



CHARTERED SURVEYORS • PROPERTY CONSULTANTS

THE GATEHOUSE 116-118 RAINSFORD ROAD

CHELMSFORD ESSEX CM1 2QL

TELEPHONE 01245 210060

FLOOD RISK and DRAINAGE ASSESSMENT

**Land at Hillside
Lower Wokingham Road
Crowthorne
RG45 6BX**

Report Prepared by:

TC Matthews BSc (Hons) FRICS

Report Date:

July 2026

Client:

Mr [REDACTED] Cole



TMA PROFESSIONAL SERVICES LLP
REGISTERED IN ENGLAND AND WALES NO. OC367703 REGULATED BY RICS

Contents

- 1 Introduction**
- 2 Existing Site**
- 3 Proposed Development**
- 4 Flood Risk**
- 5 Assessment of the Development**
- 6 Managing Surface Water**
- 7 Flood Risk Mitigation**
- 8 The Exception and Sequential Tests**
- 9 Conclusion**

1.0 INTRODUCTION

- 1.1 This Flood Risk and Drainage Assessment has been prepared by TMA Chartered Surveyors on behalf of the applicant Mr [REDACTED] Cole. The statement accompanies an outline planning application for residential redevelopment at Hillside, Lower Wokingham Road, Crowthorne, RG45 6BX.
- 1.2 The development site extends to 1 hectares.
- 1.3 The site is located in Flood Zone 1, indicating a less than 0.1 % (1 in 1000) annual probability of flooding.
- 1.4 A Flood Risk Assessment is required to support all ‘major’ applications where the site area is more than 1 hectare.
- 1.5 This report has been prepared in line with the NPPF requirements, the Planning Practice Guide ‘Flood Risk and Coastal Change’ and the Environment Agency Flood Risk Standing Advice.
- *This report includes:*
 - *Development Description, location and detailed proposals*
 - *Assessment of*
 - *Flood Risk from all potential sources*
 - *Impact of flooding on the site*
 - *Provision of safe access and egress during all types of flood event*
 - *Proposals for surface water management*
 - *Residual risk to the site and means of managing these*
 - *Development within Flood Zone 1 should consider the following:*
 - *The potential for a change in the Flood Zone classification at the site because of climate change, over the lifetime of the development.*
 - *The risk of surface water flooding on-site attributable to runoff from off the site and how this is managed within the development layout.*
 - *The use of SuDS to reduce where practicable, the rate and volume of surface water runoff generated by the site to the greenfield rate.*
 - *The potential impacts of groundwater flooding on the development and the potential for the development to impact on groundwater flows.*
 - *The proximity of the site to any Main Rivers or Ordinary Watercourses. Usually any development within 20m of a water feature will require some form of Statutory Consent.*
 - *Consideration of the proposals in relation to the Wokingham Borough Council Strategic Flood Risk Assessment as updated in January 2020*

2.0 EXISING SITE

Site Description

- 2.1 The development site is located on the west side of Lower Wokingham Road, Crowthorne, RG45 6BX. The Local Planning Authority is the Wokingham Borough Council unitary authority. The Lead Local Flood Authority (LLFA) is also Wokingham Borough Council.
- 2.2 The site is considered within the Housing and Economic Land Availability Assessment (HELAA) of Wokingham Borough Council under reference 5FI024 it has therefore also been assessed within the Strategic Flood Risk Assessment.
- 2.3 The site is currently occupied by one dwelling known as Hillside. The land around the dweling is managed as garden and amenity space.
- 2.4 The site in total comprises approx. 1.0 hectares although it has previously been identified in two sections.
- 2.5 The site has the benefit of access directly from the A321 Lower Wokingham Road.
- 2.6 The site is located on gently sloping land which rises to the south and falls to the north and west. The site itself is generally level, although slopes at the rear (western end of the site) on the southern and western boundaries.
- 2.7 An earlier topographic survey shows the site having levels of 65.5m to 69.5m OD.
- 2.8 The site is located in a residential area and is surrounded by other residential property. To the north of the site is the Ashdale Park development of residential dwellings. A single dwelling adjoins the site to the south. There are residential dwellings to the east of the site on the opposite side of Lower Wokingham Road (A321).



