

SHB Design Ltd

FLOOD RISK ASSESSMENT

**PLANNING APPLICATION FOR CHANGE OF USE OF EXISTING
OUTBUILDING TO FORM CRAFT WORKSHOP AND TEA ROOM
AT WEST VIEW HOUSE, MAIN ROAD, GRAINTHORPE, LINCOLNSHIRE LN11 7JS**



The Studio, 1 Acer Court, Grimsby, N E Lincolnshire DN33 2JA

Mobile : 07742 413691

shbdesignltd@btinternet.com

Contents

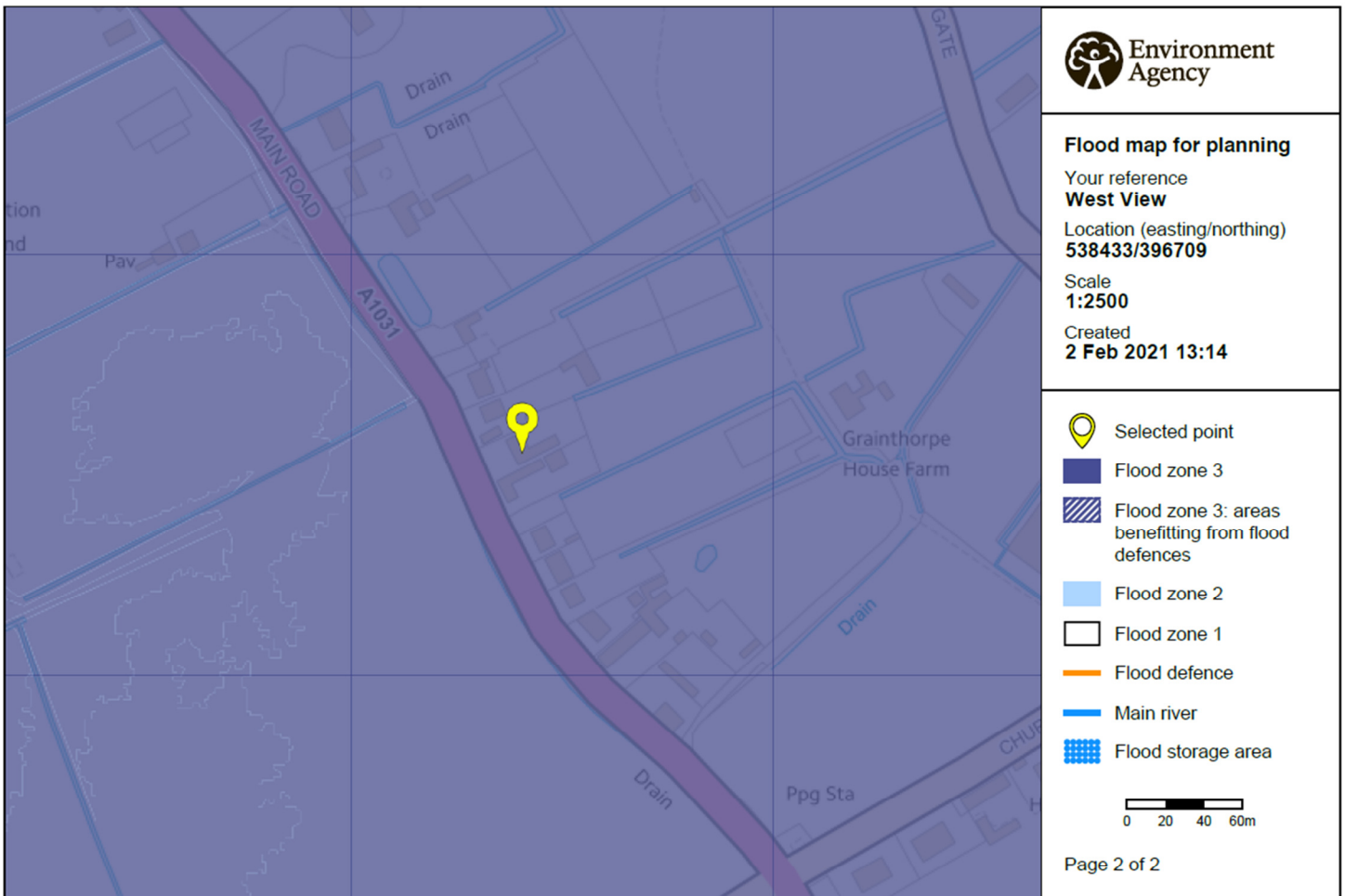
1.0	Introduction	3
2.0	Existing Building	3
3.0	Flood Risk	4
4.0	Existing Flood Defences	4
5.0	Development Proposal	4
6.0	Flood Defence Measures	5
7.0	Impact on Third Parties	6
8.0	Evacuation Procedure	6
9.0	Summary	6
	Appendix 1	7
	Appendix 2	9

