

pete sonntag
ARCHITECT

Flood Risk Assessment

2nd March 2026

23 Kingsmead, Felpham, PO22 7BD

Proposed single-storey rear extension to existing dwelling, adjoining existing rear extension.

1. Introduction

1.1 This Flood Risk Assessment (FRA) has been prepared in support of a householder planning application for a modest single-storey rear extension at 23 Kingsmead, Felpham.

1.2 The proposal comprises a 2.4m x 1.8m single-storey extension adjoining an existing rear extension to provide additional home office space.

1.3 The site is located within Flood Zone 3 as identified by the Environment Agency Flood Map for Planning (see Figure 1).

1.4 This assessment considers flood risk from rivers and sea, surface water, groundwater and reservoirs, with reference to the Environment Agency mapping provided.

2. Site Location and Description

2.1 The site comprises an existing detached residential dwelling located within an established residential area of Felpham.

2.2 The property benefits from a large rear garden and established on-site surface water drainage arrangements.

2.3 The proposal does not involve any change of use, intensification of use, or increase in the number of residential units.

3. Flood Zone Classification

3.1 The Environment Agency Flood Map for Planning identifies the site as lying within Flood Zone 3 (Figure 1).

3.2 Flood Zone 3 is defined as land having a 1% or greater annual probability of river flooding or a 0.5% or greater annual probability of sea flooding.

3.3 The proposal relates solely to a minor extension to an existing dwelling and does not alter the vulnerability classification of the site.

3.4 In accordance with the Planning Practice Guidance, householder extensions are not required to pass the Sequential Test or Exception Test.

4. Flood Risk from Rivers and Sea

4.1 The Environment Agency Risk of Flooding from Rivers and Sea mapping (Figure 2) identifies the site as having a low present-day annual probability of flooding, taking account of existing flood defences.

4.2 Climate change projections between 2036 and 2069 identify a medium annual probability of flooding.

4.3 The mapping confirms that flood defences are in place within the wider area.

4.4 The proposal represents a modest increase in built footprint of approximately 4.3 square metres and will not materially displace floodwater.

4.5 The development does not increase residential density and does not introduce a more vulnerable land use.

5. Surface Water Flood Risk

5.1 The Environment Agency Surface Water Flood Risk mapping (Figure 3) identifies the site as having a very low annual probability of surface water flooding, both presently and in future projections.

5.2 The proposed extension will result in a minimal increase in impermeable area.

5.3 Surface water from the proposed flat roof will discharge via rainwater goods connecting to existing on-site soakaways.

5.4 Given the scale of the proposal and the size of the rear garden, there will be no increase in off-site surface water discharge.

6. Groundwater Flood Risk

6.1 Groundwater flood alert mapping (Figure 4) identifies that the site lies outside a groundwater flood alert area.

6.2 Groundwater flooding is therefore not considered to present a significant constraint to the proposed development.

7. Reservoir Flood Risk

7.1 Reservoir flood risk mapping (Figure 5) confirms that flooding from reservoirs is unlikely in this area.

7.2 The proposed development does not increase exposure to reservoir flood risk.

8. Development Design and Mitigation

8.1 The extension will be constructed at the same finished floor level as the existing dwelling.

8.2 The proposal does not include any basement accommodation.

8.3 The scale of the development is minor and will not materially alter floodplain storage capacity.

8.4 Existing flood defences serving the wider area remain unaffected.

8.5 Surface water will continue to be managed through on-site infiltration methods.

9. Conclusion

9.1 The site is located within Flood Zone 3; however, Environment Agency mapping confirms a low present-day annual probability of flooding from rivers and sea, taking account of flood defences.

9.2 Surface water flood risk is very low, groundwater flood risk is not identified, and reservoir flooding is unlikely.

9.3 The proposal comprises a modest 2.4m x 1.8m extension to an existing dwelling and does not increase vulnerability classification, residential density, or off-site flood risk.

9.4 The development is therefore considered acceptable in flood risk terms and accords with national planning policy and guidance.

Figure 1 – Flood Map for Planning (Flood Zones)

