

Flood Risk Assessment

Proposed Change of Use from an Annexe to a Holiday Let

Red Chimneys, Shore Road, Garthorpe, Scunthorpe, DN17 4AD

Amended Version – Revision A – 24th November 2025



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A Flood Warning and Evacuation Plan

B Flood Barriers

DOCUMENT HISTORY

ISSUE NO	COMMENTS	DATE
1	Planning	September 2025
2	LLFA updates	24 th November 2025

1 Introduction

1.1 This Statement has been prepared to accompany a Full Planning application for the Change of Use of an Annexe to a Holiday Let at, Red Chimneys, Shore Road, Garthorpe.

1.2 The Government has placed increasing priority on the need to take full account of the risks associated with flooding at all stages of the planning and development process. This course of action seeks to reduce the future damage to property and risk to life resulting from incidents of flooding. National Planning Policy does not prevent all development in flood risk areas and this would be unsustainable and result in economic stagnation, depriving existing communities of much needed homes, services, employment opportunities etc. It is in the essential interests of the vitality of settlements and for the wider economic and social wellbeing of the community, that development opportunities are not unnecessarily constrained. Accordingly, the aims of this site specific FRA will be as follows:

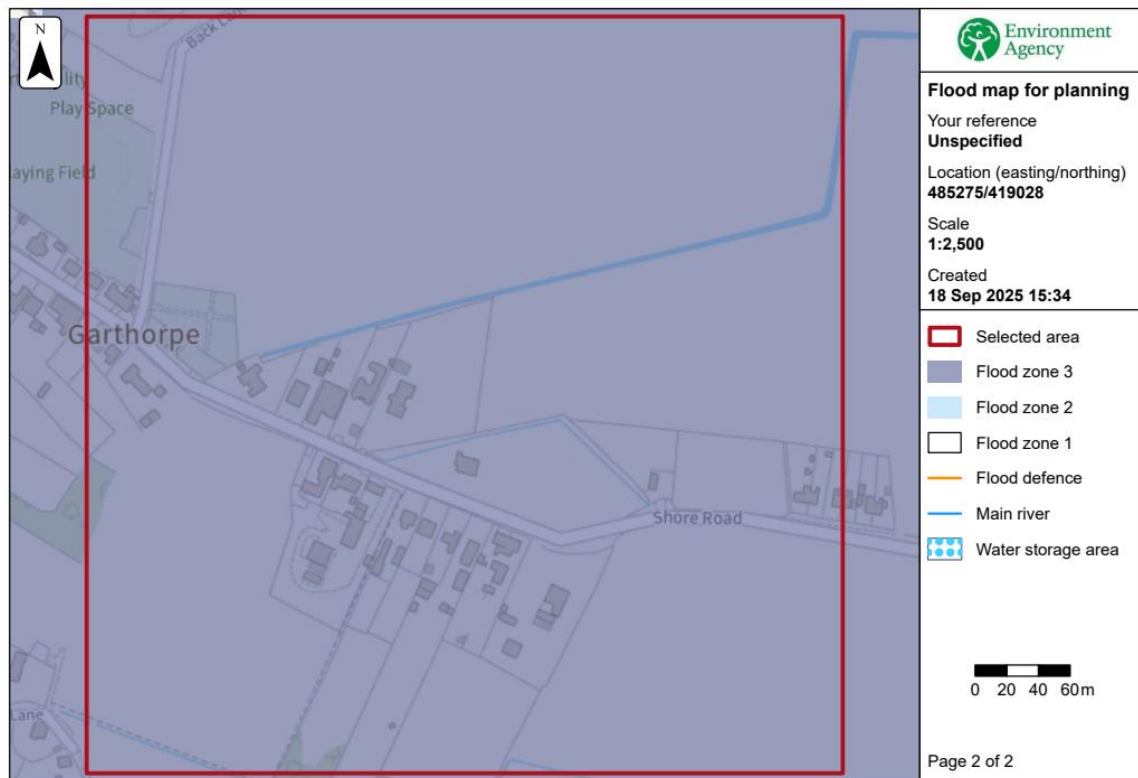
- Identify and address flood risk issues associated with the development.
- Assess if the project is likely to be affected by flooding from all relevant sources both now and in the future.
- Assess whether the project will increase the flood risk elsewhere.
- Demonstrate that the project is safe and where possible, reduces flood risk.
- Propose measures to deal with the identified effects and risks.

