the sea is considered to be greater than or equal to 1 in 30 (3.3%) in any given year.

FRAW (sea):

Very Low - The chance of flooding from the sea is considered to be less than 1 in 1000 (0.1%) in any given year.

Low - The chance of flooding from the sea is considered to be less than 1 in 200 (0.5%) but greater than or equal to 1 in 1000 (0.1%) in any given year.

Medium - The chance of flooding from the sea is considered to be less than 1 in 30 (3.3%) but greater than 1 in 200 (0.5%) in any given year.

High - The chance of flooding from the sea is considered to be greater than or equal to 1 in 30 (3.3%) in any given year.

Historic flood events

Over 86,000 events are recorded within this database. This data is used to understand where flooding has occurred in the past and provides details as available. Absence of a historic flood event for an area does not mean that the area has never flooded, but only that Environment Agency/Natural Resources Wales do not currently have records of flooding within the area. Equally, a record of a flood footprint in previous years does not mean that an area will flood again, and this information does not take account of flood management schemes and improved flood defences.

Surface water flooding

Ambient Risk Analytics surface water flood map identifies areas likely to flood following extreme rainfall events, i.e. land naturally vulnerable to surface water or "pluvial" flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though older ones may even flood in a 1 in 5 year rainstorm event.

Proposed flood defences

The data includes all Environment Agency/Natural Resources Wales's projects over £100K that will change or sustain the standards of flood defence in England and Wales over the next 5 years. It also includes the equivalent schemes for all Local Authority and Internal Drainage Boards.

Flood storage areas

Flood Storage Areas may also act as flood defences. A flood storage area may also be referred to as a balancing reservoir, storage basin or balancing pond. Its purpose is to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel. It may also delay the timing of a flood peak so that its volume is discharged over a longer time interval. These areas are also referred to as Zone 3b or 'the functional floodplain' and has a 5% or greater chance of flooding in any given year, or is designed to flood in the event of an extreme (0.1%) flood or another probability which may be agreed between the Local Planning Authority and Environment Agency/Natural Resources Wales, including water conveyance routes. Development within Flood Storage Areas is severely restricted.

Groundwater flooding

Groundwater flooding is flooding caused by unusually high groundwater levels. It occurs as excess water emerging at the ground surface or within underground structures such as basements. Groundwater flooding tends to be more persistent than surface water flooding, in some cases lasting for weeks or months, and it can result in significant damage to property. This risk assessment is based on a 5m Digital Terrain Model (DTM) and 1 in 100 year and 1 in 250 year return periods.

Ambiental FloodScore™ insurance rating

The property has been rated as **High** risk. Please see **page 2** for further advice.

Ambiental's FloodScore™ risk rating gives an indicative assessment of the potential insurance risk classification from flooding, which can provide an indication of how likely it is that a property's policy will be ceded to Flood Re. The assessment is based on Ambiental's river, tidal and surface water flood data and other factors which some insurers may use in their assessment are not included.

Flood Re is a re-insurance scheme that makes flood cover more widely available and affordable as part of your residential property home insurance. Properties at higher risk of flooding may have the flood part of their policy ceded to Flood Re by their insurer. It is important to understand that Flood Re does not apply to all situations. Exclusions from Flood Re includes properties constructed after 1 January 2009; properties not within domestic Council Tax bands A to H (or equivalent); commercial properties, certain buy to let scenarios and buildings comprising four or more residential units. A full list of the exemptions can be found on the Flood Re website (<https://www.floodre.co.uk/can-flood-re-help-me/eligibility-criteria/>).

The Ambiental FloodScore™ insurance rating is classified into six different bandings:

Very High indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a very high possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, particularly if the property has flooded in the past.

High indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a high possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, particularly if the property has flooded in the past.

Moderate-High indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a moderate possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, particularly if the property has flooded in the past.

Moderate indicates a level of risk that may make it more likely that standard insurance premiums will be higher, or additional terms may apply to the provision of flood cover. There is a low possibility that the cover for flooding at the property will be ceded into the Flood Re scheme, unless the property has flooded in the past.

Low indicates a level of risk that is likely to mean standard cover and premiums are available for flood cover. There is a low possibility the cover for flooding at the property will be ceded into the Flood Re scheme, unless the property has flooded in the past.

Very Low indicates a level of flood risk that should not have any impact on the provision of flood cover for the property.

Conveyancing Information Executive and our terms & conditions

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Groundsure Ltd, Sovereign House, Church Street, Brighton, BN1 1UJ. Tel: 08444 159 000. Email: info@groundsure.com. Groundsure adheres to the Conveyancing Information Executive Standards.

The Standards

- Conveyancing Information Executive Members shall act in a professional and honest manner at all times in line with the Conveyancing Information Executive Standards and carry out the delivery of the Search with integrity and due care and skill.
- Compliance with the Conveyancing Information Executive Standards will be a condition within the Conveyancing Information Executive Member's Terms and Conditions.
- Conveyancing Information Executive Members will promote the benefits of and deliver the Search to the agreed standards and in the best interests of the customer and associated parties.

Complaints Advice

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure.

If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Standards.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs.

COMPLAINTS PROCEDURE: If you want to make a complaint, we will:

- acknowledge it within 5 working days of receipt
- normally deal with it fully and provide a final response, in writing, within 20 working days of receipt
- liaise, at your request, with anyone acting formally on your behalf

Complaints should be sent to:

Operations Director, Groundsure Ltd, Sovereign House, Church Street, Brighton, BN1 1UJ. Tel: 08444 159 000. Email: info@groundsure.com If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk We will co-operate fully with the Ombudsman during an investigation and comply with their final decision.

Groundsure's Terms and Conditions can be viewed online at this link: <https://www.groundsure.com/terms-and-conditions-jan-2020/>

Important consumer protection information

All of the advice and reports that Groundsure produces are covered by a comprehensive Remediation Contribution policy to ensure customers are protected, see <https://www.groundsure.com/remediation> for full details.

Data providers

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