

Flood risk assessment

Extensions and alterations 50 Langstone Road, Havant

1. Introduction

This Flood Risk Assessment has been prepared in support of a householder planning application for extensions and alterations to the existing dwelling at 50 Langstone Road, Havant, PO9 1RF.

The assessment considers the potential flood risk to the proposed development and the potential for the development to increase flood risk elsewhere.

The proposals comprise extensions and alterations to the existing dwelling as illustrated on drawing S3272 PL01 Rev A. The proposal does not involve the creation of an additional dwelling.

The proposed ground floor level will remain consistent with the existing dwelling, at 3.426 m above Ordnance Datum (m OAD).

The Environment Agency's current guidance requires flood risk to be considered from all relevant sources and requires development to be safe throughout its lifetime without increasing flood risk elsewhere.

The assessment has been prepared proportionately having regard to the scale and nature of the proposal and the fact that it is a householder extension.

2. Site and Development Description

The application property is an established dwelling within the built-up area of Langstone. The proposal involves alterations and extensions to the existing building at both ground and first floor levels, with the principal purpose being to improve and enlarge the accommodation available to the existing household. Although floor area is increasing the number of habitable bedrooms will remain the same, maintaining potential occupancy levels.

The proposed works will retain the existing ground floor datum, with the finished floor level set at 3.426 m OAD

No basement accommodation is proposed.

There is no proposal to substantially raise the site or divert existing watercourses.

3. Flood Risk Policy and Guidance

The assessment has had regard to the following:

National Planning Policy Framework (NPPF);

Planning Practice Guidance – Flood Risk and Coastal Change;

Environment Agency Preparing a flood risk assessment: standing advice, updated May 2026;

Environment Agency Flood Map for Planning;

Havant Borough Council's flood risk guidance;

Partnership for South Hampshire Strategic Flood Risk Assessment – Havant Borough Council Part 4, 2024; and

Havant Borough Council Flood Risk Sequential Test & Exception Test – Guidance for Applicants & Planning Officers, January 2026.

Havant Borough Council identifies flood risk as an important planning consideration and requires applicants to consider all sources of flooding, current and future risk, and measures necessary to ensure that development remains safe throughout its lifetime without increasing flood risk elsewhere.

The Council's 2026 Sequential Test guidance confirms that householder development is exempt from the Sequential Test, including physical extensions to an existing dwelling.

The Environment Agency likewise confirms that householder development such as residential extensions is exempt from the Sequential Test.

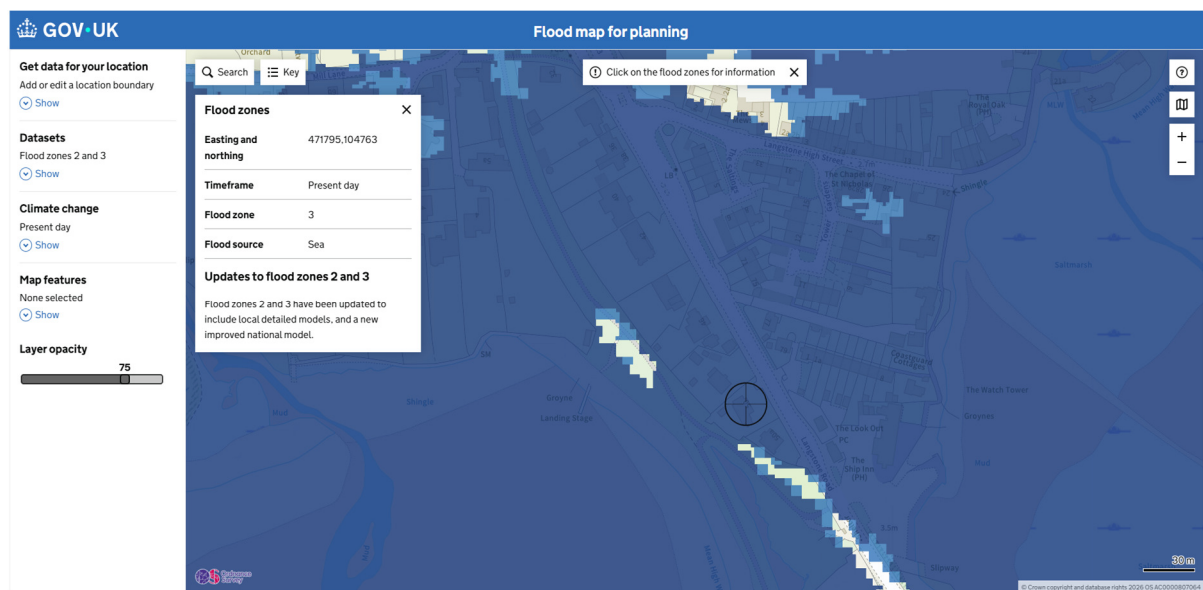
Accordingly, a separate Sequential Test is not considered necessary for this application.