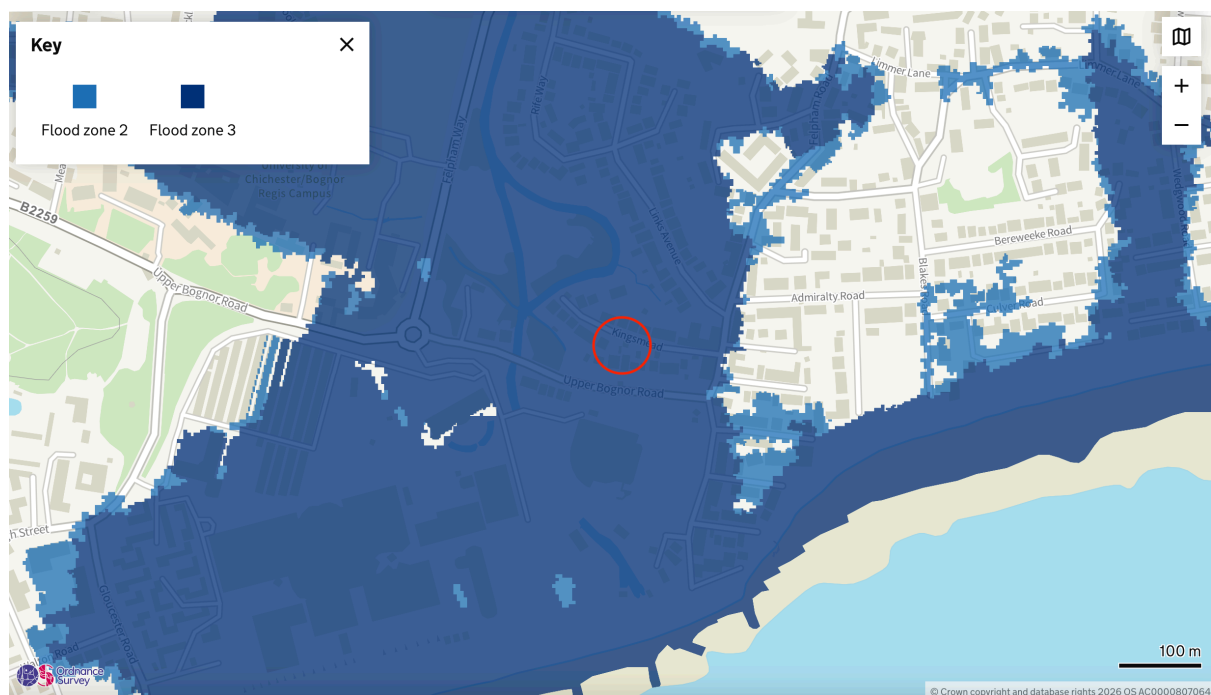


Figure 2 – Risk of Flooding from Rivers and Sea

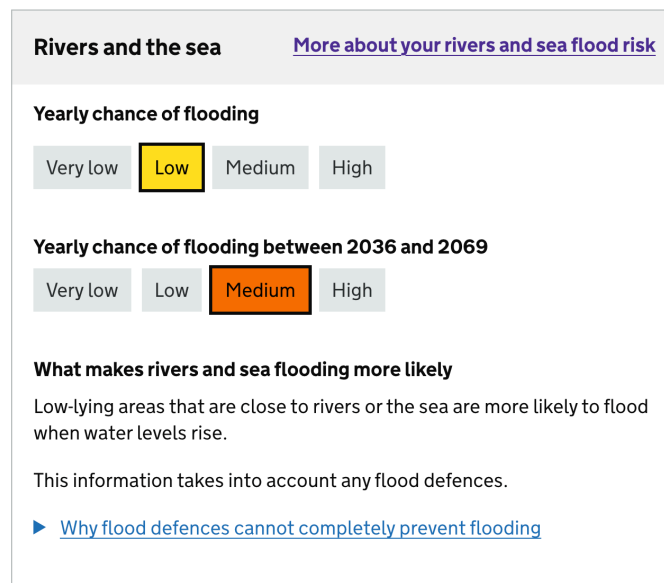


Figure 3 – Surface Water Flood Risk

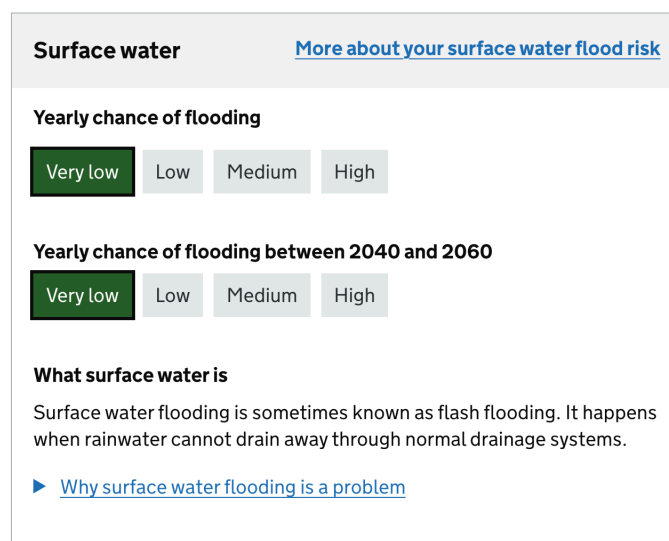


Figure 4 – Groundwater Flood Risk

Groundwater[More about your groundwater flood risk](#)

We use groundwater flood alert areas to check the risk of flooding from groundwater.

This location is outside of a groundwater flood alert area.

► [What this means](#)

What groundwater is

Groundwater is the water that is usually held in rocks and soil underground.

Groundwater flooding happens when this water rises and flows above the surface.

Flooding from rivers is more likely when groundwater levels are high.

Figure 5 – Reservoir Flood Risk

Reservoirs[More about your reservoir flood risk](#)

Flooding from reservoirs is unlikely in this area.

What a reservoir is

A reservoir is a large natural or artificial lake that is designed to collect and store water.

They are usually formed by building a dam across a river, or by building a large tank or surrounding embankment. If one of these dams or embankments fails, then water could escape from the reservoir. This would result in land or properties being flooded.