

FLOOD RISK ASSESSMENT

Shakespeare Hotel, 2 Wytham Street, Padiham, BB12 7DX

Change of use of part of ground floor from public house (sui generis) to convenience store (Use Class E) and whole of first floor to four flats (Use Class C3), change of use of garage to barbers shop (Use Class E) and various external works

1.0 INTRODUCTION

1.1 This Site-Specific Flood Risk Assessment (FRA) has been prepared to accompany a detailed planning application for Change of use of part of ground floor from public house to convenience store and whole of first floor to four flats, change of use of garage to barbers shop and various external works.

1.2 The assessment investigates the potential flood risk impacts of the proposed development in accordance with the National Policy Planning Framework (NPPF) and supporting Planning Practice Guidance. This FRA is considered proportionate to the degree of flood risk and to the scale, nature and location of the development.

1.3 This Flood Risk Assessment has been carried out generally in accordance with:

i) National Planning Policy Framework (July 2021)

ii) Planning Practice Guidance: Flood Risk and Coastal Change (August 2022)

iii) BS8533:2017 "Assessing and managing flood risk in development, Code of Practice" iv) CIRIA Report 753 "The SUDS Manual" 2015 v) Environment Agency Report SC030219 Rainfall Runoff Management for Developments.

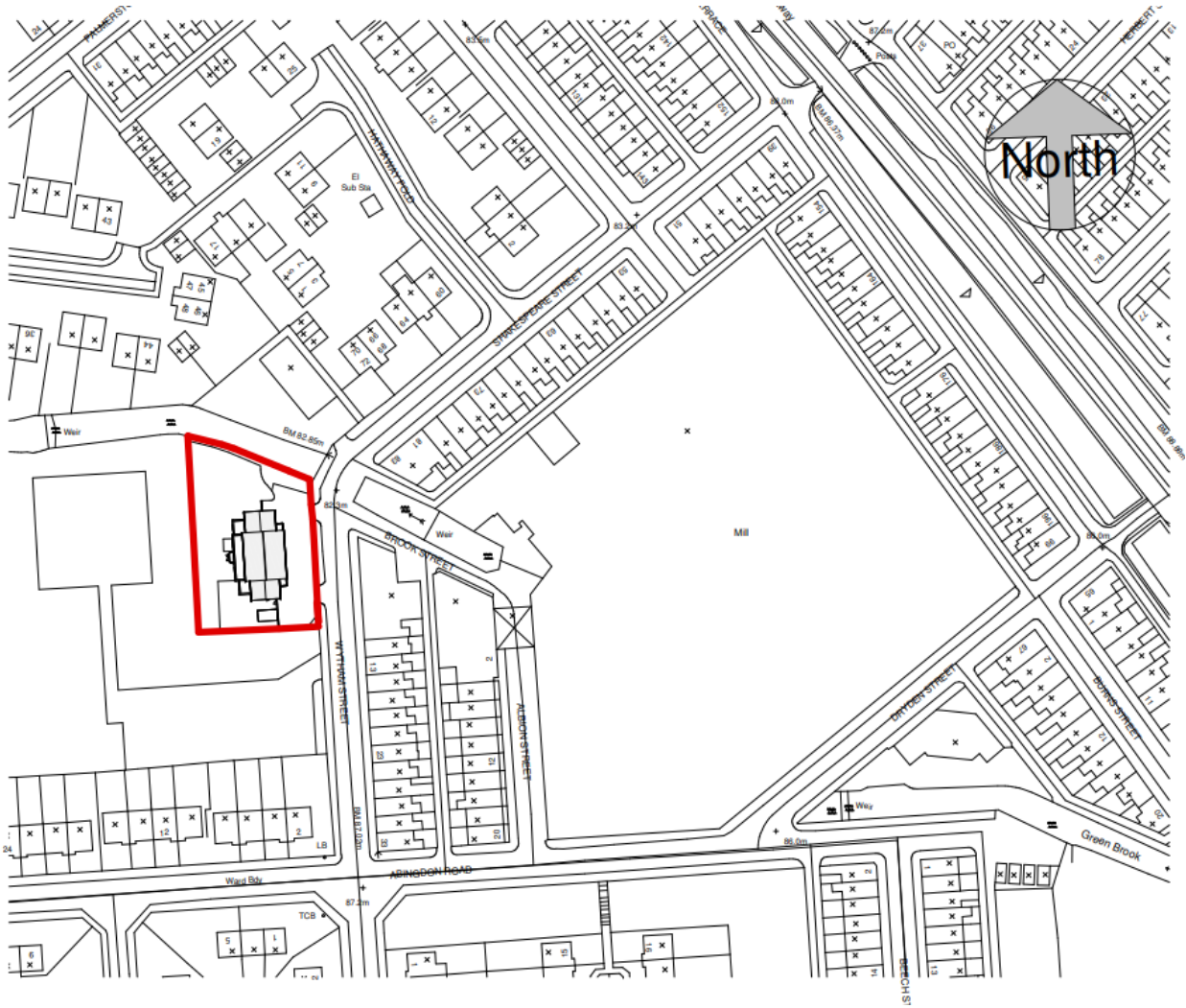
2.0 THE SITE

2.1 The site is located off Wytham Street in Padiham, a suburb of Burnley, roughly 3 miles west of Burnley town centre.

2.2 The site is bounded by residential dwellings to the south and east, and vegetation to the west. To the northern boundary is the Green Brook main river.

2.3 The approximate grid reference of the site is E379704, N433179.

2.4 Figure 1 shows the site location.



2.6 The site is referenced as HEL/259 within Burnley Borough Council's Strategic Housing Land Availability Assessments (SHLAA).

3.0 DEVELOPMENT PROPOSALS

3.1 The development consists of Change of use of part of ground floor from public house (sui generis) to convenience store (Use Class E) and whole of first floor to four flats (Use Class C3), change of use of garage to barbers shop (Use Class E) and various external works