Figure 1 Location Plan

3.0 PROPOSED DEVELOPMENT

- 3.1 The proposed development comprises the demolition of the existing bungalow and garage and construction of up to 11 residential dwellings with associated infrastructure and landscaping.
- 3.2 Access is proposed the A321 Lower Wokingham Road, indicatively making use of the two access points which currently give access for the dwelling and for the parcel of land to the north.
- 3.3 It is proposed that foul sewerage will be disposed to the existing foul sewer on Lower Wokingham road, subject to the usual charges and agreements.
- 3.4 Surface water will be discharged to separate soakaways or similar infiltration systems designed in accordance with Sustainable Urban Drainage (SUDs) principles, serving each property.
- 3.5 An indicative site layout has been prepared including some land set aside for landscaping to include potential swales or drainage ponds to address likely SuDs requirements.



Figure 2 Indicative Site Layout

4.0 FLOOD RISK:

Classification

- 4.1 The development site is shown on the Environment Agency (EA) Flood Map to lie within Flood Zone 1 (the extract from the EA Flood Map for Planning is included at Appendix A).



Figure 3 Extract from the Flood Map for Planning

- 4.2 Land in Flood Zone 1 has a less than 0.1% (1 in 1000) annual exceedance probability (AEP) of flooding.
- 4.3 The Strategic Flood Risk Assessment, as updated in January 2020, also confirms that the site is within Flood Zone 1. The relevant extract from the SFRA is attached in Appendix B.
- 4.4 The site is not within a critical drainage area.
- 4.5 There is no record of flood on the site.

Rivers and Watercourses

- 4.4 The nearest rivers to the site are tributaries of the River Lodden located approximately 200m to the north and 250m to the west.
- 4.5 The nearest body of water is the Kings Mere approximately 450m to the north west.
- 4.6 The risk of flooding from rivers and the sea is assessed by the Environment Agency to be very low, again this is less than 0.1% AEP of flooding. See extract below.

