

TECHNICAL NOTE

JBA Project Code
 Client
 Day, Date and Time
 Author
 Reviewer / Sign-off
 Subject

2024s0087
 Dominus Oxford Hotel Ltd
 18/01/2024
 Rebecca Crowther MSc BSc
 Alistair Clark BSc MSc
 Flood Risk Statement for the Courtyard by Marriot

1 Introduction

JBA Consulting were commissioned by Dominus Oxford Hotel Ltd to undertake a Flood Risk Statement (FRS) to support the planning application for the proposed extension of the Courtyard by Marriott hotel on Paradise Street in central Oxford. No change is proposed in the use of the site in general and the extension specifically involves the redesign of the current fifth-floor terrace to accommodate nine additional bedrooms.

The original Flood Risk Assessment for the redevelopment of the site was completed by JBA Consulting in 2017, in relation to the transformation of the site from offices and a warehouse into its current use as a hotel. This assessment considered factors such as site topography, historic flooding, and different sources of flooding.

This statement has been undertaken as a desk-based assessment. The flood risk to and from the site has been determined based a combination of publicly available information, existing hydraulic modelling results and a review of the site plans.

2 Proposed development

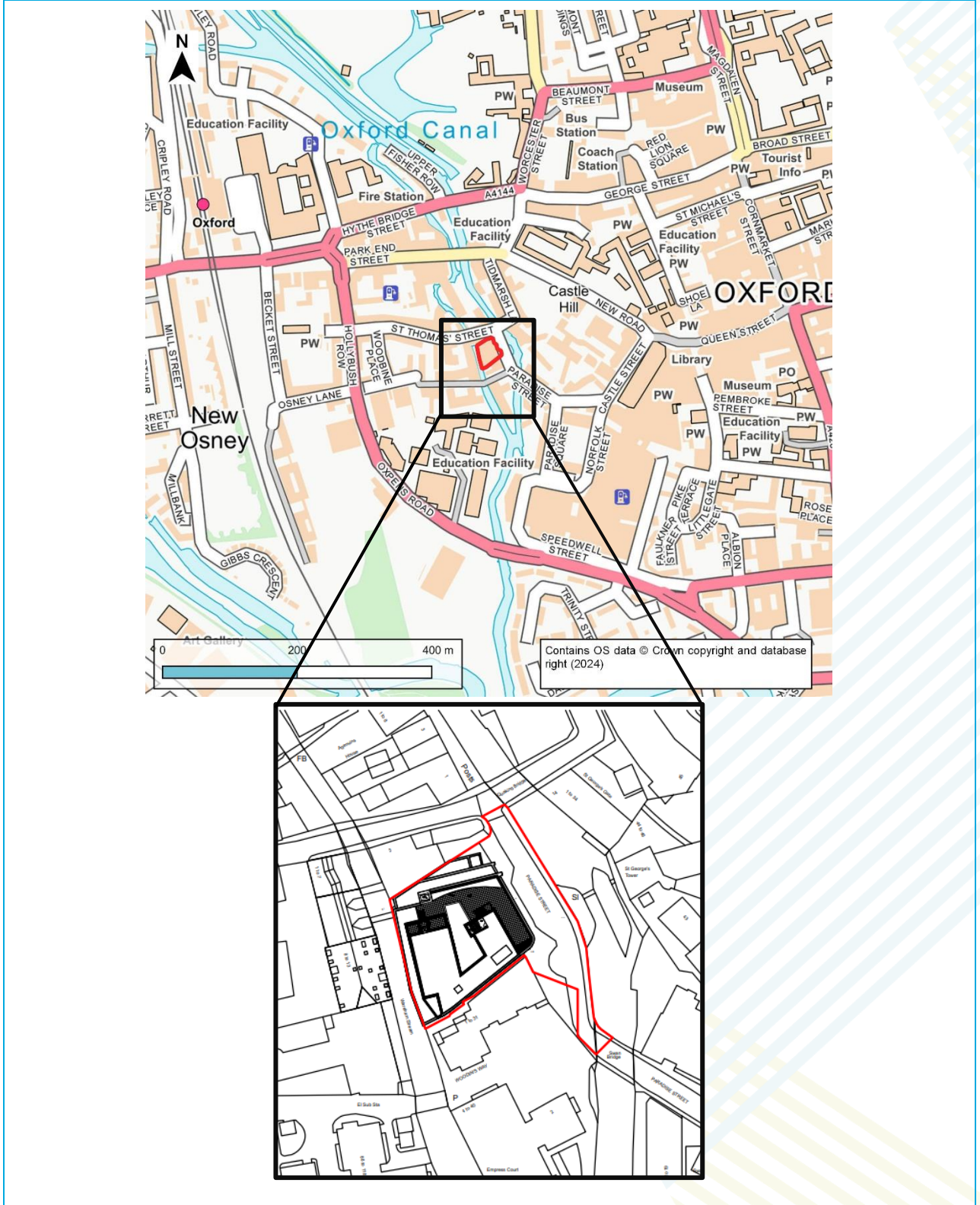
2.1 Site Description

Site name	Courtyard by Marriot
Site area	0.12 hectares
Existing land-use	Hotel
Development proposed	Converting a fifth-floor terrace into additional rooms
OS NGR	SP50890 06145
Country	England
County	Oxfordshire
Local Planning Authorities	Oxford City Council
Lead Local Flood Authority	Oxfordshire County Council

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2.2 Proposed development

The proposed extension involves the conversion of the fifth-floor terrace into nine additional rooms. No changes are proposed to the lower floors as part of the development.

This statement focuses on any changes in the flood risk associated with this specific modification to the existing structure.

3 Planning Policy and Flood Risk

3.1 Applicable Planning Policy

The National Planning Policy Framework (NPPF), introduced in March 2012 and most recently updated in December 2023, addresses flood risk in developments through a sequential characterization of risk using planning zones and the EA Flood Map for Planning.

The revised NPPF, to be used with Planning Practice Guidance (PPG)⁵, emphasizes the identification of Flood Zones and vulnerability classification for proposed developments.

3.1.1 Development Vulnerability

Annex 3 of the NPPF1 shows the classification of flood risk vulnerability in relation to a proposed development type. There have been no changes to the vulnerability classification as part of the more recent NPPF updates.