3.2 The existing building is generally within Flood Zone 2/3

3.3 There are no changes to the existing hard or soft standing.

3.4 All the ground floor accommodation is for commercial uses. All residential and sleeping accommodation is located at first floor which is a low risk for any risks of flooding.

4.0 FLOOD RISK VULNERABILITY

4.1 The Flood Risk Vulnerability Classification has been determined in accordance with Planning Practice Guidance, Flood Risk and Coastal Change. The classification for this development is 'less Vulnerable'.

5.0 FLOOD ZONE COMPATABILITY

5.1 As the existing building does not encroach into Flood Zone 3a, the development should be classified as being within Flood Zone 2 and the building's floors, publicly accessible spaces and the entirety of the main access route into the building sit within Flood Zone 2.

5.2 The following table has been recreated from Table 3 in Paragraph 067 of the Planning Practice Guidance, Flood Risk and Coastal Change, which shows that the development is appropriate without requiring an Exception Test.

Table 1: Flood Risk Vulnerability and Flood Zone Compatibility

Flood Zones	Flood Risk Vulnerability Classification				
	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a†	Exception Test required†	X	Exception Test required	✓	✓
Zone 3b*	Exception Test required*	X	X	X	✓*

Key:

✓ Development is appropriate / X Development should not be permitted

5.3 The Burnley SFRA Level 1 Report suggested that the site would fall under their Strategic Recommendation B, i.e. that it is likely an Exception Test would be required for the site. However, we believe this is not required, due to the building which does not encroach onto Flood Zone 3a.

6.0 FLUVIAL FLOODING (FLOODING FROM RIVERS AND THE SEA)

6.1 Fluvial flooding occurs when high flows exceed the capacity of the river channel and spill out onto the floodplain, usually after a period of prolonged or heavy rainfall.

6.2 The main source of flood risk to the site is fluvial flooding from the Green Brook main river. Below is an extract from the Environment Agency’s map for flood risk from rivers or the sea:

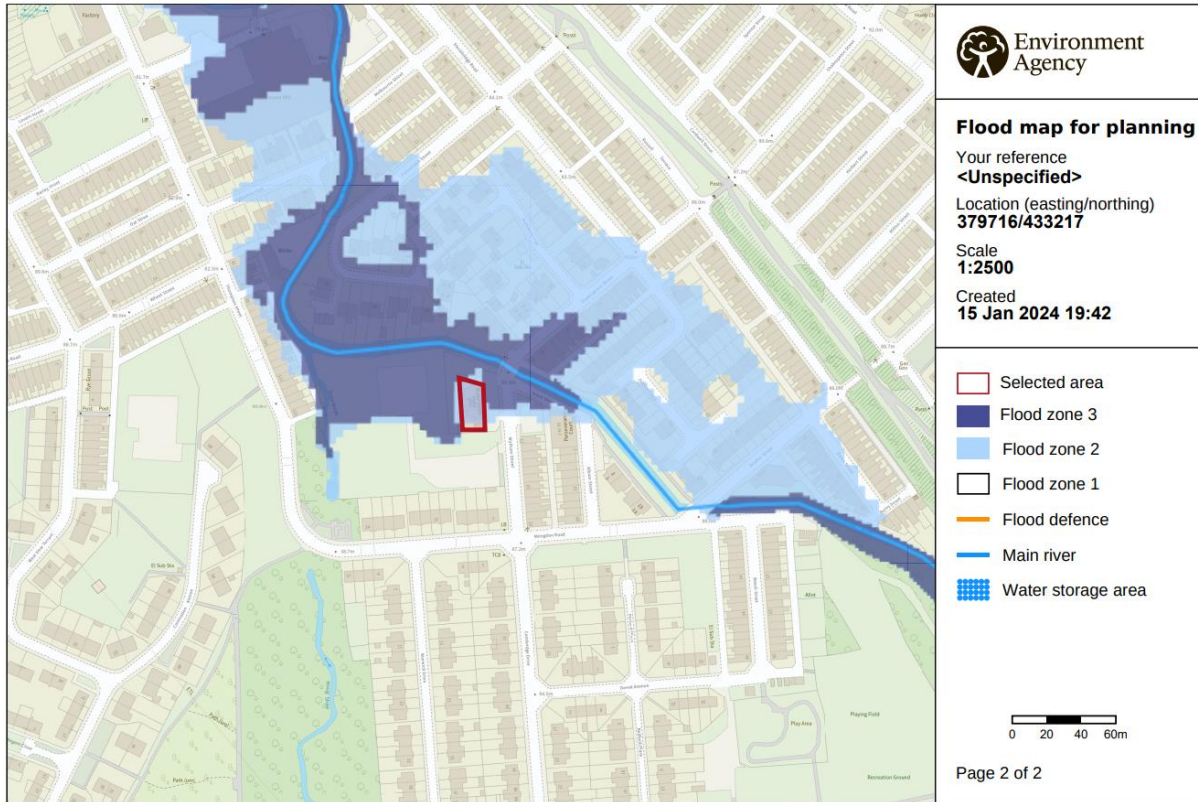


Figure 2: Flood Risk from Rivers of the Sea Map

6.3 The following table confirms the percentages of the site falling within each flood zone:

Table 2: Fluvial Flood Zone Coverage

Flood Zone 1		Flood Zone 2		Flood Zone 3a	
Area (ha)	%	Area (ha)	%	Area (ha)	%
0.28	65.96	0.01	2.46	0.13	31.58

6.4 The parts of the site within Flood Zone 3 have an Annual Exceedance Probability (AEP) of greater than 1%. The parts within Flood Zone 2 have an AEP between 1% and 0.1%. The parts within Flood Zone 1 have an AEP lower than 0.1%.

6.5 The main access route to the building is wholly within Flood Zone 1.

6.6 The river flow climate change allowance for the site is 36% (Central 2080s) and it is expected that river peak flows will increase by this amount over the next 50 years. The height of the building levels will be expected to be substantially above this potential flood level and the building will not be at risk from these future floods.

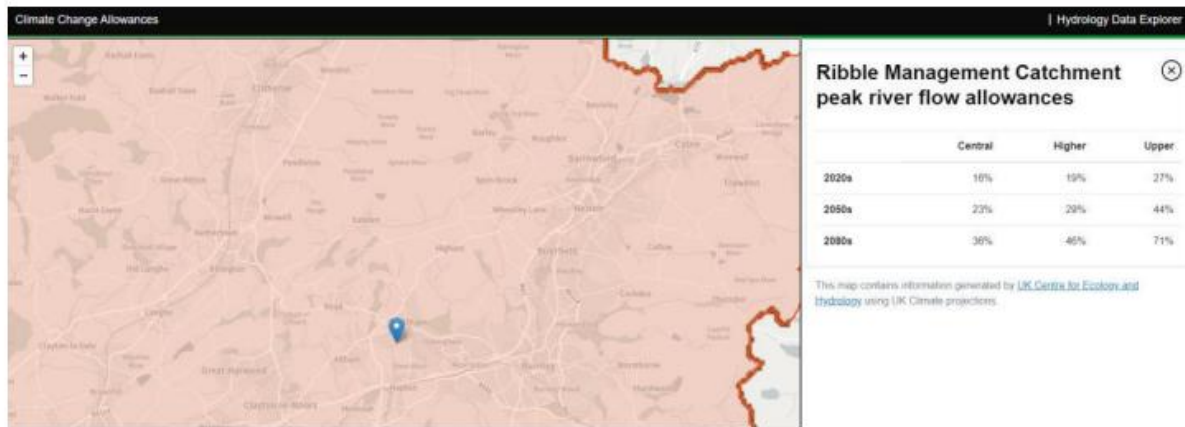


Figure 3 - Climate Change Allowance

7.0 PLUVIAL FLOODING (FLOODING FROM SURFACE WATER)

7.1 The Environment Agency Map showing Risk of Flooding from Surface Water is shown below. This type of flooding can be difficult to predict, much more so than river or sea flooding as it is hard to forecast exactly where or how much rain will fall in any storm.