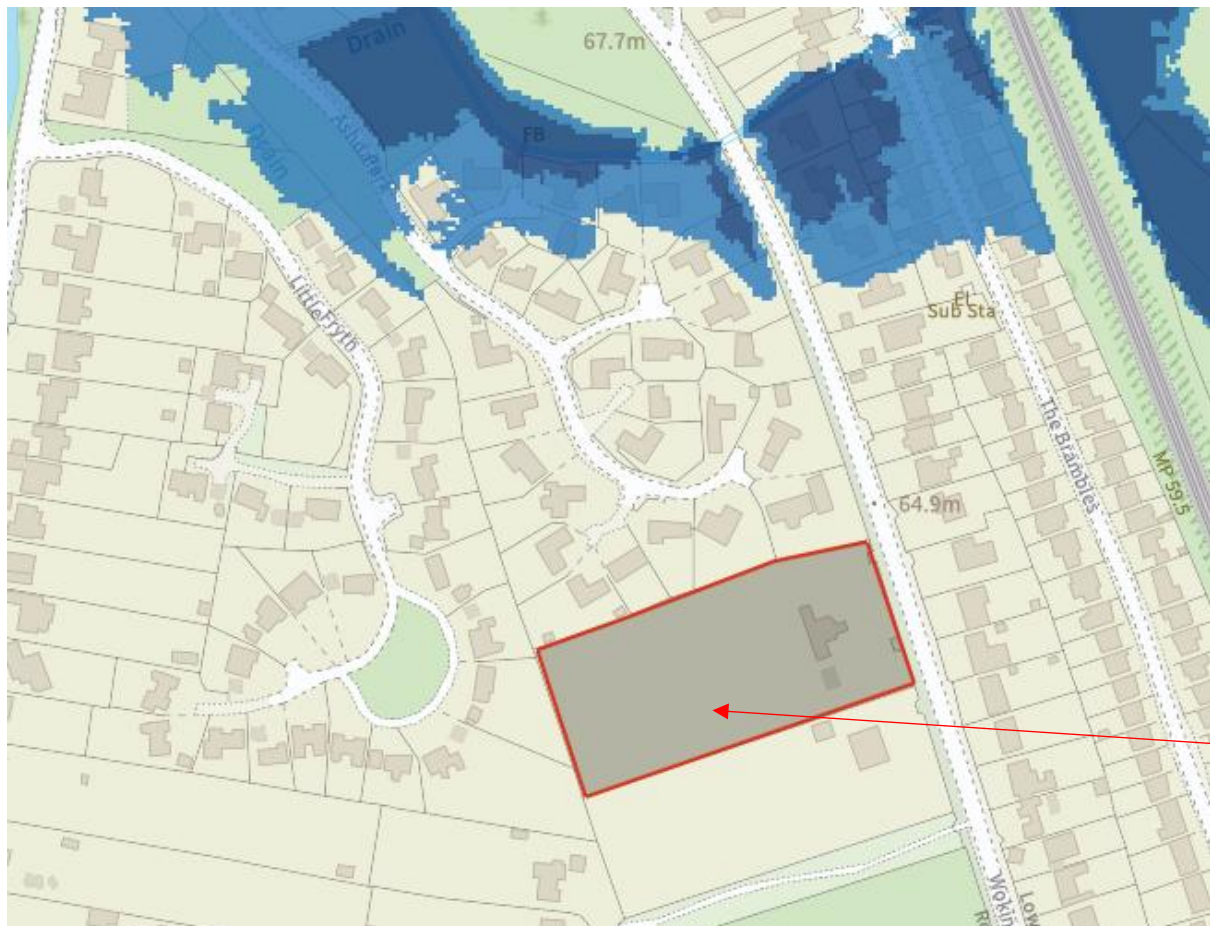


Figure 4 Extent of flood zones 2 & 3

Surface Water

- 4.9 Surface water flooding typically arises following periods of intense rainfall, often of short duration, that is unable to soak into the ground or enter drainage systems. It can run quickly off land and result in localised flooding.
- 4.10 The Environment Agency's Flood Map for Surface Water (FMfSW) indicates that the site has a 'very low' risk of surface water flooding (flooding occurring as a result of rainfall with less than 0.1% AEP..