4. Existing Flood Risk

The site lies within the coastal settlement of Langstone, adjacent to Langstone Harbour. Consequently, tidal flooding is the principal flood mechanism requiring consideration.

The Havant Borough Strategic Flood Risk Assessment identifies Portsmouth and Langstone Harbours as an area of moderate to high flood risk and recognises the increasing pressure that climate change and increased storminess will place upon coastal areas and drainage systems. The SFRA identifies the need for greater resilience to flooding, flood warning and emergency planning, together with development that does not increase flood risk elsewhere.

The SFRA also identifies coastal flood defences along the Langstone frontage. It records a mixture of concrete wall, concrete block revetment and masonry quay wall along the Langstone and Southmoor frontage.



The application site is situated within flood zone 3

5. Climate Change and Future Flood Risk

Climate change is an important consideration for the site because of its coastal location.

The Havant SFRA confirms that future coastal flood risk around Langstone is expected to increase as a consequence of sea-level rise and climate change. The SFRA's future coastal modelling identifies increased flood extents around Langstone.

The Council's current approach is therefore to ensure that development in areas affected by flood risk is appropriately resilient and does not increase flood risk elsewhere.

6. Surface Water Flood Risk

Surface water flooding can occur when rainfall exceeds the capacity of the local drainage system or when water flows overland towards lower ground.

The Environment Agency identifies surface water flooding as a separate source of flood risk from tidal and fluvial flooding. Current Environment Agency guidance requires surface water and groundwater risks to be considered in addition to river and sea flooding.

The proposed extensions will result in some increase in built footprint; however, the proposal is relatively small in scale and forms an extension to an existing residential property.

The development will be designed so that:

existing drainage arrangements are maintained wherever practicable;

rainwater from the additional roof areas is appropriately collected and discharged;

runoff is not directed towards neighbouring properties;

existing overland flow routes are not obstructed;

external ground levels will not be altered as part of the proposal.

Havant's SFRA recommends that development should preserve existing flow paths and avoid diverting floodwater towards other properties. It also recommends that new development should not increase flood risk elsewhere.

7. Groundwater Flood Risk

The underlying geology and low-lying coastal setting of parts of Havant mean that groundwater flooding is a potential source of risk.

The Havant SFRA notes that the borough's geology can provide pathways for groundwater movement and that below-ground development or changes to drainage can potentially alter groundwater flows.

The proposed development does not include a basement or other significant below-ground accommodation.

Foundations will be designed in accordance with Building Regulations and appropriate structural engineering requirements.

No works are proposed that are considered likely to materially obstruct regional groundwater flows.

8. Sewer Flooding

Sewer flooding can occur where drainage systems become overloaded during periods of intense rainfall or where local infrastructure is unable to accommodate flows.

The Havant SFRA recognises pressure on the local drainage and wastewater network, particularly during rainfall events. It identifies the importance of reducing additional rainfall entering the sewer system.

The proposed development will therefore seek to minimise additional surface water discharge to the public sewer.

Any connection to existing drainage infrastructure will be subject to confirmation of the capacity and suitability of the existing system.

New drainage connections, where required, will be constructed in accordance with Building Regulations and the requirements of the relevant statutory undertaker.

9. Finished Floor Levels

The Environment Agency's current standing advice for minor extensions requires finished floor levels and flood levels to be considered and recommends a minimum freeboard above the estimated flood level, with additional flood resistance and resilience measures where the required floor level cannot reasonably be achieved.

Havant's SFRA similarly states that, where development in Flood Zones 2 or 3 cannot be avoided, floor levels should be above the design flood level including climate change and appropriate freeboard. It specifically recognises that, for extensions to existing buildings where raising the floor level is impractical, alternative flood resistance measures may be appropriate.

In this case, the proposal retains the existing 3.426 m OAD floor level.