7.2 The map indicates that some random areas of the site have 'low' to 'medium' chance of flooding from surface water, indicating a probability of flooding between 1 in 1,000 and 1 in 100.

7.3 The external site levels will remain as is.

7.4 Below is an extract from the Environment Agency's map for flood risk from surface water:



Extent of flooding from surface water

● High
 ● Medium
 ● Low
 Very low
 ⊕ Location you selected

7.6 As there is less than 10% of the site identified as high or medium risk and there is less than 20% of the site identified as low risk, then the whole site is not considered to be at risk from surface water flooding.

Table 3: Risk of Flooding from Surface Water

High Risk (1 in 30 year outline)		Medium Risk (1 in 100 year outline)		Low Risk (1 in 1000 year outline)	
Area (ha)	%	Area (ha)	%	Area (ha)	%
0.00	0.06	0.00	0.09	0.03	7.38

8.0 FLOODING FROM RESERVOIRS

8.1 The site is not considered to be at risk from flooding from reservoirs.

8.2 Below is an extract from the Environment Agency's map for flood risk from reservoirs:



Maximum extent of flooding from reservoirs:

● when river levels are normal
 when there is also flooding from rivers
 + Location you selected

9.0 GROUNDWATER FLOODING

9.1 Groundwater flooding occurs when water levels in the ground rise above surface levels this is more likely to occur in low lying areas.

9.2 The effects of ground water flooding on the site are low.

10.0 EXISTING SEWER FLOODING

10.1 Flooding caused by the existing sewer network occurs when the network is over capacity or there is a blockage in the system.

10.2 There are two large combined sewers crossing the site to the north of the building and within the flood zone 3a part of the site.

10.3 There is no anecdotal knowledge of past sewer flooding in any of the adopted United Utilities sewers around the site.

FOUL WATER DRAINAGE

12.9 The site will convey foul water collected from toilets, kitchens and bathrooms through a new separate foul water private drainage network before connecting to an existing combined sewer that runs through the site.

13.0 OCCUPANTS AND USERS OF THE DEVELOPMENT

13.1 During a flooding event the development will be wholly accessible by emergency services and it is not expected that an emergency evacuation plan will be required.

14.0 MAINTENANCE STRATEGY

14.1 Maintenance and suitable management of all drainage aspects is required to ensure the system is working correctly and effectively. The owners/occupiers of the development will need to appoint a competent contractor to undertake the recommended maintenance work, as detailed below.

Pipe Network and Flow Controls Maintenance Schedule

Operation	Frequency
Inspect and identify any areas that are not operating correctly, if required, take remedial actions.	Monthly for 3 months as a part of normal post completion monitoring, then biannually
Debris removal from manholes (where may cause risk performance)	Monthly
Where rainfall into network from above, check surface or filter for blockage or silt, algae or other matter by jetting	As required, but at least twice a year
Remove sediment from pipework by jetting.	Annually or as required
Repair/check all inlets, outlets and overflow pipes	As required
Inspect/check all inlets, outlets, and overflow pipes to ensure that they are in good condition and operating as designed	Annually and after large storms
Inspect/check flow control and ensure bypass door, linkage chain and all moving parts are in working order without damage and operating as designed.	Annually and after large storms
Desludging of Catchpits and Flow Control Manholes	As required, but at least twice a year

Operation	Frequency
Inspect and identify any areas that are not operating correctly, if required, take remedial actions	Monthly for 3 months, then six monthly
Debris removal from attenuation tank (where may cause risk performance)	Monthly
Where rainfall into attenuation tank from above, check surface or filter for blockage or silt, algae or other matter by jetting	As required, but at least twice a year
Remove sediment from upstream surface water network by jetting.	Annually or as required
Repair/check all inlets, outlets and overflow pipes	As required
Inspect/check all inlets, outlets, and overflow pipes to ensure that they are in good condition and operating as designed.	Annually and after large storms
Survey inside of tank for sediment build up and remove if necessary.	Every 5 years.

14.2 A log of all maintenance activities should be kept and made available to the Lead Local Flood Authority and/or the Local Planning Authority on request.

15.0 CONCLUSION AND RECOMMENDATIONS

15.1 The site is partially sited within Flood Zone 3a, Flood Zone 2 and Flood Zone 1. The existing building footprint sits partially within Flood Zone 2 but has a large void within the basement to prevent impacting the wider flood risk in the area and to protect the residents of the building.

15.2 The site has a low risk of flooding from surface water

15.3 This report has considered the flood risk to the site and has identified suitable mitigation measures where required, and a sufficient drainage strategy to ensure that risks are managed within the site boundary with no detriment to neighbouring properties.