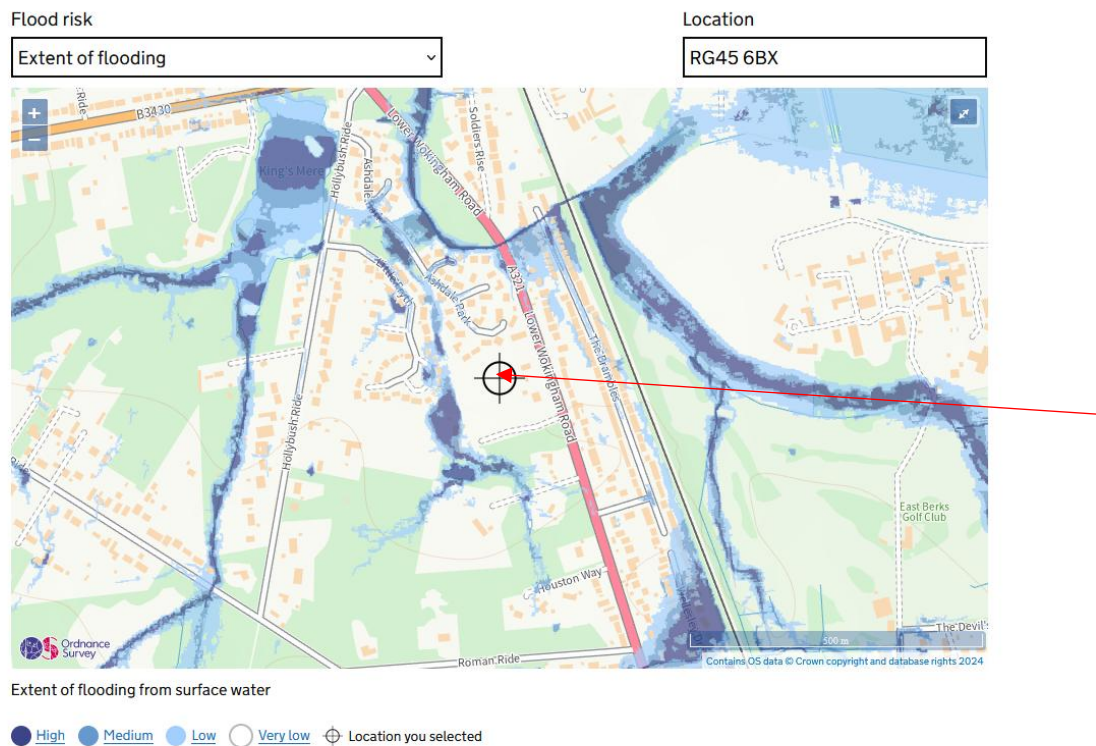


Figure 5 Extent of Surface Water Flooding

- 4.11 The SFRA similarly indicates a very low potential for surface water flooding.

Ground Water

- 4.12 The site is not in an area which has a high susceptibility to groundwater flooding, based on the criteria used by the Environment Agency and British Geological Survey to assess groundwater flood risk. The site is underlain by silty fine sands. The risk from groundwater flooding is considered to be low to moderate.
- 4.13 The SFRA shows the site as having limited potential for groundwater flooding.

5.0 ASSESSMENT OF DEVELOPMENT

Development Proposal

- 5.1 The proposed development at the site comprises the development of up to 11 residential dwellings all with generous gardens and amenity space.
- 5.2 The dwellings comprise a mix of sizes and include both market and affordable dwellings.
- 5.3 The site and the access is in within Flood Zone 1 having a less than 0.1% (1 in 1000) annual exceedance probability (AEP) of flooding.

Flood Risk Vulnerability

- 5.4 According to Table 2 (Flood Risk Vulnerability Classification) in the Flood Risk and Coastal Change Planning Practice Guidance to NPPF, the development for residential use is classified as “More Vulnerable”.
- 5.5 Table 3 (Flood Risk Vulnerability and Flood Zone Compatibility) in the Planning Practice Guidance to the NPPF, states that "More Vulnerable" developments are appropriate to locate in Flood Zone 1 without the need to apply the ‘exception test’.

Drainage

- 5.6 Foul water drainage will be via the existing, public sewage system in Lower Workingham Road.
- 5.7 Surface water drainage will be designed according to SuDS principles using individual soakaways for the dwellings. As the indicative site layout shows flexible use of the site including landscaping areas and capacity to incorporate swales or ponds is possible.

6.0 MANAGING SURFACE WATER

- 6.1 It is a requirement of the NPPF that the development will not increase flood risk elsewhere.
- 6.2 The site is previously developed with an existing residential bungalow and garage and is otherwise garden land.
- 6.3 This flood risk assessment is prepared to support an “Outline” planning application. Initial planning for the drainage system for the site has nonetheless been undertaken.
- 6.4 Permeable surfaces will be used for roads, paths and patios across the site to minimise run off. Land has been allocated for the creation of a ‘swale’ or other sustainable urban drainage system so that SuDS principles can be applied.
- 6.5 The detailed drainage system will be developed at a later stage but no additional surface water will be added to the drainage system. The development will not add to flood risk elsewhere.

7.0 MANAGING THE RISK OF FLOODING (MITIGATION)

Tidal & Fluvial Flooding

- 7.1 The development site is shown on the Environment Agency (EA) Flood Map to lie mainly within Flood Zone 1 with a less than 0.1% (1 in 1000) annual probability of flooding.
- 7.2 The proposed access to the site is from Lower Wokingham Road, access to the site is wholly within Flood Zone 1 ensuring that the site has safe, dry access and egress.

Surface Water (Pluvial) Flooding

- 7.3 Surface water flooding can occur during periods of intense rainfall when water is not absorbed sufficiently quickly.
- 7.4 The Environment Agency assessment is that the site has a less than 0.1% (1 in 1000) AEP. However, surface water flooding will need to be controlled in the future by carefully designed and appropriate surface water drainage systems.

8.0 SEQUENTIAL AND EXCEPTION TESTS

Sequential Test

- 8.1 The purpose of the Sequential Test is to steer development to areas with the lowest probability of flooding.

Through application of the Sequential Test, informed by the SFRA, the Local Planning Authority seeks to demonstrate that there are no reasonably available sites in areas with less risk of flooding that would be appropriate to the type of development or land use proposed.

