

Date: **Wednesday, 29 October 2025**
Address: **90 Stone Street, Reading, RG30 1HU**
Project Title: **Flood Risk Assessment**



Fig. 1 Front Elevation 90 Stone Street, Reading, RG30 1HU

Valentina Antoniuc
a. 6 Simmonds Close, Bracknell RG42 1FL
e. Valentina.antoniuc@hausframe.com
m. 07400022422

Planning Department
Reading Borough Council
Civic Offices
Bridge Street
Reading
RG1 2LU

Flood Risk Assessment – 90 Stone Street, Reading RG30 1HU

Site: 90 Stone Street, Reading, RG30 1HU

Prepared by: Valentina Antoniuc

Date: 29.10.2025

Executive Summary

The site at 90 Stone Street, Reading, RG30 1HU, comprises an existing residential property situated within a well-developed area of Reading. According to Environment Agency mapping and Reading Borough Council's evidence base, the site lies within Flood Zone 1, meaning it has a low probability of flooding from rivers or the sea. Historical data also shows a low risk of surface water flooding, though during periods of intense rainfall, minor pooling may occur along the adjacent carriageway. The proposed works are of a small scale and will not increase the built footprint within any floodplain or affect existing flood storage. With the incorporation of sustainable drainage and minor mitigation measures, the residual risk will remain low and the proposal will be in accordance with the National Planning Policy Framework (NPPF) and associated guidance.

Development Proposals

The existing property is a C3 dwellinghouse situated along Stone Street. The proposal consists of a small-scale residential development, such as a single-storey rear extension, internal alterations, or the addition of a modest hardstanding area for parking. The proposed development is considered "less vulnerable" under the NPPF vulnerability classifications. The works will not increase impermeable surfaces significantly and will not create new sources of flood risk.

Site and Catchment Context

Stone Street is located northwest of Reading town centre at approximately 38–41 metres AOD. The surrounding area is primarily residential, with the River Thames and River Kennet being the nearest major watercourses, both at a considerable distance from the site. The area is served by Thames Water's foul and surface water systems, which have undergone improvements in recent years to reduce the likelihood of sewer surcharge. The site itself is gently sloped toward the highway, and surface water flow paths generally direct runoff toward the road, preventing accumulation within the property boundaries.

Planning Policy and Guidance

This assessment has been prepared in line with the National Planning Policy Framework (NPPF) and the Planning Practice Guidance (PPG) for flood risk. Locally, it considers the Reading Borough Local Plan and the Strategic Flood Risk Assessment (SFRA). As the proposal is located within Flood Zone 1 and relates to a minor residential development, the Sequential and Exception Tests are not required.

Flood Risk Review

Fluvial and Tidal Flooding

The site lies within Flood Zone 1 and has an annual probability of fluvial or tidal flooding of less than 0.1%. No floodplain storage or flow paths are present within or near the site boundary.

Surface Water Flooding

Environment Agency mapping identifies a very low to low risk of surface water flooding. Any risk that exists is limited to shallow, short-term ponding along the street during heavy rain. This does not extend to the property's internal floor levels.

