

# 12 Glebe Road

Flood Risk Assessment  
SEPTEMBER 2024

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## Introduction

This Flood Risk Assessment supports the planning application for the alterations proposed at 12 Glebe Road and has been prepared on behalf of Mr & Mrs Fothergill. The Flood Risk Assessment should be read in conjunction with the accompanying drawings and Design & Access and Heritage Statement.

The proposal put forward looks to sympathetically alter the existing outbuilding and make improvements to the owner's quality of life whilst enhancing the architectural character of the building. This report explains how the proposed development is a suitable response to the site and its setting and demonstrates that it can be adequately accessed by prospective users.

This document has been produced to demonstrate that the proposed works does not worsen the flood risk for the area and will not place the proposed development itself at risk.



## 1.0 Site Context & Proposal

The London Borough of Richmond upon Thames has 45 Conservation Areas. These have been recognised for the importance of their historic and architectural merit. The application site is located in Barnes, within the Barnes Common Conservation Area. The building is noted to be a Building of Townscape Merit. The house is a 3 storey terrace house with front and rear dormer extensions, side infill extension and a cellar, centrally located on Glebe Road.

The proposal aims to sympathetically enhance the liveable space of the house through the addition of a single storey rear extension and side infill extension. The proposed massing and scale have been directly informed by the existing pattern of development along the rear of the Glebe Road terraces. The proposed extension will use the existing system for both foul and rainwater where possible.



## 2.0 Flood Risk

The proposed site is situated near the River Thames, which would be the primary source of fluvial and tidal flood risk. As a result of this the Environment Agency Flood Map for Planning indicates the proposed site is located within Flood Zone 3 which states a high risk of flooding.

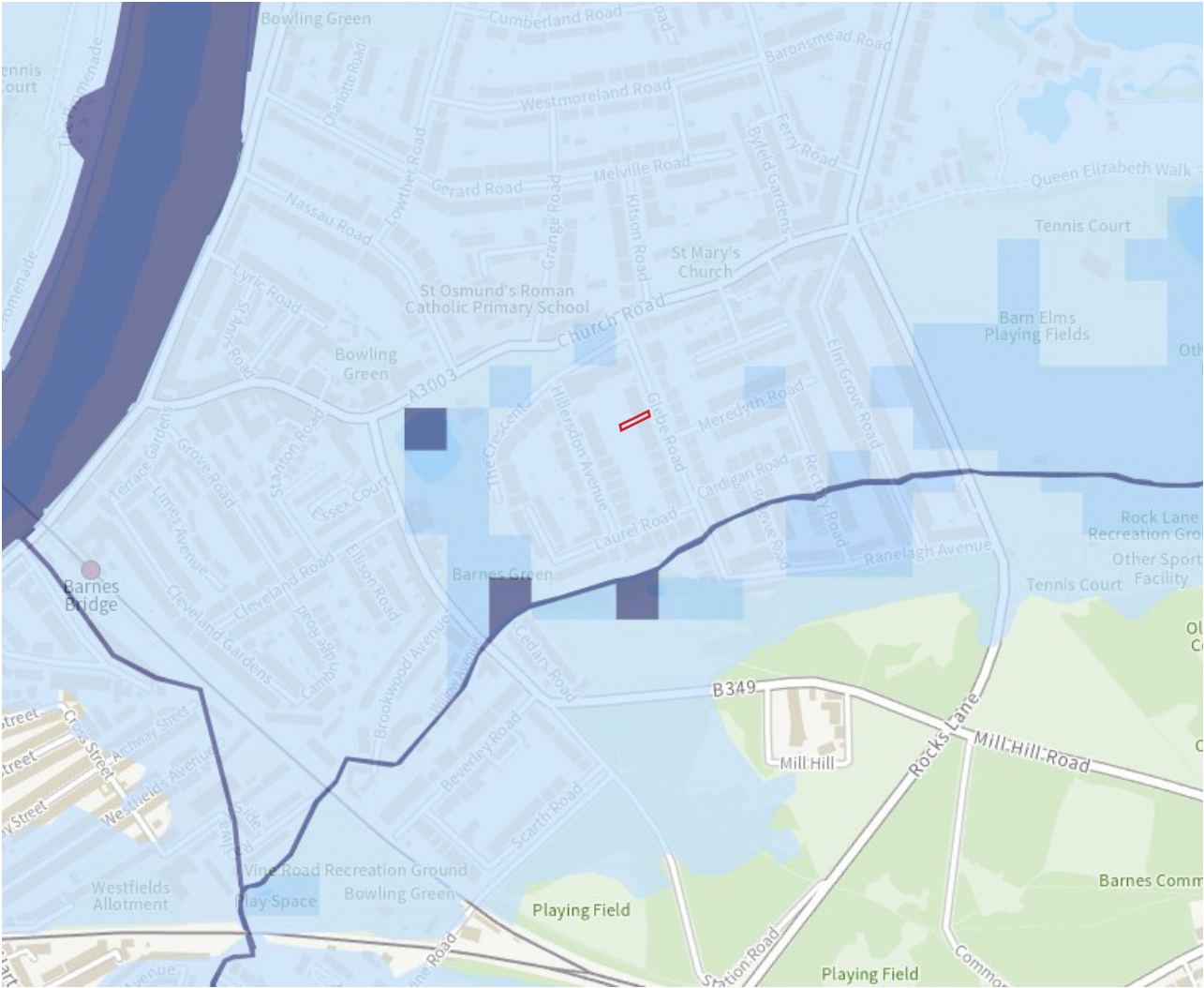
However, the proposed site is shown as being of low flood risk, less than 0.1% chance of flooding each year. The site is also considered to be of low risk to surface water flooding (flash flooding) and very low chance of river and sea flooding.