1.0 Introduction

This Flood Risk Assessment accompanies a planning application submitted on behalf of Mr & Mrs Bennett for the Change of Use of an existing Outbuilding to form a Craft Workshop and Tea Room at West View House, Main Road, Grainthorpe, Lincolnshire LN11 7JS (hereafter referred to as “the site”).

The site is located on Main Road, Grainthorpe, Lincolnshire.

From reference to the Environment Agency website, the site is within a flood zone 3 which requires a flood risk assessment to be carried out.



© Environment Agency copyright and / or database rights 2018. All rights reserved. © Crown Copyright and database right 2018. Ordnance Survey licence number 100024198.

Zone 3 as defined by PPS25 is a high risk area where the annual probability of flooding with sea defences for the river is 1.0% or greater, tidal and coastal 0.5% or greater which relates to a 1 in 100 year return flood for rivers and 1 in 200 year return in coastal areas.

2.0 Existing Building

The existing building is a single storey detached outbuilding currently used for Hobby Rooms and Workshop for use by the occupants of West View House (the applicants).

The property is constructed in 225mm brickwork walls.

It is proposed that the existing Outbuilding is used as a Craft Workshop and Tea Room.
The Craft Room and Tea Room businesses are to be operated by the applicant who is the owner of West View House.

It is envisaged that the Craft Workshop will be the primary business and tutorial workshop events will be run for upto 10 people at a time.

When the Craft Workshop is not running then the facility will be open (at limited times) as a Tea room for upto 10 people.

The hours of operation will vary but in the main will be during the following periods,

Craft Workshop or Tea Room 10am to 4pm (on selected days NOT 7 days a week)

Craft Workshop only 6pm to 9pm (on occasions and on selected days NOT 7 days a week)

The ground level of the site is 2.500m AOD.

The ground floor level of the existing building is stepped and is at 2.700m and 2.800m AOD.

3.0 Flood Risk

The source of potential flooding for this location is North Sea and the Land Drain to the West side of Main Road..

The site has a future hazard classification of 'danger to most' as defined in Research & Development report FD2320 'Flood Risk Assessment Guidance for New Development'. It could experience flood depths of 1 - 1.6m arising from a breach in the defences during a flood that has a 0.1% chance of occurring in any one year up to 2115.

The Environment Agency has no historic records of any flooding having occurred in the vicinity of the site.

4.0 Existing Flood Defences

There are no known sea defences along the stretch of coastline in the local vicinity.

The Environment Agency have no ongoing projects to reduce or sustain the current flood risk to the site.

The area is covered by the Environment Agency flood warning sirens.

5.0 Development Proposal

Consultation has been undertaken with the Environment Agency and discussions have taken place regarding the level of flood mitigation /safety measures that can reasonably be incorporated to protect the property and life.

Emails have been exchanged with Ms Sharon Nolan, Planning Advisor, and the following is an extract from Ms Nolan's email dated 4th January 2021 (see Appendix 2),

"As this proposal is classed as a Less Vulnerable use, East Lindsey District Council's standing advice for this depth band requires proposals have finished floor levels raised as high as practicable (minimum 300mm above the existing ground level). For single storey buildings finished floor levels should be above the predicted flood depth."

"The Environment Agency would not object to a proposal with FFLs less than this due to the change of use to an existing building. However an area of safe refuge will need to be provided or an appropriate flood warning and evacuation plan will need to demonstrate how this risk will be managed. We would expect the FRA to go through the options we have outlined and explain why they can't be implemented."

