

1. Introduction

This Flood Risk Assessment (FRA) supports a planning application for the extension and refurbishment of a residential bungalow at 17 Bembridge Drive, Hayling Island. The purpose of this report is to assess any potential flood risk arising from the proposed development and to demonstrate how the design minimises risk to occupants and neighbouring properties.

2. Site Location and Flood Zone Classification

The site is located partially within **Flood Zone 3**, as shown on the Environment Agency's Flood Map for Planning, indicating a high risk of flooding from coastal and tidal sources. However, the dwelling is positioned on **elevated ground approximately 1 metre higher than the garden**, with the land sloping gently down towards a private road to the south. An existing raised front patio provides access to the house via a central stair. **The property has not experienced flooding in the last 40 years** of continuous occupancy, and the garden has consistently remained dry during significant rainfall and storm events.

3. Description of Proposed Development

The proposed works consist of:

- A **hip-to-gable roof extension**, creation of **two side dormers**, and a **front-facing gable dormer** with a recessed balcony, forming a new **first-floor level for living space**
- Internal reconfiguration of the existing **ground floor layout** to improve circulation and access;
- Alteration to the existing **raised front patio**, where the two curved sections either side of the entrance will be **squared off** to create a more usable, safer outdoor space;
- The proposal will result in the transformation of the existing bungalow into a **two-storey dwelling**, with the upper level set entirely within the extended roof structure.

No changes are proposed to the footprint of the house beyond the minor patio adjustment, and no changes to the garden levels or hardstanding areas are included. The new works are predominantly vertical in nature and do not increase the extent of impermeable surface on site.

4. Assessment of Flood Risk

Although the site lies within a flood risk zone, the proposed development is not expected to be affected by flooding for the following reasons:

- **Habitable accommodation is being added at first-floor level**, well above any potential flood event;
- The **existing raised ground level** offers natural flood resilience to the property;
- There is **no history of flooding** affecting the house or garden, confirmed by long-term occupants;
- The **squaring off of the raised front patio** will occur above existing ground level and will not alter the site's drainage characteristics.

No additional site coverage or ground-raising is proposed, and therefore, **flood displacement or surface water runoff will not be increased**.

5. Flood Mitigation and Resilience Measures

While the development is inherently low risk, good-practice measures will be incorporated:

- First-floor accommodation ensures safe refuge in the unlikely event of surface water flooding;
- Existing drainage routes will remain unchanged and surface water will not be directed towards neighbouring plots;
- All new elements (such as roof construction, windows, and external finishes) will be constructed to modern standards, improving weather and water resilience;
- The new raised patio area will maintain appropriate drainage away from the house, with materials chosen for permeability and ease of maintenance.

6. Sequential and Exception Tests

As a **domestic extension to an existing dwelling**, the proposal is considered **minor development** under the NPPF and is therefore **exempt from Sequential and Exception Test requirements**.

7. Conclusion

The proposed loft conversion and internal alterations at 17 Bembridge Drive:

- Introduces **no additional flood risk** to the property or neighbouring land;
- Does **not encroach into areas of higher flood vulnerability**;
- Maintain the existing ground conditions and surface water management;
- Will provide long-term sustainability benefits through improved construction methods and energy efficiency upgrades;
- Represent a **proportionate and sensitive extension** to a long-standing family home in a way that supports modern living and local policy compliance.