

Introduction

The proposal involves the erection of two ground floor front extensions, the first extension will form a new porch and the second will increase the size of the existing bay window; both represent small increases to the existing building footprint. As part of the proposal there will be some internal alterations but these will not affect the external footprint. The dwelling will be retained by the occupants as a residential property.

This FRA assesses the risk of flooding to and from the site, with particular regard to surface water (pluvial) flooding, and sets out the measures incorporated into the design so that:

- the development will be safe for its lifetime, and
- it will not increase flood risk elsewhere.

This approach reflects the Environment Agency (EA) Flood Map for Planning service and national surface water mapping (RoFSW), as well as MSDC's local validation expectations where a site falls within mapped surface water risk.

Site description

- The site comprises an existing residential dwelling with typical domestic frontage and hard/soft landscaping.
- The proposal is a small front extension (footprint increase) with internal alterations.
- The proposal does not introduce basements or below-ground sleeping accommodation.

Planning policy and local requirements

MSDC's published checklists confirm that an FRA may be required in Flood Zone 1 where any part of a site is within an area at risk of surface water or groundwater flooding.

This assessment has been prepared in accordance with national policy and the National Standards for SuDS (Defra, June 2025), adopting a proportionate approach appropriate to minor householder development.

Sources of flooding considered

This FRA considers:

1. Fluvial (rivers) and sea flooding
2. Surface water (pluvial) flooding
3. Groundwater flooding
4. Reservoir flooding (residual risk)
5. Sewer / drainage exceedance (localised)

Baseline flood risk (desktop assessment)

1. Fluvial / tidal flood risk

The EA Flood Map for Planning is the primary screening tool for fluvial/tidal flood zones. Flood Zone 1 is defined as land with <0.1% annual probability (1 in 1000) of flooding from rivers/sea.

For this householder proposal, the principal identified issue is surface water, rather than river/sea flooding (noting Burgess Hill is inland).

Conclusion (fluvial/tidal): The site is at low risk in strategic terms and fluvial or tidal flooding does not influence the design of the proposal.

2. Surface water flood risk (pluvial)

The EA's Risk of Flooding from Surface Water (RoFSW) mapping identifies locations where rainfall may pond or flow overland when it cannot drain or soak away adequately.

The site is identified as being at risk of surface water flooding in a 0.1% AEP (1 in 1000 year) event. This reflects potential overland flow routes during extreme rainfall events.

The proposal has been designed so that it does not obstruct flow routes, does not introduce vulnerable accommodation below expected flood levels, and does not increase runoff to adjacent land or the highway.

3. Groundwater flood risk

Groundwater risk is acknowledged in accordance with MSDC guidance.

The drainage strategy will ensure that infiltration techniques are only utilised where ground conditions are confirmed as suitable, and the development will not introduce features that would adversely affect groundwater conditions.

4. Reservoir flood risk (residual)

Reservoir flooding is recognised as a low-probability residual risk.

Given the scale and nature of the proposal, this does not influence the layout or design of the development.

5. Sewer / drainage exceedance

Localised flooding can occur from overwhelmed surface water sewers during intense storms. The proposal will not increase the load on the existing drainage network and will ensure that post-development runoff rates are not increased.

Flood risk vulnerability

- Development type: Residential (More Vulnerable).
- Scale: Minor development (householder extension).
- Site Approach: The extension has been positioned and designed to avoid identified surface water flow paths and ponding areas, and will not reduce local overland flow conveyance within the site frontage.

Mitigation measures

1. Finished floor levels and thresholds

- Existing ground levels around the dwelling will not be lowered in a way that could redirect water toward the building.
- Positive falls away from the dwelling will be maintained.
- The extension's finished floor level will be set no lower than the existing dwelling, and new threshold details will avoid the creation of low points.

2. Flow routing and exceedance

- The new walls and foundations will not create a barrier to overland flow across the frontage. Where levels indicate an overland route, exceedance flows will be directed safely around the extension and away from the principal entrance.

3. Resilience and resistance (proportionate for minor works)

For areas potentially affected by shallow surface water:

- Moisture-resilient finishes will be used at low level within the new porch area.
- Electrical sockets and services within the extension will be positioned at appropriate levels to reduce vulnerability to shallow ingress.

4. Safe access and egress

The proposal maintains existing access and egress arrangements and does not increase flood risk to occupants or worsen existing flood pathways.

Summary

The site is identified as having surface water flood risk in a low-probability event (1 in 1000 year / 0.1% AEP). The proposed works are minor householder development and have been designed so that they will:

- not obstruct overland flow routes,
- maintain appropriate finished floor levels and drainage falls,
- ensure runoff is not increased to neighbouring land or the highway.

Yours Faithfully,

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