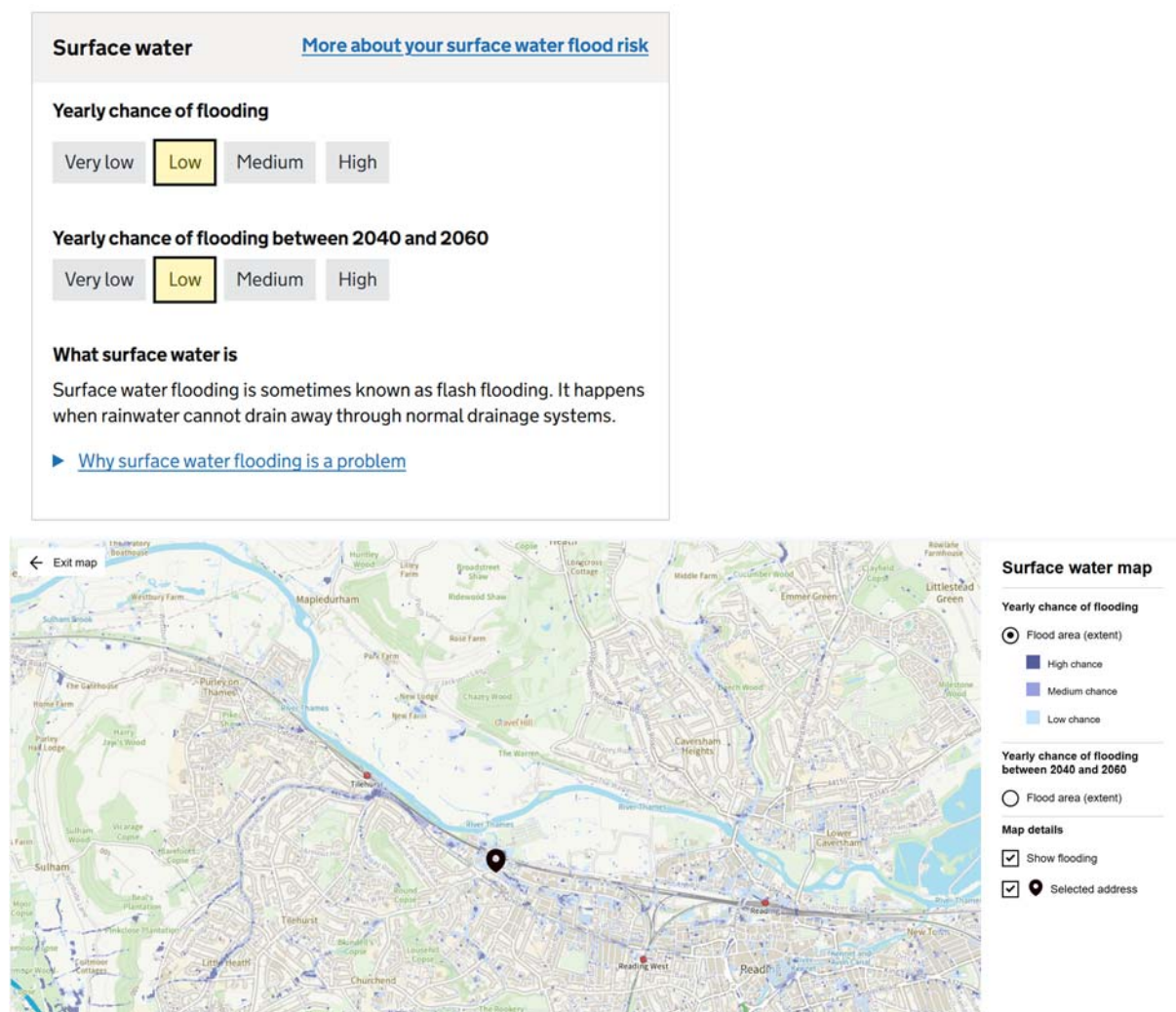


Fig 2. Surface Water Map – sourced from GOV.UK

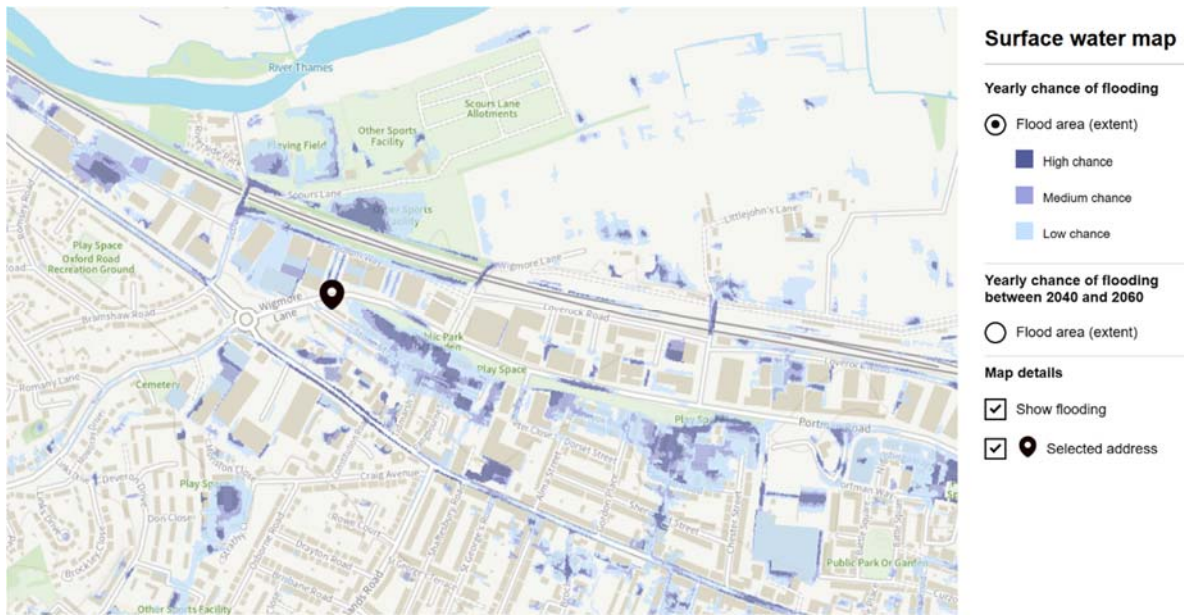


Fig 3. Surface Water Map – sourced from GOV.UK

Groundwater Flooding

The geological conditions and topography of the area suggest a low likelihood of groundwater flooding. There are no known records of groundwater emergence at this location.