2 Existing Site

- 2.1 The site is located on Shore Road, Garthorpe to the East of the village (see figure below); the ordnance survey grid reference is TF 485210 419035.



2.2 The Environment Agency Flood Map for Planning identifies the site as being primarily within Flood Zone 3 meaning that the site could theoretically be flooded from the sea by a flood that has a 0.5% (1 in 200) or greater chance of happening each year or from a river by a flood that has a 1% (1 in 100) or greater chance of happening each year. (See Figure below).



2.3 Whilst a full topographical survey of the site has not been undertaken, given that minimal physical works are proposed, local benchmark and levels data has been collected. Local benchmark data as shown in the follow image (taken from interactivemaps.uk/os-benchmark-archive) shows recorded benchmarks within the area with the closest benchmark to the site (approximately 300m to the east) being 3.918m AOD. The next closest benchmark is located approximately 350m westwards along Shore Road and sets a benchmark of 4.340m.



- 2.4 From the available data we can establish, including the 3m datum within the road on the bend eastwards along Shore Road, that the level of the site is around 2.9-3m AOD. The finished floor level of the existing residential annexe is around 150mm higher and sits around 3-3.150m AOD.

3 Proposed Scheme

- 3.1 The proposed application seeks Full Planning approval for the Change of Use of the existing residential Annexe to a Holiday Let at, Red Chimneys, Shore Road, Garthorpe. The building will not be altered, and the existing sleeping and habitable accommodation already utilised and previously approved will be utilised. The only change will be the formal use to holiday / leisure.

4 Historic Flooding

- 4.1 The Environment Agency have advised that they do not have any records of flooding in this area. Additionally the applicant has confirmed they do not know of any events of flooding on the site.

5 Sequential and Exceptions Tests

- 5.1 The National Planning Policy Framework (NPPF) expects that proposals within the flood zone should be subject to the Sequential Test, and if necessary, the Exception Test at the planning application stage. The Planning Practice Guidance (PPG) to the Framework states that changes of use should be subject to the Sequential Test.
- 5.2 The proposal relates to the change of use of a residential annexe constructed on an existing site. Sequentially there are no other sites available within a lower risk area as the application relates solely to the building itself within the confines of the existing site.
- 5.3 The Technical Guidance to the NPPF discusses the concept of flood risk vulnerability and flood zone compatibility, providing a mechanism for assessing the appropriateness of proposed uses against the various degrees of flood risk. Applying the likelihood of flooding identified from the flood maps to Table 1: Flood Zones of the Technical Guide, the site falls into zone 3, classified as having a 'high' probability of flooding (the relevant section of Table 1 is reproduced below). Table 2: Flood Risk Vulnerability Classification, classifies the proposed holiday use as 'more vulnerable' (see below / next page). Table 3: Flood Risk Vulnerability and Flood Zone 'Compatibility' compares the Flood Zone classification from Table 1 against the Vulnerability Classification from Table 2. As can be seen on Table 3, the proposed scheme is appropriate development in Flood Zone 3, and therefore are subject to the Exceptions Test.

FLOOD ZONES

Source: NPPF

Technical Guide, Table 1

Zone 3a - high probability**Definition**

This zone comprises land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% – 0.1%) in any year.

Appropriate uses

Essential infrastructure and the water-compatible, less vulnerable and more vulnerable uses, as set out in table 2, are appropriate in this zone. The highly vulnerable uses are only appropriate in this zone if the Exception Test is passed.

Flood risk assessment requirements

All development proposals in this zone should be accompanied by a flood risk assessment

Policy aims

In this zone, developers and local authorities should seek opportunities to reduce the overall level of flood risk in the area through the layout and form of the development, and the appropriate application of sustainable drainage systems..