- 8.2 The site has been assessed for the Housing Economic Land Availability Assessment (HELAA) as part of Wokingham Local Plan process and assessed within the SFRA.
- 8.3 The proposed development is located within Flood Zone 1 and therefore has a low probability of flooding and is inherently suitable for development. The access is wholly within Flood Zone 1.
- 8.4 The indicative site layout presented in this outline application addresses the Flood Risk and presents a mitigation strategy in relation to surface water. The development therefore meets the requirements of the Sequential Test.

Exception Test

- 8.5 According to Table 2 (Flood Risk Vulnerability Classification) in the Flood Risk and Coastal Change Planning Practice Guidance to NPPF, dwelling homes are classified as "More Vulnerable".
- 8.6 Table 3 (Flood Risk Vulnerability and Flood Zone Compatibility) in the Planning Practice Guidance to the NPPF, states that "More Vulnerable" developments are appropriate developments to locate in Flood Zone 1.
- 8.7 The Exception Test is not required for the proposed development.

9.0 CONCLUSIONS

- 9.1 The objectives of a flood risk assessment are to establish:
- whether a proposed development is likely to be affected by current or future flooding from any source;
 - whether it will increase flood risk elsewhere;
 - whether the measures proposed to deal with these effects and risks are appropriate;
 - the evidence for the local planning authority to apply (if necessary) the Sequential Test, and;
 - whether the development will be safe and pass the Exception Test, if applicable.
- 9.2 The proposal at Hillside is for redevelopment for residential use for up to 11 residential units, landscaping and associated car parking and roads.
- 9.3 The proposed use of the site is ‘more vulnerable’.
- 9.4 The site is located within Flood Zone 1 and therefore has a low risk of fluvial flooding. Other sources of flooding have also been demonstrated to provide a low risk of flooding.
- 9.5 It has been demonstrated that the proposal meets the NPPF requirements for the Sequential and Exception Tests
- 9.6 The site is considered to be at low risk of flooding from all sources. The proposal is therefore compliant with National Planning Policy
- 9.7 Foul sewage can be handled via the existing network in Lower Wokingham Road and surface water will be handled



Flood map for planning

Your reference
Unspecified

Location (easting/northing)
481704/164632

Created
22 July 2026 11:48

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following**:

- bigger than 1 hectare (ha)
- in an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