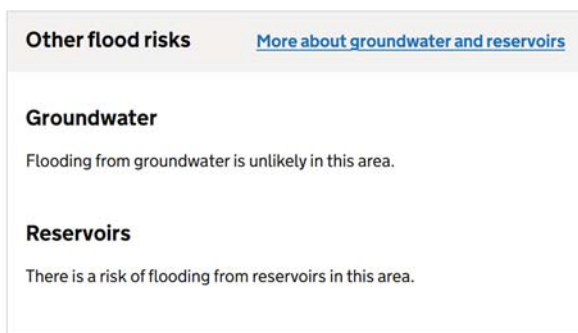


Fig 4. Other Flood Risk – sourced from GOV.UK

Sewer Flooding

While the wider area has experienced historical sewer issues, infrastructure upgrades have largely mitigated these risks. The residual risk from sewer surcharge during extreme rainfall is minimal. Connection points for new drainage will include non-return valves to provide additional protection.

Reservoir and Other Sources

According to Environment Agency data, there is negligible risk from reservoirs or other artificial water bodies.

Rivers and the sea
[More about your rivers and sea flood risk](#)

Yearly chance of flooding

Very low

Low

Medium

High

Yearly chance of flooding between 2036 and 2069

Very low

Low

Medium

High

What makes rivers and sea flooding more likely

Low-lying areas that are close to rivers or the sea are more likely to flood when water levels rise.

This information takes into account any flood defences.

► [Why flood defences cannot completely prevent flooding](#)