FLOOD RISK VULNERABILITY CLASSIFICATIONS

Source: NPPF Technical Guide,

Table 2

MORE VULNERABLE	<ul style="list-style-type: none"> • Hospitals. • Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels. • Buildings used for: dwelling houses; student halls of residence; drinking establishments; nightclubs; and hotels. • Non-residential uses for health services, nurseries and educational establishments. • Landfill and sites used for waste management facilities for hazardous waste.²¹ • Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.
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FLOOD RISK VULNERABILITY AND FLOOD ZONE 'COMPATIBILITY'					
<i>Source: NPPF Technical Guide, Table 3</i>					
Flood Risk Vulnerability classification (Table 2)	Essential Infrastructure	Water compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone 1	✓	✓	✓	✓	✓
Flood Zone 2	✓	✓	Exception Test Required	✓	✓
Flood Zone 3a	Exception Test Required	✓	X	Exception Test Required	✓
Flood Zone 3b 'Functional Floodplain,	Exception Test Required	✓	X	X	X
X = Development should not be permitted ✓ = Development is appropriate					

- 5.4 The NPPF states that for the Exceptions Test to be passed, it should demonstrate that:
- a) *the development would provide wider sustainability benefits to the community that outweigh the flood risk; and*
 - b) *the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.*
- 5.5 The applicant has consulted with North Lincolnshire Council's tourism department to clarify that there is a need for this type of holiday accommodation within the borough and, as a result, confirms that the first criterion of the Exceptions Test is passed.
- 5.6 In regards to the second criterion, this site-specific FRA has been produced to ensure that the development is safe and will not increase flood risk elsewhere. The change of use relates solely to a single existing building, which will not be increased in size, and therefore there is no increased risk elsewhere or even within the immediate surroundings. The buildings change of use will be as noted on paper only – the physical use of the building (currently an annexe with sleeping accommodation) will be no different. Mitigation measures will be explored and

proposed to ascertain ways the use of the building could actually be made safer for its lifetime.

- 5.7 It is therefore submitted that the proposals satisfy the requirements of the Sequential and Exceptions Tests.

6 Assessment of potential sources of flooding and possible impact

6.0 This section presents an assessment of Flood Risk to the development from

a) external sources; and

b) potential of the proposed development to cause flood risk elsewhere

TABLE 1: POSSIBLE FLOODING MECHANISMS

Source	Significant?	Comment
Fluvial	Yes	Humber & Trent if a breach of defences occurs
Tidal/Coastal	Yes	If a breach or over topping of the defences occurred
Pluvial (drainage)	No	On site run off.
Groundwater	No	Unlikely due to local drainage network
Overland flow	No	No higher ground adjacent to the site
Blockage	No	No culverts or bridges close to the site
Infrastructure failure	No	No major infrastructure has been identified
Rainfall ponding	No	No depressed areas which could encourage ponding.