“Where no area of safe refuge is provided, it must be agreed with the local planning authority that they are content to manage the risks to the future users of the site through a robust flood warning and evacuation plan. During the preparation of the flood warning and evacuation plan, we recommend entering into early discussions with ELDC’s emergency planners. It is the responsibility of the Local Planning Authority to determine the adequacy of the plan. The area is covered by the Environment Agency flood warning sirens.”

As referred to above, the Environment Agency considers the proposal to be classed as a Less Vulnerable use and therefore it is recommended that the floor levels are a minimum of 300mm above ground level. The existing building has flood levels of between 200mm and 300mm above ground level.

It is not practical or cost effective to raise the lower part of the existing floor level to 300mm above existing ground level as this would necessitate the raising of door openings, with new lintels and associated works, also as the current outbuilding is a finished and decorated building this would also involve altering all floors, skirtings, decorations etc. Such investment would render the project unaffordable as the facilities are intended to be operated on limited hours on a “lifestyle business” basis and will not generate significant profit in order to repay the capital investment.

It is therefore recommended that the existing floor levels are to remain and the Environment Agency, in their email correspondence referred to above, has noted this to be acceptable subject to safe refuge and evacuation procedures being in place and this has been included within the proposals (see section 8.0 for details).

The Craft Workshop and Tea Room businesses are to be operated by the applicants who are the owners of West View House and therefore this dwelling will be available to use as a first floor refuge area in the event of a flood and the building requiring to be evacuated.

It is proposed that foul and surface water will discharge to the existing public sewers.

The existing building is to remain unchanged, therefore no increase in surface water discharge volume will result from the development.

The use as a Tea Room will generate a modest amount of additional foul water discharge but this is not considered to be significant and would not have any detrimental effect on the drainage system.

Minor flooding could occur if local drains become blocked, particularly during periods of heavy rainfall, however the effect on the existing building is similarly likely to be minimal with shallow flooding running down roads where the levels are lower.

6.0 Flood Defence Measures

Construction materials are to be resilient to water ingress to enable the building to dry out in the event of a flood.

Any new electrical supplies are to enter the property at high level.

Electrical circuits and sockets to the ground floor to be installed at least 450mm above floor level.

Management of the building will prepare an emergency flood action plan, making full use of the Environment Agency’s Flood Warnings Direct system.

The business will be registered to the Environment Agency’s AVM flood warning message service.

7.0 Impact on Third Parties

The development proposed is the conversion of an existing building, it is considered that the proposal will not therefore result in an increase in dispersed surface water.

8.0 Evacuation Procedure

The property is to be registered with the Environment Agency's Floodline Warnings Direct system.

Upon notification of a risk of flooding all occupants are to

1. Assess the level of flood risk warning received by reference to the table in Appendix 1
2. Determine the lead time until flood risk occurrence is likely to take place
3. Ensure all occupants of the premises are made aware of the flood warning and level of risk
4. Assemble at the agreed point within the premises
5. Isolate (if safe to do so) all gas and electrical supplies
6. Evacuate the premises if safe to do so and time permits
7. If evacuation of the site is not possible to take refuge on the first floor of the adjacent residential dwelling of West View House (owned by the applicant and proposed business owner) and call 999 and request assistance

9.0 Summary

Whilst the site falls within a zone 3 flood risk area, it has no historical records of flood events.

Extreme flooding events are generally known in advance and as such appropriate action can be taken to alert occupants and protect the building.

The measures taken and materials used during the buildings previous conversion and any future proposed works to mitigate flood damage will minimise damage to the building fabric in the event of flooding.

There is no proposed overnight or sleeping accommodation provided within the proposal.

The proposed use is considered as a Less Vulnerable use by the Environment Agency and the current floor levels are at or close to the ELDC's accepted level of 300mm above ground level, for the conversion of an existing building.

There will be a robust evacuation plan in place and 1st floor refuge is available in the adjacent dwelling at West View House.

It is reasonable therefore to conclude that the residual flood risk for proposed development would be at an acceptable level.

Appendix 1 - Environment Agency Warning Codes

Flood Alert



Key Message: Flooding is possible. Be prepared

Timing: 2 hours to 2 days in advance of flooding

Actions: Be prepared for flooding

Prepare a flood kit of essential items

Monitor local water levels and flood forecasts

Channels:

Floodline Warnings Direct

Floodline

Internet

Flood Alerts are to warn people of the possibility of flooding and encourage them to be alert, stay vigilant and to make early preparations for flooding.

