

FLOOD RISK ASSESSMENT

Proposal : Side Extension and Loft Conversion
at
Address : 5, The Holt, Haywards Heath,
RH16 4XR



1. Introduction

This flood risk assessment has been prepared in accordance with the National Planning Policy Framework (NPPF) and the Environment Agency's guidelines. The proposal is for a front extension on the ground floor to extend the existing garage, a side extension on the first floor above the existing garage and room, and a hip-to-gable loft conversion with front and rear dormers, including a Juliet balcony. This proposal is located at 5, The Holt, Haywards Heath, RH16 4XR, a semi-detached property that faces a forest area.

2. Site Description

The site is located in a relatively low-lying area, with proximity to open forest land. It is essential to evaluate potential flood risks arising from surface water, groundwater, or river flooding, especially given the semi-detached nature of the property and the surrounding green space, which may affect local drainage conditions.

3. Flood Risk Assessment

3.1. Flood Zone Classification

According to the Environment Agency's Flood Map for Planning, the property at 5, The Holt is located in **Flood Zone 1**, which is considered to have a low probability of flooding. However, further assessment of surface water and local drainage conditions is necessary, as local factors such as stormwater runoff could potentially influence flooding.

3.2. Potential Flooding Sources

- **Surface Water Flooding:** The development site, located near a forest, may experience surface water runoff during heavy rainfall. Surface water could accumulate at low points, especially around the front extension area where the garage will be extended.
- **Groundwater Flooding:** Given the surrounding landscape and topography, groundwater is unlikely to pose a significant risk; however, monitoring of groundwater levels in the area is recommended during the construction phase.
- **River Flooding:** The nearby forest is not associated with any major river systems, and as such, river flooding is not expected to be a significant concern.

4. Construction Details and Flood Prevention Measures

4.1. Drainage and Rainwater Dispersal

To mitigate potential flooding risks, the following construction and drainage measures will be employed:

- **Rainwater Management:** The proposed extensions will incorporate rainwater collection systems, including gutters, downpipes, and appropriate surface water drainage to divert excess water away from the structure.
- **Permeable Surfaces:** Where possible, the ground surfaces surrounding the front extension will be constructed using permeable materials to allow rainwater to seep through and reduce surface water runoff. This will help reduce the burden on local drainage systems and prevent localized flooding.
- **Soakaways:** A soakaway system will be installed to capture and manage surface water runoff from the roof area and hard-standing surfaces, allowing rainwater to gradually dissipate into the ground. This is particularly important given the potential for surface water runoff in the area.

- **Flow Control Measures:** The drainage system will include flow control devices to manage the rate of discharge into the public sewer or local drainage systems, ensuring that the system can accommodate the additional water generated by the development.

4.2. Flood Resistant Materials

The construction materials for the ground floor extension and the loft conversion will be selected for their resilience against potential water ingress. These materials include waterproof barriers, moisture-resistant flooring, and elevated electrical installations.

4.3. Sustainable Drainage System (SuDS)

In line with sustainable development practices, a Sustainable Drainage System (SuDS) will be incorporated into the design. SuDS features, such as green roofs, permeable paving, and rainwater harvesting, will be considered to manage surface water runoff and reduce the risk of flooding.

5. Evacuation Plan

In the event of an extreme flood scenario, an evacuation plan has been outlined to ensure the safety of the residents:

- **Flood Alerts:** The residents will sign up for flood alerts through the Environment Agency to receive timely warnings of potential flood events.
- **Evacuation Routes:** Clear evacuation routes will be identified, taking into consideration the proximity of the property to the forest area and any local obstructions. Evacuation routes will lead to higher ground to avoid the risk of floodwater inundation.
- **Emergency Contact Information:** Emergency contact numbers will be provided to all occupants and visitors to the property. These include local emergency services and flood response teams.
- **Flood Preparedness:** In the event of a flood, emergency flood barriers will be kept on-site and can be quickly deployed around vulnerable areas, including doorways and windows, to prevent water ingress into the property.

7. Conclusion

The proposed development at 5, The Holt, Haywards Heath, RH16 4XR is located in Flood Zone 1, with a low risk of flooding. However, measures such as permeable surfaces, a rainwater collection system, soakaways, and SuDS will be implemented to manage surface water runoff and reduce flood risk. Additionally, an evacuation plan will be in place for the safety of the residents. The design is in keeping with the nearby precedent properties, which have successfully incorporated similar flood mitigation strategies.

This flood risk assessment concludes that, with the proposed mitigation measures, the development will not increase the risk of flooding in the area.