a) Assessment of Flood Risk to Development from External Sources

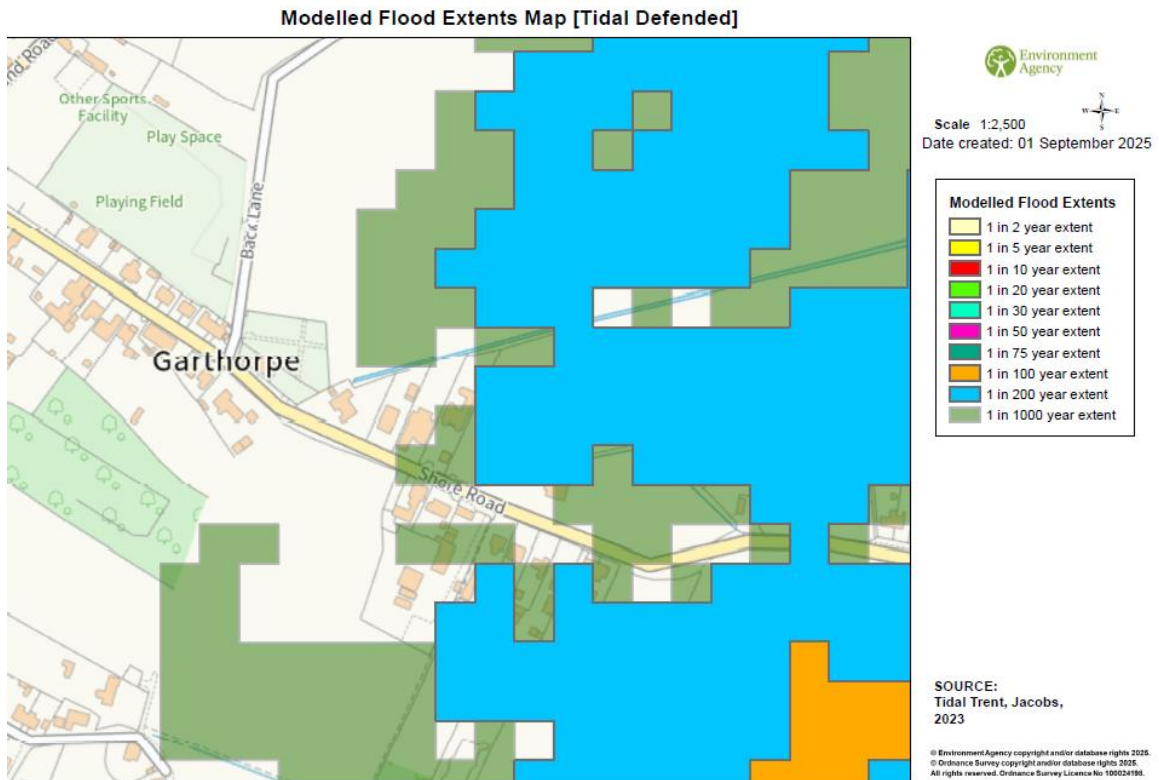
6.1 Assessment of Flood Risk from Fluvial/Tidal Sources

- 6.1.1 The River Humber is located approximately 5 km to the north of the site, and the river Trent is approximately 2 km to the east of the site, which runs directly south from the Humber, therefore tidal flooding is considered to be a source of flood risk. The Hazard Maps provided by the Environment Agency show the hazard rating, depth and velocity of water for future scenarios for either a breach or overtopping of the sea defences. These maps show that the site could be affected by tidal flooding from the Trent if a breach or overtopping of the sea