In this context, a hotel is categorized as a 'more vulnerable' development under the NPPF, making it suitable for placement within Flood Zone 2, with the Exception Test required for Flood Zone 3. Although, some of the site has been re-classified to be within Flood Zone 3, as the extension only alters the fifth floor, it doesn't affect the buildings flood risk vulnerability classification.

3.2 Flood risk

The EA states that flood risk is a function of:

- "The likelihood of a particular flood happening, best expressed as a chance or probability over a period of one year.
- "The impact or consequences that will result if the flood occurs."

The EA has developed a flood map (the Flood Map for Planning) which shows the risk of flooding from rivers and the sea in England for different return period events, assuming no flood defences are in place. This map is divided into flood zones, indicating the probability of land in each zone flooding.

3.2.1 Fluvial Flood Risk

Figure 3-1 and Figure 3-2 show a comparison of the Flood Zones based on most recent model outputs and those available at the time of the original FRA respectively. The comparison shows that most of the site is now within Flood Zone 2, and a larger proportion also shown to be in Flood Zone 3.

1 <https://www.gov.uk/guidance/national-planning-policy-framework/annex-3-flood-risk-vulnerability-classification>

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The Flood Zones are based on hydraulic model outputs which include a representation of the floodplain based on available LIDAR data. The LIDAR data is filtered to remove buildings, vegetation etc and provide a bare-earth representation of ground level. This means that buildings such as the hotel on the site, which form part of the watercourse banks are also removed from the ground model and this can result in an increased modelled flood extent in specific locations.

The proposed extension will only impact the fifth-floor terrace, and there will be no modifications to the existing footprint of the building. No adjustments will be implemented on any of the other floors, particularly the ground floor, ensuring that all threshold levels remain unchanged. Consequently, the flood risk of the building will remain consistent with the conditions assessed in the original Flood Risk Assessment conducted in 2017.

3.2.2 Surface water flood risk

The risk of flooding from surface water to the site has not altered since the 2017 FRA was produced as shown in Figures 3-3 and 3-4.

The RoFSW mapping shows ponding within the channels of the watercourse either side of the site, but a low risk to the development itself.

4 Summary

- the extension only impacts the fifth floor, maintaining the existing building footprint. No modifications are planned for other floors, including the ground floor, ensuring that threshold levels remain consistent.
- Flood Zones have been updated, but there is no change in the overall risk classification to the site.
- The Vulnerability classification of the site is unchanged by the proposed development and there has been no change in classification as part of recent NPPF updates.

