London Borough of Richmond upon Thames, Civic Centre, 44 York St, Twickenham TW1 3BZ

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Re: 37 St Margarets Grove, Twickenham, TW1 1JF



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## Flood Risk Assessment

The site is within a Flood Zone 3 within an area that is at risk of flooding from the River Thames, but which benefits from significant flood defences. This area covers a large swathe of London with flood protection provided by the Thames Barrier and other flood defences along the riverbanks. The River Thames is not expected to overtop these flood defence mechanisms, even in an extreme 1 in 1000 year event.

There is therefore a very low probability of a flooding event occurring to the property from the River Thames.

The Environment Agency reservoir flooding maps show that the site is also potentially at risk of flooding from three reservoirs within the River Thames catchment. However, the site is a considerable distance from any of the reservoirs. The reservoirs are national critical infrastructure and are actively managed to meet a high level of safety standards. This includes an ISO 9000 accredited reservoir surveillance management process and regular inspections to the requirements of the Reservoirs Act 1975. For these reasons, the risk of failure of these reservoirs with consequent impact on the application property is minimal.

Flooding can also potentially arise from heavy rainfall when surface water cannot be absorbed into the ground or enter drainage systems, and when ordinary smaller watercourses and drains cannot hold the volume of water flowing through them. Heavy rain may not be able to drain away causing "flash flooding" and groundwater may rise above surface levels and overflow onto surrounding land. The Environment Agency's Flood Risk Map confirms that the property is a "low" risk of flooding from surface water.

The proposal is for a minor household extension. The property is not at risk of flooding and the development will not increase the risk of flooding.

No specific mitigation measures are therefore required. However, in accordance with good practice and to minimise the effect of future flood risk, the floor levels of the extension will be no lower than the existing floor levels of the house.

The opportunity will also be taken to provide a water butt and other measures to reduce water consumption within the new extension.

The occupants will also be encouraged to subscribe to the Environment Agency's Flood Warning service https://www.gov.uk/sign-up-for-flood-warnings.