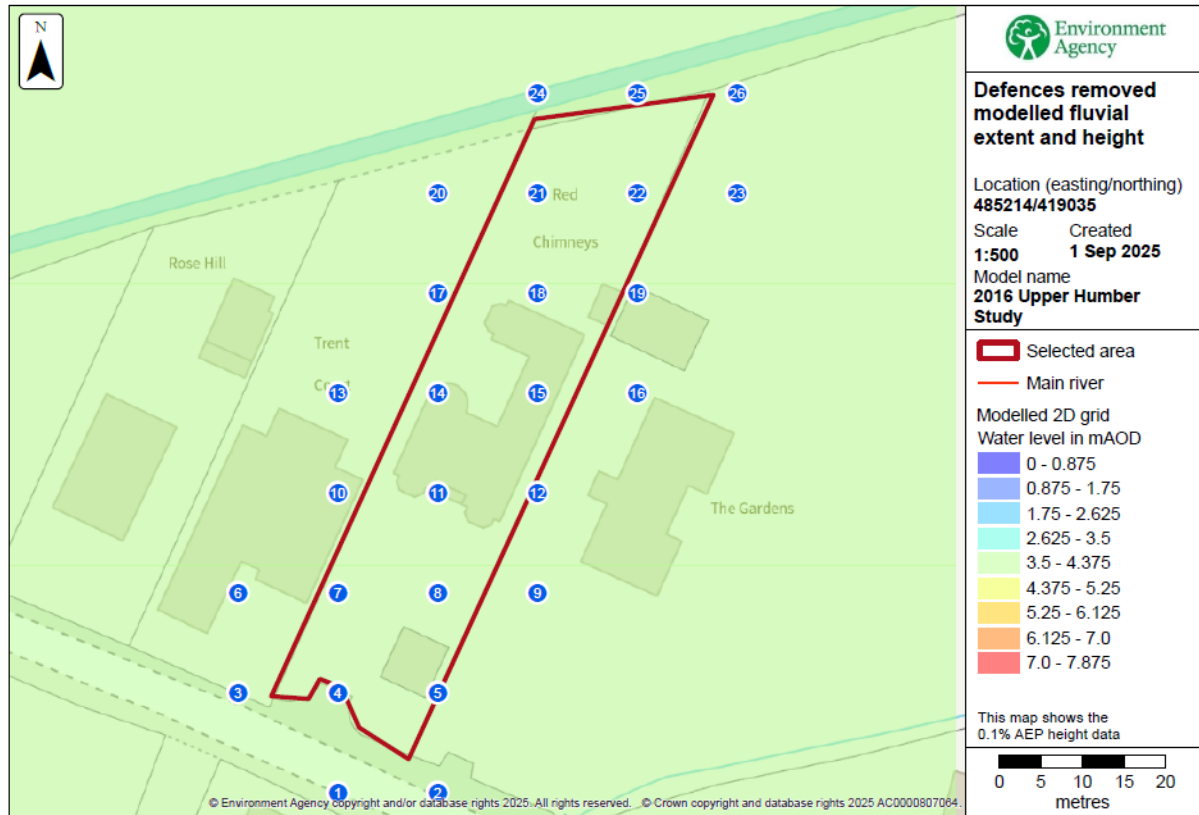
defences occurred. The Environment Agency inspects these defences regularly to ensure that any potential defects are identified early and the current condition of the defence along the nearby river is said to be good. These defences provide protection from floods with a 0.5% (1 in 200) chance of occurring in any year.

6.1.2 The likelihood of the site being affected by overtopping is considered low given the height of the defences and the distance from the defences to the site.

6.1.3 The EA data shows that there is potential for the site to be effected by a 1 in 1000 year event with defences in place, as shown in the figure below:

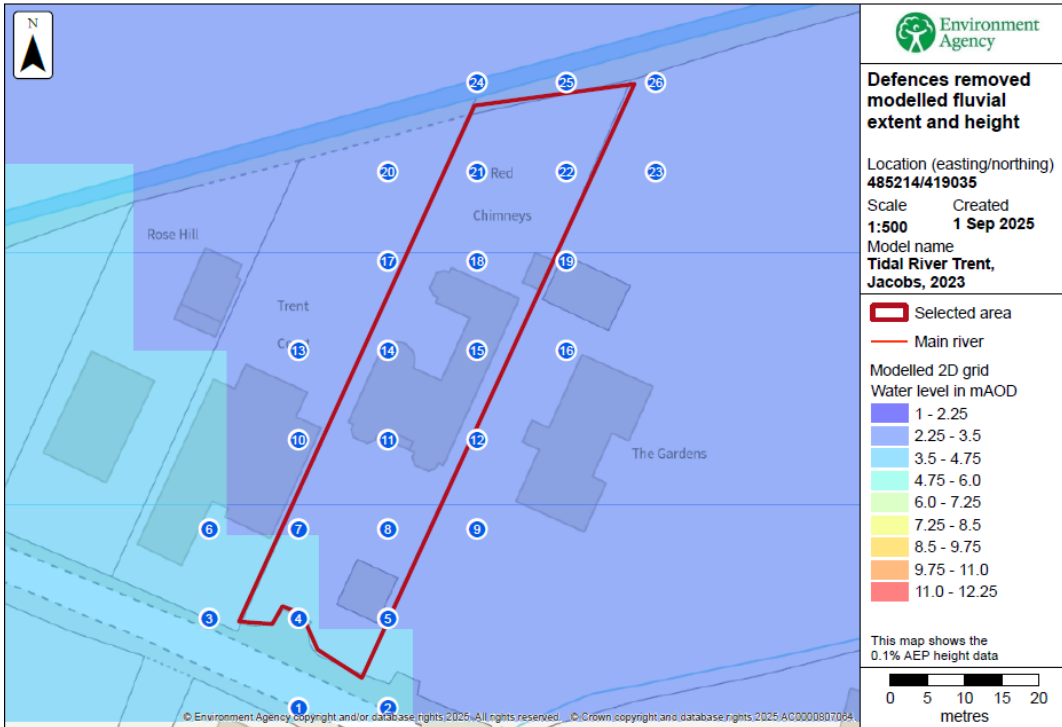


6.1.4 With defences removed the modelled data from the EA suggests potential water levels to between 3.5-4.375m AOD of risk from the Humber, and noted from the data as around 3.90 m AOD for a 0.5% event (label 5 from the EA extract figure below).



6.1.5 With defences removed the modelled data in relation to the River Trent from the EA suggests potential water level around 3.47 m AOD for a 1% / 1:100 event (label 5 from the EA extract figure on next page / below).

6.1.6 The LLFA have advised in their consultation response that within the sites current location within the Isle of Axholme it is subject to a critical flood level of 4.1m AOD (300mm above the SFRA critical flood level of 3.8m AOD).



6.2 Assessment of Flood Risk from Overland Flow (Pluvial)

6.2.1 The Environment Agency Surface Water Flood Map shows that there is no risk from pluvial flooding as shown on the map extract below.



6.3 Assessment of Flood Risk from Ground Water

6.3.1 The area surrounding the site is not known to suffer from ground water problems.

6.4 Assessment of Flood Risk from Reservoirs

6.4.1 The Environment Agency Risk of Flooding from Reservoirs Map shows the site is not at risk from reservoir flooding.

B) Potential of the Proposed Development to Cause Flood Risk Elsewhere

6.5 The existing building will remain unchanged in terms of footprint and potential for water run off. The grounds surrounding the building will also remain unaltered in respect of surface materials, and therefore there will be no increase in risk.

6.6 Arrangements for the disposal of surface water will not be altered as part of the change of use, and therefore there shall be no additional risks.

MITIGATION MEASURES

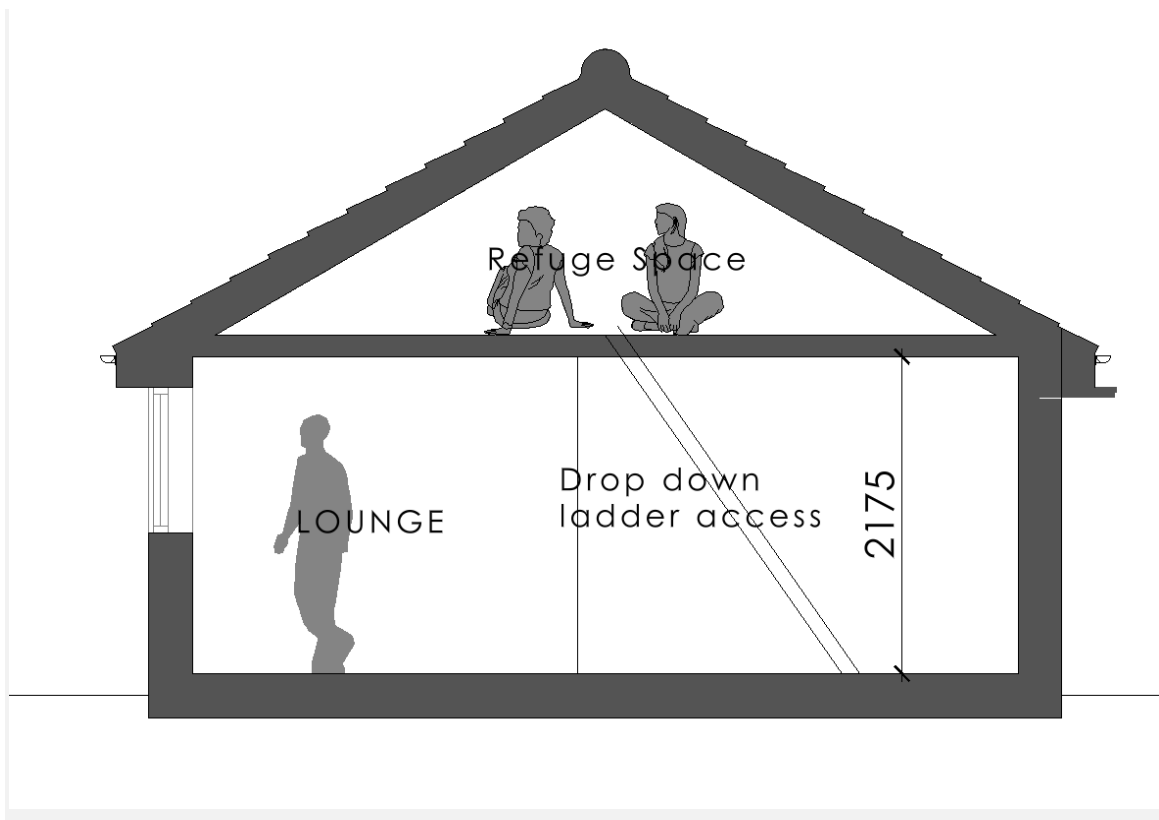
6.8 As described in section 6 of this assessment the site is at a limited risk of flooding with the hazard maps showing that the site would be at risk from flooding as it currently stands in the event of extreme flooding.

