

FLOOD RISK ASSESSMENT & DRAINAGE STATEMENT

Proposed Remodelling and Extension of Existing Dwelling

Site Address
Waters Edge
Derryfields
Ashton Keynes
Swindon
SN6 6PA

Grid Reference
Approximate Coordinates: 51.64304° N, 1.94105° W

1. Introduction

This Flood Risk Assessment (FRA) and Drainage Statement has been prepared in support of a planning application for the remodelling and extension of the existing dwelling known as Waters Edge, Derryfields, Ashton Keynes.

The proposal comprises the remodelling of the existing bungalow together with the construction of single-storey and two-storey extensions and associated external works.

This report has been prepared in response to pre-application advice issued by Wiltshire Council, which noted that whilst the site lies within Flood Zone 1, local records indicate groundwater levels may be close to the ground surface.

2. Site Description

The site comprises an existing residential dwelling and associated domestic curtilage located within Ashton Keynes.

The property benefits from a substantial private garden and external amenity space surrounding the dwelling.

The site is currently partially developed, comprising:

- Existing dwellinghouse.
- Existing hardstanding and driveway areas.
- Domestic garden and landscaping.

The site is not located within an area identified as being at risk from fluvial flooding and is located within Flood Zone 1, which is defined as land having less than a 1 in 1,000 annual probability of river flooding.

3. Existing Flood Risk

The Environment Agency Flood Map identifies the site as being located within Flood Zone 1. Wiltshire Council's pre-application advice notes that local groundwater mapping indicates groundwater levels may be close to the surface within the locality.

The applicant is not aware of any historic flooding affecting the property, either from rivers, surface water or groundwater sources.

The site has operated as a residential property for many years without known flooding incidents.

4. Development Proposal

The proposal involves the extension and remodelling of the existing dwelling. Whilst the development will result in a modest increase in roof area and associated impermeable surfaces, the majority of the site will remain as private garden.

The increase in developed area represents a small proportion of the overall site area. No development is proposed within any identified floodplain.

5. Surface Water Drainage Strategy

The key objective of the drainage strategy is to ensure that the proposed development does not increase flood risk either on-site or elsewhere.

The site benefits from a generous garden area capable of accommodating sustainable drainage measures.

It is proposed that surface water generated by the new development will be managed on-site through the use of sustainable drainage principles.

Subject to detailed design and ground conditions, suitable measures may include:

- Cellular attenuation storage systems located below landscaped areas.
- Soakaways or infiltration features, where ground conditions permit.
- Permeable surfacing to external hardstanding areas where appropriate.
- Controlled discharge arrangements if infiltration is demonstrated to be unsuitable.

The final drainage design will ensure that post-development runoff rates do not exceed existing runoff characteristics.

6. Impact on Flood Risk

The proposed development is considered to present a low flood risk for the following reasons:

- The site lies within Flood Zone 1.
- No historic flooding is known to have affected the property.
- The development is domestic in scale.
- The increase in impermeable area is modest relative to the overall site area.
- Significant garden space remains available for infiltration and attenuation measures.
- Surface water generated by the development can be managed within the site boundary.
- The proposal will not increase flood risk to neighbouring properties or surrounding land.

It is therefore considered that the development can be accommodated without adverse impacts upon flood risk.

7. Conclusion

The proposed development at Waters Edge, Derryfields, Ashton Keynes is located within Flood Zone 1 and is therefore at low risk of flooding from rivers.

Whilst local mapping identifies potential groundwater constraints within the wider area, there is no known history of flooding affecting the property.

The development is modest in scale and can be supported by sustainable drainage measures within the site boundary.

The proposal is therefore considered acceptable in flood risk and drainage terms and is compliant with the objectives of Policy INP1 of the Ashton Keynes Neighbourhood Plan and Core Policy 67 of the Wiltshire Core Strategy.

Yours faithfully



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