Flood Warning



Key Message: Flooding is expected. Immediate Action Required

Timing: Half an hour to 1 day in advance of flooding

Actions: Act now to protect your property

Block doors with flood boards or sandbags and cover airbricks and other ventilation holes

Move family, pets and valuables to a safe place

Turn off gas, electricity and water supplies if safe to do so

Keep a flood kit ready

Move cars, pets, food, valuables and important documents to safety

Channels: Floodline Warnings Direct

Floodline

Internet

Sirens

Loudhailers

Media

Flood Warnings are to warn people flooding is expected and encourage them to take immediate action to protect themselves and their property.

Severe Flood

Warning



Key Message: Severe flooding. Danger to life

Timing: When flooding poses a significant threat to life and different actions are required

Actions: Stay in a safe place with a means of escape

Be ready should you need to evacuate from your home

Co-operate with the emergency services

Call 999 if you are in immediate danger

Channels:

Floodline Warnings Direct

Floodline

Internet

Sirens

Loudhailers

Media

Severe Flood Warnings are to warn people of a significant risk to life or significant disruption to communities caused by widespread or prolonged flooding, and encourage them to take immediate action to protect themselves and follow the advice of the emergency services.

**Warnings no
longer in force**

(no icon)

Key Message: No further flooding is currently expected for your area

Timing: When river or sea conditions begin to return to normal

Actions: Be Careful. Flood water may still be around for several days and could be contaminated

If you've been flooded, ring your insurance company as soon as possible

Channels: Floodline Warnings Direct
Floodline
Internet

Warnings are removed to inform people that the threat has now passed.

Appendix 2 - Environment Agency Email – 4th January 2021

Steve

From: Nolan, Sharon <Sharon.Nolan@environment-agency.gov.uk>
Sent: 04 January 2021 11:49
To: Steve
Subject: RE: West View House, Main Road, Grainthorpe, Lincolnshire LN11 7JS

Dear Steve

Thank you for your enquiry.

The proposed development site at West View House, Main Road, Grainthorpe is located in Flood Zone 3, defined by the Environment Agency as having a high probability of flooding. A Flood Risk Assessment is therefore required to support the application, which should demonstrate that the proposal will be safe for its lifetime.

The site has a future hazard classification of 'danger to most' as defined in Research & Development report FD2320 'Flood Risk Assessment Guidance for New Development'. It could experience flood depths of 1 - 1.6m arising from a breach in the defences during a flood that has a 0.1% chance of occurring in any one year up to 2115.

As this proposal is classed as a Less Vulnerable use, East Lindsey District Council's standing advice for this depth band requires proposals have finished floor levels raised as high as practicable (minimum 300mm above the existing ground level). For single storey buildings finished floor levels should be above the predicted flood depth.

The Environment Agency would not object to a proposal with FFLs less than this due to the change of use to an existing building. However an area of safe refuge will need to be provided or an appropriate flood warning and evacuation plan will need to demonstrate how this risk will be managed. We would expect the FRA to go through the options we have outlined and explain why they can't be implemented.

Where no area of safe refuge is provided, it must be agreed with the local planning authority that they are content to manage the risks to the future users of the site through a robust flood warning and evacuation plan. During the preparation of the flood warning and evacuation plan, we recommend entering into early discussions with ELDC's emergency planners. It is the responsibility of the Local Planning Authority to determine the adequacy of the plan.

For detailed planning advice, including the review of any Flood Risk Assessment or adequacy of proposed mitigation, you can request our pre-application advice. This service is chargeable at £100 plus VAT per hour.

If I can be of any further assistance please do not hesitate to contact me on the number below.

Kind regards,

Sharon Nolan
Planning Advisor

Our team mail box has changed to LNplanning@environment-agency.gov.uk

Lincolnshire and Northamptonshire Area
Environment Agency
Nene House, Pytchley Lodge Road, Kettering, NN15 6JQ
33525 (internal)
020302 53525 (external)
sharon.nolan@environment-agency.gov.uk