6.9 As the site is located within Flood one 3 it would be usually expected that floor levels should be raised for a new property, however we cannot propose this as part of the change of use as there is no intention to change anything with the building itself. Whether the site remains as a residential annexe, with sleeping accommodation, or whether its use allows for holiday stays with no increase in sleeping accommodation, the risks are no different, and the situation will be no different on site.

6.10 To provide additional protection to the occupants of the holiday accommodation we would propose the installation of a flood barrier to the existing entrance door. We would advise on a system such as the face or reveal fixed barriers, which are demountable in smaller sections for ease of installation and flexibility, as referred to in Appendix B.

The flood barriers should be to a minimum height of 1.2m above the threshold – with a GF FFL of around 3.1 this will ensure the barriers are up to and above the height of the suggested critical flood level of 4.1m AOD with a 300mm additional height.

- 6.11 As a way to provide measures to better control potential flood events on the site **A Flood Warning and Evacuation System** will be put into place within the site to minimise impact on human life. The current occupants would be managing the holiday let from the house adjacent, and as part of this management and procedures which will be advised to occupants there will be the potential to utilise the exiting property as emergency refuge on the upper floors – this could be managed through physical intervention or via a keybox entry.
- Whilst it is currently suggested by the LLFA that this method of refuge would not be considered appropriate, within the holiday let which is managed by the occupants of the host dwelling (which is less than 10m away), and with early warning systems in place as advised below, we would still consider this a form of mitigation in an emergency which gives the users a further option of safe refuge.
- 6.12 In response to the comments from the LLFA comments as above, as an additional measure we will look to provide ease of access into the existing roof space of the existing building. There is no scope to add an additional storey onto the building, which would be unreasonable given the existing use, however there is an existing loft hatch and roof space which with a suitable installed drop down loft ladder could provide a place of refuge in an severe emergency. Refer to the below for further clarification on this space.



6.13 The site will also be registered with the Environment Agency's 'Warnings Direct' flood warning system. The Agency provides this flood warning service in England and Wales and supports the public taking action to prepare and respond when these warnings are issued. The warnings are provided for flooding from rivers and the sea but not for localised flash flooding that cannot be predicted, for example from blocked or overloaded sewers or local groundwater flooding. The Agency issues warnings through media on TV and radio weather bulletins and on its website (www.environment-agency.gov.uk/floodline). In areas of particular risk, the Agency can send a warning message direct to people at home or at work by telephone, fax or pager using an Automatic Voice Messaging (AVM) system.