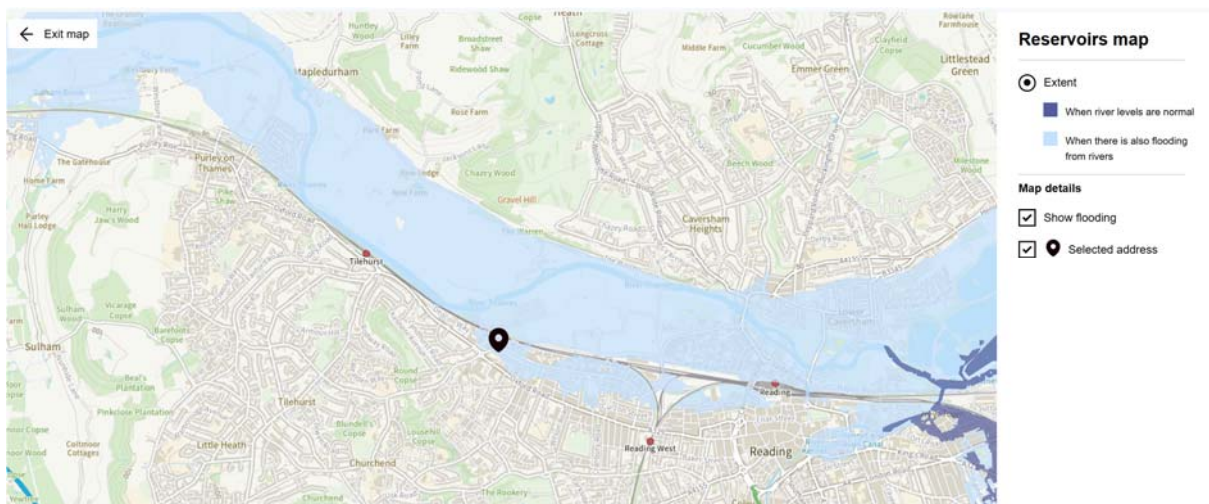


Fig 5. Rivers and Sea Map – sourced from GOV.UK
#

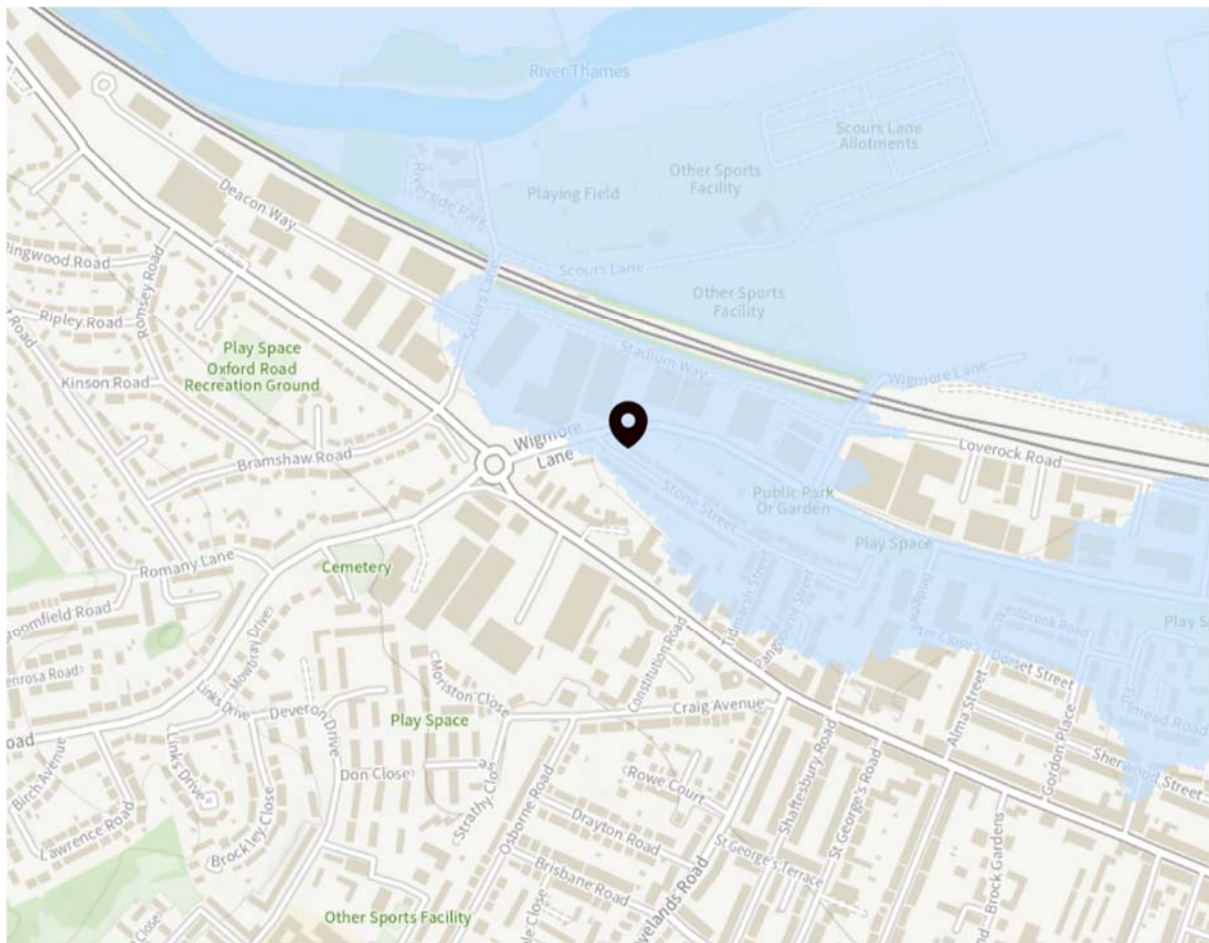


Fig 6. Rivers and Sea Map – sourced from GOV.UK

Mitigation and Sustainable Drainage

Finished floor levels for any new extensions will be set at least 150 mm above surrounding external ground levels. Thresholds will include small upstands or linear drains to prevent ingress of surface water. Any new areas of hardstanding will use permeable materials where feasible, allowing for infiltration. If infiltration is restricted, the paving sub-base will provide attenuation, controlling discharge into the existing surface water system.

Simple Sustainable Drainage Systems (SuDS) such as water butts, raingardens, or green roof areas will be used where possible to improve water management and biodiversity. Drainage features will be regularly maintained to ensure long-term efficiency. The design will also incorporate resilient materials, raised electrical points, and flood-resistant ventilation measures where appropriate.

Management and Maintenance

Permeable paving will be maintained by regular sweeping and cleaning to prevent clogging. Raingardens and planters will be inspected after major rainfall to clear debris and ensure functionality. Gutters, downpipes, and water butts should be checked twice a year. Any exceedance flow paths must be kept unobstructed to direct water safely toward the highway.

Emergency Planning and Access

The property benefits from dry access under normal and design storm conditions. Although flood risk is minimal, occupants are encouraged to register for Environment Agency flood alerts and maintain a simple home flood plan for precautionary purposes.

Conclusion

The property at 90 Stone Street, Reading, is located in Flood Zone 1, with a very low probability of flooding from rivers or the sea and only a minimal risk from surface water. The proposed development is appropriate for its location and, with the inclusion of standard mitigation measures, will not increase flood risk either on or off the site. The development therefore complies fully with the NPPF and local planning policy relating to flood risk management.