### FLOOD RISK ASSESSMENT FOR PLANNING

22 Chudleigh Road Twickenham TW2 7QR

FLOOD ZONE 2

Based on the Environment Agency website, the property is in an area designated as ZONE 2 Flood Risk Area (Medium risk). This means that there is a medium probability of flooding from Rivers and Sea. Each year this area has a chance of flooding between 0.1% (1 in 1000) and 1% (1 in 100). The risk of flooding from Surface Water is Very Low at front of site, and Low at back of site. According to the Environment Agency, the chance of flooding from surface water is less than 0.1% (1 in 1000) at front, and between 0.1% (1 in 1000) and 1% (1 in 100) at back of site each year.

### **DESCRIPTION OF DEVELOPMENT**

Single storey wrap-around extension with pitched roof to side and rear

## ASSESSMENT OF FLOOD RISK, AND FRA GUIDANCE

The site is located in Thames River Basin, in Flood Risk Zone 2, based on mapping provided by the Environment Agency.

## ASSESSMENT OF THE EXISTING CONDITIONS

The existing site has a 2-storey dwelling. The house has front and back gardens. The site has a hard non permeable paving to the side and rear and is then grassed throughout the rear garden. The proposed extension will cover the existing patio and hard landscaping areas.

# HAZARD REDUCTION, MITIGATION AND WATER EXCLUSION STRATEGY

- 1. Landscaping to Rear and Front Gardens: The proposed gardens will have ground soil, a wooden decking with steps from the proposed bi folding doors. This will allow water to drain away directly back into the ground soil. The gardens will be laid to fall away from the building.
- 2. The proposed extension will be constructed using resistant construction techniques and resilient materials with a concrete floor to the lower part of the proposed extension and hard floor finishes. This construction will provide structural strength and integrity in respect of potential future flood events to proposed ground FFL

### PLANNED EVACUATION

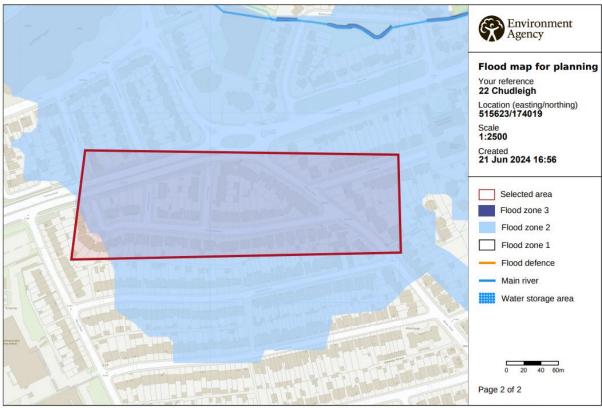
The proposed ground floor levels are above Flood Zone depths predicted on Chudleigh Road at the site frontage, which are predicted at less than 100mm. Estimated Flood levels from surface water are predicted at 300mm or below, and would impact the lower part of the extension if at all. Escape is up the steps to the kitchen and remainder of the property, both of which are above EA estimated flood levels.

### SURFACE WATER RUN-OFF REDUCTION

Rainwater run-off from the house roofs will be taken at the rear and front of the existing house to a soakaway in the rear garden.

## **SUMMARY OF PROPOSAL IMPACTS**

Through increase in the net area of permeable surfaces on the site, and the attenuation of surface water flows from residual permeable surfaces, the proposals will provide a positive contribution to borough wide efforts to reduce flood risk through a reduction in run-off relative to the existing.



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Image courtesy of EA – Flood Risk from Rivers and Sea – Extent of flooding