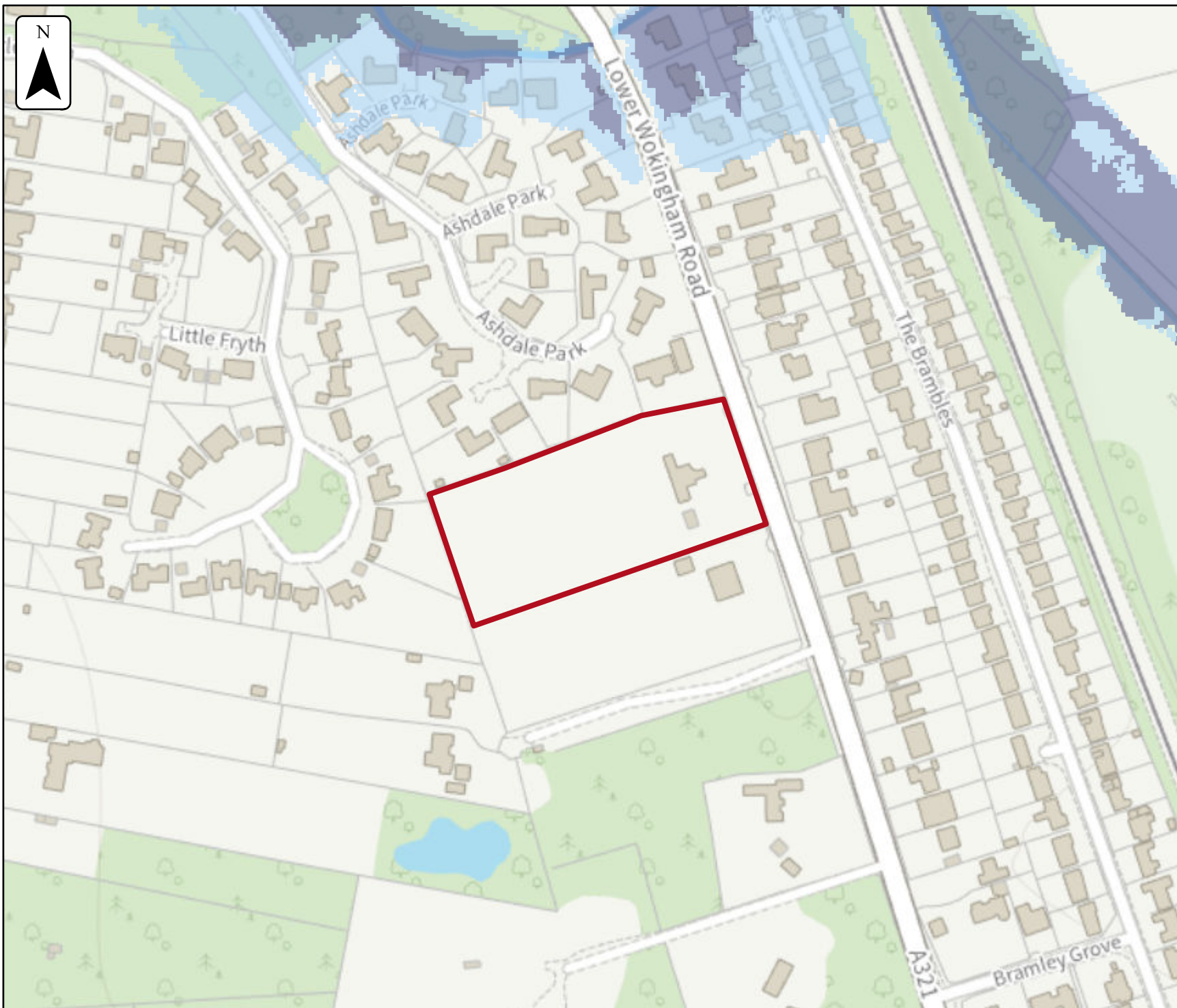
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2026 AC0000807064. <https://flood-map-for-planning.service.gov.uk/os-terms>



Flood map for planning

Your reference

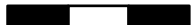
Unspecified

Location (easting/northing)
481704/164632

Scale
1:2,500

Created
22 Jul 2026 11:48

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area


0 20 40 60m

5FI024 Jovike, Lower Wokingham Road

Site Area (ha)	0.79
Proposed Site Use	Housing
Flood Zone 1	100.00%
Flood Zone 2	0.00%
Flood Zone 3a	0.00%
Flood Zone 3b Developed	0.00%
Flood Zone 3b Functional Floodplain	0.00%
Groundwater Flooding Potential	Limited potential
Surface Water 1 in 30	0.00%
Surface Water 1 in 100	0.00%
Surface Water 1 in 1000	0.00%

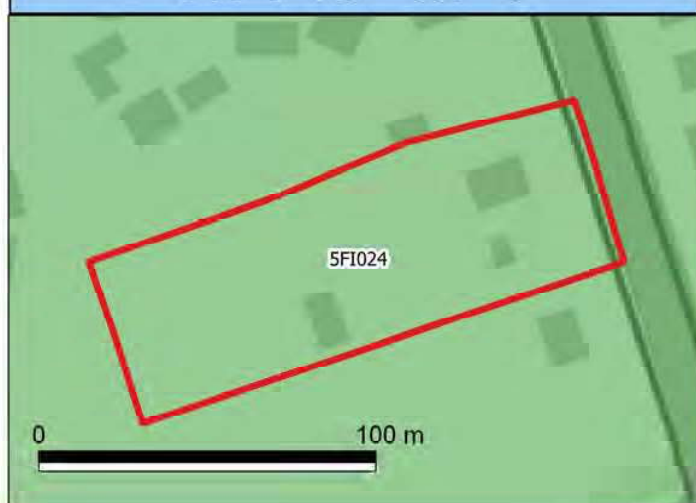
Fluvial Flooding



Surface Water Flooding



Groundwater Flood Risk



Historic Flood Events