The design therefore incorporates flood resilience measures as described below, subject to the final confirmation of the current Environment Agency design flood level.

Building fabric

Use flood-resilient materials at ground floor level where reasonably practicable.

Use solid/concrete floor construction with an appropriate waterproof membrane where appropriate.

Avoid materials that are particularly susceptible to prolonged water damage at low level.

Seal service penetrations through walls and floors wherever practicable.

Ensure external walls and pointing are maintained in good condition.

Doors and openings

New external doors should be detailed to provide an appropriate level of flood resistance.

Thresholds should be designed to avoid creating a route for surface water into the building.

Air bricks and other low-level openings should be protected where appropriate.

Electrical installations

Electrical sockets and sensitive equipment should be positioned at an appropriate level above anticipated floodwater where reasonably practicable.

The main electrical installation should be arranged to minimise the consequences of any flood event.

Drainage

New foul drainage connections should incorporate appropriate backflow protection where necessary.

Drainage outlets should be designed to prevent surcharging from the public sewer entering the property.

Rainwater should be discharged in a controlled manner.

10. Access and Egress

The property is served directly from Langstone Road.

The proposed works do not materially alter the existing means of access to the dwelling.

Because the site is in a coastal area, extreme tidal events could affect roads in the wider Langstone area even where the property itself remains protected.

The Havant SFRA identifies the importance of safe access and escape during design flood conditions and recommends that access routes should be assessed having regard to tidal flood risk and climate change.

The proposed development does not introduce additional residential occupancy or a new dwelling and therefore does not materially alter the existing emergency access requirements.

Occupants should nevertheless be aware of Environment Agency flood warnings and local emergency advice where a tidal flood warning is issued.

11. Flood Risk to Neighbouring Properties

The proposed development will not involve significant land raising or the construction of a structure across a watercourse.

The extensions will be constructed within the existing residential curtilage.

The design will ensure that:

surface water is not directed towards neighbouring properties;

existing drainage paths are maintained;

there is no deliberate obstruction of an existing flood flow route;

roof water is collected and discharged in a controlled manner.

The Havant SFRA specifically advises that development should preserve existing flow routes and avoid diverting floodwater towards adjoining properties.

On this basis, the proposal is not expected to increase flood risk elsewhere.

12. Sustainable Drainage and Surface Water Management

Although this is a householder development, the opportunity should be taken to ensure that the additional roof and paved areas do not increase the rate or volume of surface water runoff.

The preferred approach will be to:

retain existing permeable surfaces where practicable;

use permeable paving where appropriate;

collect roof water from the extension;

discharge rainwater using an appropriate sustainable drainage method where site conditions permit;

avoid uncontrolled discharge onto neighbouring land; and

ensure that any connection to an existing drainage system is appropriately sized.

Hampshire County Council's approach, as recorded in the Havant SFRA, seeks to ensure that post-development surface water does not leave a site at a greater volume or faster rate than occurred before development, and encourages SuDS on both major and minor developments where applicable.

13. Residual Flood Risk

The principal residual risk arises from the site's coastal location and the possibility of an extreme tidal event exceeding the capacity of existing flood risk management infrastructure.

The Havant SFRA identifies residual coastal flood risk and notes the importance of flood warning and emergency planning.

The existence of coastal defences should not therefore be regarded as removing all flood risk.

14. Conclusion

This Flood Risk Assessment has considered the potential sources of flooding affecting the proposed householder development at 50 Langstone Road, Havant.

The principal flood risk consideration is tidal/coastal flooding associated with Langstone Harbour, with surface water, groundwater and sewer flooding also considered.

The proposed works:

are alterations and extensions to an existing dwelling;

do not create an additional dwelling;

retain the existing ground floor level of 3.426 m OAD;

do not involve significant land raising;

do not obstruct a watercourse;

will not deliberately divert floodwater towards neighbouring properties;

will incorporate appropriate flood-resistant and flood-resilient construction measures; and

will provide appropriate management of additional surface water runoff.

The proposal is exempt from the Sequential Test as householder development under current national guidance and Havant Borough Council's January 2026 guidance.

Subject to confirmation of the current Environment Agency Flood Map for Planning designation and the relevant design flood level, it is considered that the proposed development can be undertaken without materially increasing flood risk to the property or elsewhere.

The development should therefore be capable of being made safe for its lifetime, subject to the flood-resilience and drainage measures identified in this assessment.