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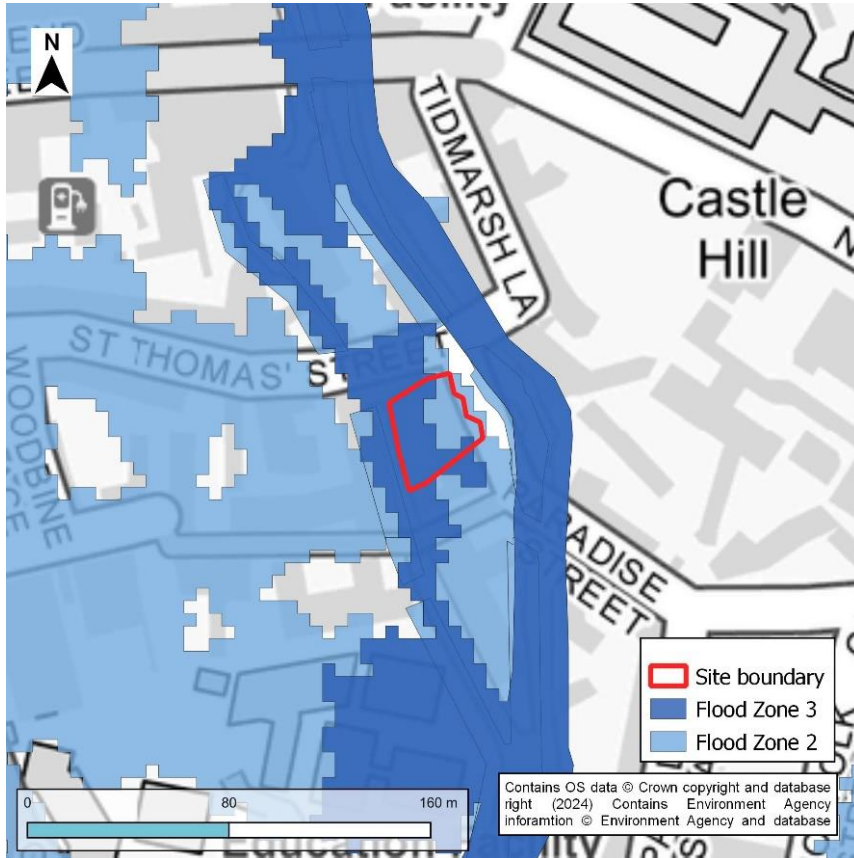


Figure 4-2: Updated Environment Agency Flood Zones

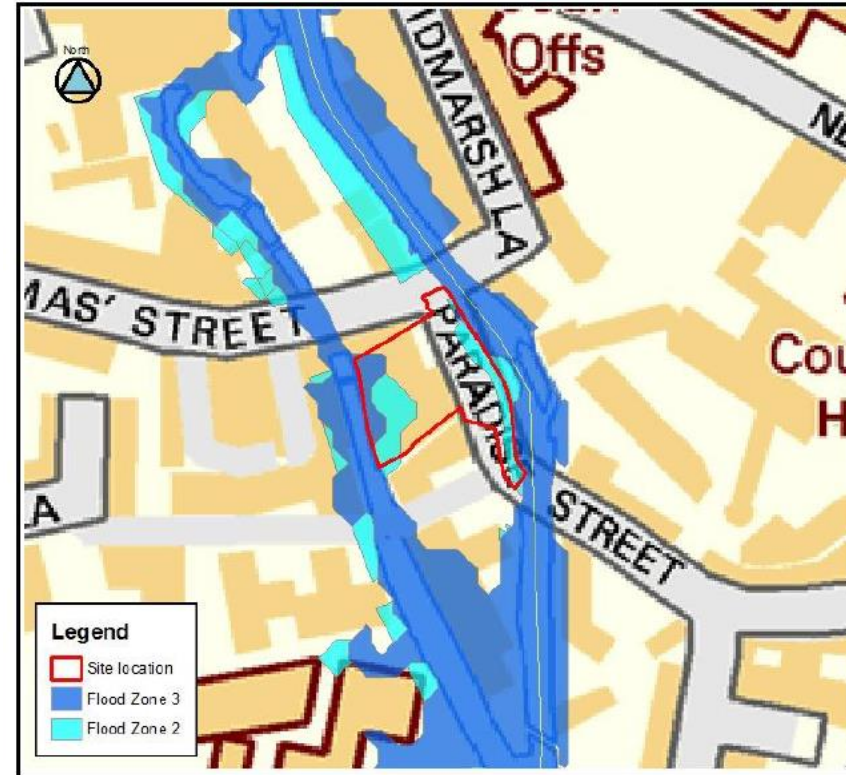


Figure 4-1: Original Environment Agency Flood Zones used in the 2017 FRA.



