

# 1. FLOOD RISK ASSESSMENT

- 1.1 According to the Environment Agency's Flood Risk Development Map the site is mainly identified within Flood Zone 2 with a small portion also falling within Flood Zone 3. As shown below this is principally derived due to its position adjacent to the Ruislip Lido, therefore is of medium-high risk of flooding. As the proposed works relate to an area which is technically identified within Flood Zone 3, it is on this basis that the Flood Risk Assessment will assess the proposals.

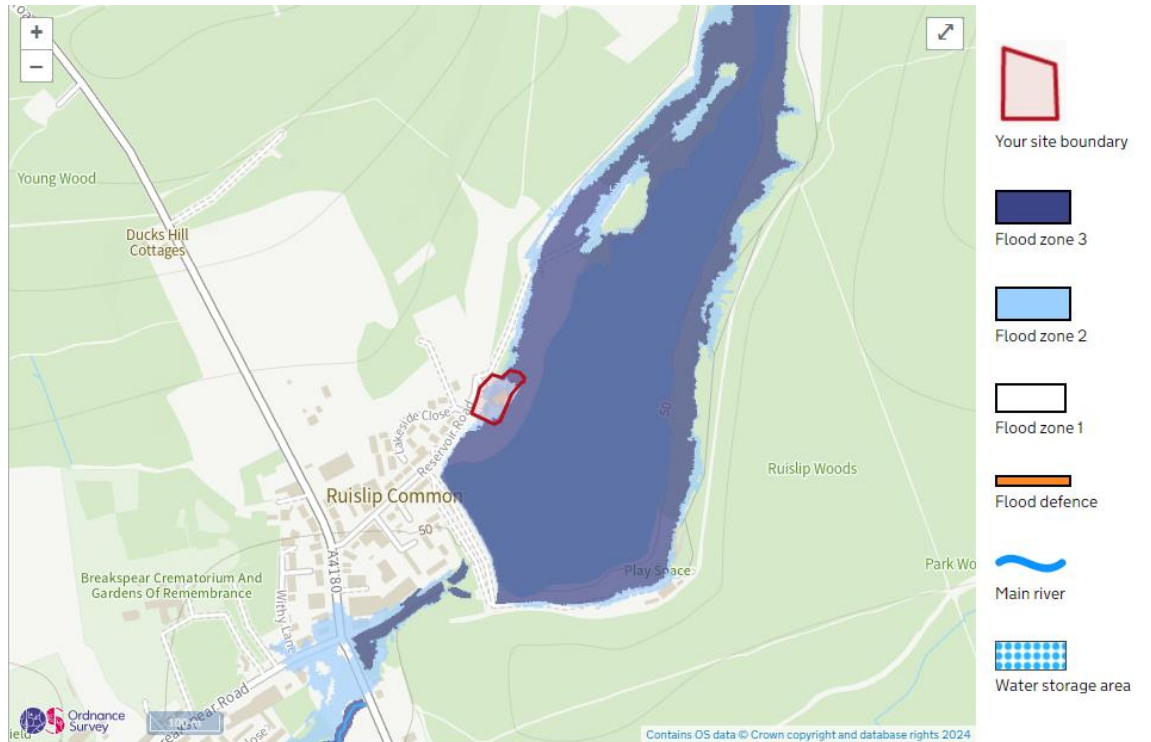


Figure 1: Extract of the EA Flood Risk Development Map

- 1.2 The site itself is considered to be a 'more vulnerable' use, as defined by the Environment Agency, as it consists of a Public House. As such, the Environment Agency advises that an Exception Test should be submitted to support proposed developments in these areas.
- 1.3 However, given that the only works within Flood Zones 2 & 3 relate to minor internal and external alterations, it is considered to be a less vulnerable use.
- 1.4 As such, our Flood Statement provides assessment of the flood risk posed by the proposed development in line with this Standing Advice.
- 1.5 In this regard, the proposed external development to the site would constitute a very small-scale development, as it consists of minor refurbishments and replacements that does not increase the total floorspace the building. This development would therefore result in a minor additions to the wider site associated with the pub in the form of a new decked veranda, outdoor seating huts, timber fencing, high-level external lighting and other associated works.
- 1.6 Accordingly, it is considered that the proposed development would result in a very low additional flood risk to the site, due to its small scale and level standing.
- 1.7 The following measures are also provided:

### *Flood Mitigation Measures*

- 1.8 During extreme flood events, the area surrounding the site will be affected by flooding. The flood water will rise at a relatively slow rate, and it is considered that the predicted flood scenario and peak flood conditions can be appropriately managed by the implementation of many mitigation measures which are identified as follows:
- Met office warning;
  - Raise electronic control units and sockets to a high level;
  - Use stainless fixtures and fittings; and
  - With the time afforded by advance warning, evacuation of external area to safe egress and removal from the structure can be implemented.

### *Flood Resilience Measures*

- 1.9 Due to the nature of the proposal, it is considered that the alterations would accommodate any potential flooding. However, to limit any potential damage and danger, all electrical outlets, heaters, and lighting would be sited at a high level, substantially above the projected flood levels for the site.

### *Flood Evacuation Plan*

- 1.10 The objective of a Flood Evacuation Plan is to raise awareness of the risk of flooding in the location under consideration, to detail the flood warnings and estimate the lead time available, and to detail how the plan is triggered by who and when, and what actions are required by those people in the area. The plan also describes the evacuation procedure and the need for safe refuge.
- 1.11 The business will sign up for the Environment Agency Flood Advance warning alerts and implement a Flood Evacuation Plan.

### *Safe Access*

- 1.12 Evacuation from the site will consist of moving westwards from the site to an area outside of Flood Zone 3, and within Flood Zone 1 which is considered to be at low risk of flooding according to the Environment Agency's Flood Maps. Given that the existing public house and associated grounds are within a Flood Zone, it is important to note safe access can be achieved on to Reservoir Road. This infrastructure adjoins the site's western boundary and sits at a slightly higher elevation when compared to the pub therefore is recognised within Flood Zone 1. The road leads directly into the village of Ruislip therefore provides access to safe refuge areas for customers, if necessary.

### *Safe Refuge Area*

- 1.13 In the event of a flood, safe refuge will be possible within the other side of Reservoir Road which shall be the primary option. However, this is supplemented by the fact the existing public house comprises of two floors; therefore, the upper floor level of the pub will also be available as another suitable area of refuge.

### *Flood Warnings*

- 1.14 The Environment Agency provides and operates a comprehensive flood forecasting and warning service. Areas at risk of flooding from rivers (fluvial), the sea (tidal) and reservoirs (storage), which relies on direct measurements of rainfall, river levels, tide levels, in-house predictive models, rainfall data and information from the Met Office. This service operates 24 hours /day 365 days a year. If flooding is forecast, warnings are issued using a set of easily recognisable codes.

### *Flood Procedure*

- 1.15 In the event of a serious flood event in the area the competent warning authority is the Environment Agency and a lead time of several hours in advance of flooding is provided, excluding potential breaches of defences. When a flood is expected the local authority and local emergency services will be responsible for public care and safety. It may be useful that the pub maintains a flood kit with items such as a flashlight, bottled water, useful telephone numbers and location and how to isolate the gas, electric and water services.

### **Conclusion**

- 1.16 The application site is predominantly located within Flood Zone 2 with a small portion also falling within Flood Zone 3, and the proposed scope of works relate to minor external alterations. As proposed, the development does not increase the total floorspace of the pub, and government guidance states that such proposals will only need to follow the Government Environment Agency's standing advice. This is the guidance we have therefore followed in preparing the Flood Risk Assessment for the proposal.
- 1.17 In these terms, overall, it is considered that the proposed development would pose a very small additional flood risk.
- 1.18 Furthermore, safe refuge is available within the existing public house in the event of a flood, whilst an evacuation zone from the site is situated immediately to the west as the remained of the site is within an area of Flood Zone 1, considered to be at low risk of flooding.
- 1.19 Accordingly, it is considered that the proposal is acceptable in terms of the potential flood risk of the proposed development to the wider site.