6.14 The use of the warning system will be used to provide the sites flood representative with information on the severity of the predicted flood. Depending on the severity different procedures will be put into place, with the most extreme being a full evacuation of the site to higher/safer ground. A copy of the Evacuation Plan and a map to show the route to the safer ground will be positioned on site within the holiday lets information pack. A simplified version of

the plan will be handed to all guests on arrival. Mobile phone contact numbers will be requested from all guests so that the representative can contact them in the event of an emergency.

- 6.15 Flooding events are generally predicted with a two hour warning being given on pending events and the road network is adequate to allow escape inland in the event of an unpredicted flooding event. If it was not possible to escape then occupants would be required to get above the flood level, such as within the upper floor of the existing property, and could safely await rescue if required.

7 Conclusion

- 7.1 The following conclusions, in relation to the questions posed at the start of this document, are as follows:

7.2 ***Identify and address flood risk issues associated with the proposed development:***

The potential sources of flood risk have been discussed within this report. It has been established that tidal and fluvial flooding are the dominant source of flood risk in the area.

7.3 ***Assess if the project is likely to be affected by flooding from all relevant sources both now and in the future:***

The Flood Maps show none of the area of the site could be affected by a breach or overtopping of the defences in the future. The likelihood of a breach in the defences is considered low given their current good condition and the commitment by the relevant authorities to maintain and raise the defences in the medium and long term future.

7.4 ***Assess whether the project will increase the flood risk elsewhere:***

There will be no change in the status of the building or impermeable areas of the site and therefore no increase in flood risk elsewhere.

7.5 ***Demonstrate the project is safe and where possible reduces flood risk overall and proposes measures to deal with the identified effects and risks:***

Whilst it can be accepted there is potential for risk from flooding it is arguable that this scenario is no different to the existing position in that the building is used as an

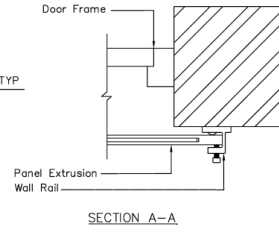
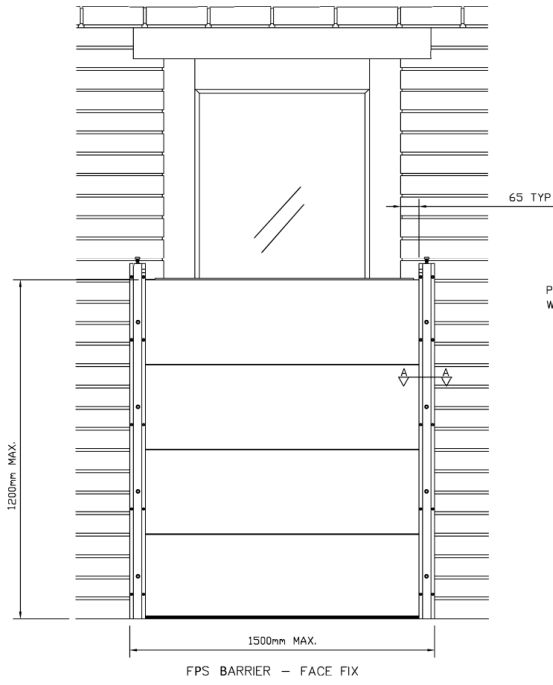
annexe to the dwelling. The proposals are to allow the building to be used, offer somewhere for anybody to stay in the locality, under the same ownership and management of the occupants of the dwelling.

Additionally, there will be early warning systems in place, there will be flood barriers which can be installed in the event of potential flood warnings, there will be safe refuge within the host dwelling which is located only a few metres away, and there will be potential for loft space refuge in a severe emergency event.

- 7.6 This report demonstrates the proposed development is compliant with the requirements of the National Planning Policy Framework, and it is considered that planning permission should not be refused on flood risk grounds.

APPENDIX A – FLOOD WARNING EVACUATION PLAN

APPENDIX B – FLOOD BARRIERS



Dimensions in mm	Flood Protection Solutions Ltd
	Flood Protection Solutions Flood Barrier - up to 2 metres
	www.floodprotectionsolutions.co.uk
	0115 987 0358