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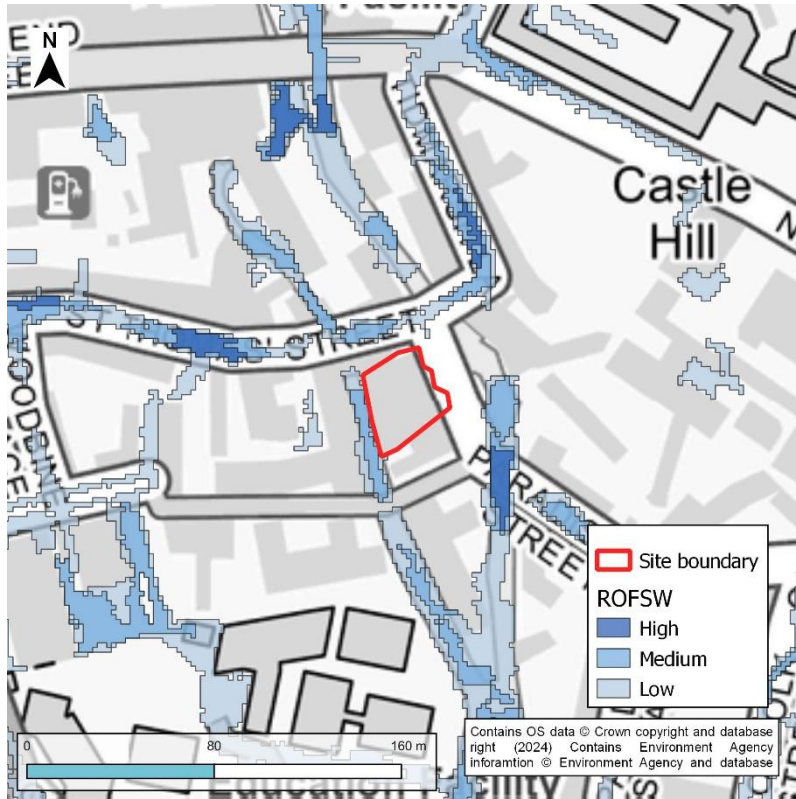
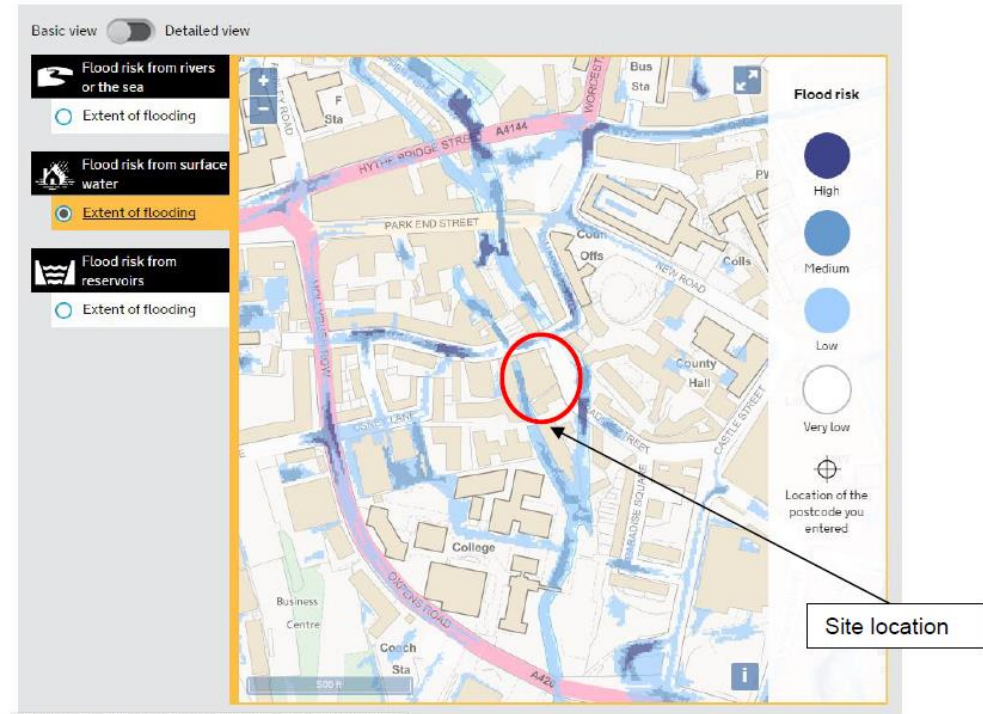


Figure 4-4: Updated Environment Agency Flood Zones



Reproduced from <https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?eastings=451479&northing=206185&address=100121366919> © Crown Copyright. All Rights Reserved. Environment Agency, 100026380, 2016.

Figure 4-3: Original Environment Agency Risk of Flooding from Surface Water used in the 2017 FRA.





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