Due to the location of the site and proximity to the River Thames, it takes advantage of existing flood defences, which offer significant protection. With these defences the site could be flooded by:






- A river flood with a 0.1% chance of happening each year
- A flood from the sea with a 0.5% chance of happening each year

Historically, according to the London Borough of Richmond upon Thames Strategic Flood Risk, there is no record of recent flooding events affecting Glebe Road.

The proposal will result in a small net gain in roof area, of 26sqm, however the additions will directly replace an existing extension roof and area of existing impermeable hardstanding and there the proposed works should not increase the peak runoff rate from the site nor increase the of surface water flooding.



Environment Agency Floor Map for Planning (Rivers and Sea).

-  Site Boundary
-  High - More than 3.3% chance each year
-  Medium - Between 1% and 3.3% chance each year
-  Low - Between 0.1% and 1% chance each year
-  Very Low - Less than 0.1% chance each year

### 3.0 Conclusion

Although the site is located within Flood Zone 3, it has a low risk of flooding and currently benefits from existing flood defences. There should not be any change to the flood risk of the property as, although there is now additional roof area it would be replacing existing impermeable hardstanding and therefore the proposed works should not increase any flood risk to the property or elsewhere.

In order to mitigate the impact of any flood risks the following be done:

- Construction materials will be selected which retain their integrity and properties when subjected to floodwater, or those that can be easily replaced.
- Concrete blocks used in foundations are to be sealed with an impermeable material where appropriate to prevent water movement from the ground to the wall construction.
- Hardcore and blinding will be well and consistently compacted to reduce the risk of settlement and consequential cracking after subjection to floodwater.
- Damp proof membrane is to be impermeable polythene minimum 1200 gauge with joints lapped and tapped at least 100mm and sealed to DPC.
- Ground bearing concrete floor slabs to minimum 150mm thick if non reinforced and 100mm for reinforced.
- Wall and floor insulation to be of the closed cell type to minimise the impact of floodwater. Floor slab insulation to be located above the floor slab to minimise the effect of floodwater on the properties.
- Services under the floor should be avoided in ferrous materials. Electrical wiring feeding low level sockets and switches should drop down from ceiling rather than be fed under the floor.
- All service penetrations below floor level to be sealed.
- Electrical equipment, such as switchboards set above the floor level.
- Non-return valves will be installed in all plumbing to prevent backflow in cases of sewer flooding.
- The occupants will be advised to sign up to the Environment Agency free Flood Warning Direct service.
- Channel drainage to be installed around proposed openings to mitigate risk of surface water flooding.