

Adwick Caravans

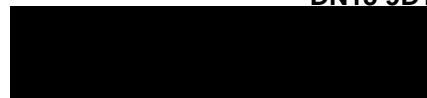
**Proposed Extension to Static Caravan Park
Epworth Fields Holiday Park
Newlands Lane
Epworth
Near Scunthorpe**

Flood Warning & Evacuation Plan

**Prepared by EWE Associates Ltd
Draft Rev0 January 2023**



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1 FLOOD LEVEL ESTIMATES AT SITE

1.1 EA Flood Level Estimates

It is considered that during a 1 in 200 year and the 1 in 1,000 year event within the River Trent that the flood water will be maintained within the main channel and the site will not be flooded. However, during the 1 in 200 year plus climate change flood event the existing flood wall could be overtopped by 0.45m resulting in a hazard rating of “danger to none” due to the site being 2650m from the river. Current EA tidal and fluvial mapping shows that the site will remain dry even during extreme 1 in 1,000 year events.

However, as the site is 2650m from the River Trent it is considered that the site is located within an area which is danger to most if the defences were to breach. It is estimated that during a breach of the defences that the existing site would be flooded to a level of 1.03mOD.

However, the critical flood level for the area has been estimated at 3.8mOD. The existing site is a holiday park. The site is generally at a level of 1.75mOD. It would be impractical to raise the site over 2.1m. As such it is recommended that the bases to the static caravans are lifted by 0.75m to a level of 2.5mOD. The new units are close to existing units and infrastructure making it difficult to raise the units any higher than this without affecting the existing site. The chassis of the static caravan is raised 0.6m above the ground, therefore providing a ground floor level of 3.1mOD. Furthermore, any static caravans or lodges should be chained to the ground to ensure that if the site was to flood then they wouldn't float away and create blockages.

The reception building should be constructed with a ground floor level of 2.5mOD and a first-floor safe area of at least 4.1mOD.

The reception building will be constructed with a first floor level above the 3.8mOD critical flood level which will be a safe area and a flood warning and evacuation plan is developed to ensure that all occupants have left the site prior to a flood arriving. The reception building has a first floor area of approximately 160m² which will be accessed via a permanent staircase from the ground floor level. The proposal is for 17 units each with a maximum occupancy of 4 persons. Therefore, a maximum occupancy of 68 people. The existing site has 24 units each with a maximum occupancy of 4 persons. Therefore, a maximum occupancy of 96 people. The total occupancy within the site would be 164 people if the site is full. It should be noted that the safe area will only be required if the critical flood level occurs at the site which requires a complete failure of all flood defence structures and pumping stations in the area. This would occur over a long period of time allowing for occupants to relocate and therefore the safe area is unlikely to be required for the total site occupation. It should be noted that all modelled overtopping and breach scenarios do not flood the site or its access road to Epworth.

2 FLOOD WARNING PROCEDURE

2.1 Current Procedures

Existing formal Flood Warning Procedures have not been identified within the site at Epworth Fields Holiday Park.

2.2 Limitations of Current Procedures

The proposal is to provide 17 additional static caravans within an existing holiday park. The ground floor level of the static caravans could be flooded to depths of approximately 0.7m based on the EA critical depth of 3.8mOD in the area. However, the EA modelled over topping and breach scenarios show that the site will remain dry. It is considered that an appropriate flood evacuation plan will reduce the risk to the proposed development further and allow the occupants to leave the site prior to the site being flooded.

2.3 EA Flood Warnings

The EA operate a flood forecasting and warning service in areas at risk of flooding from rivers or the sea, which relies on direct measurements of rainfall, river levels, tide levels, inhouse predictive models, rainfall radar data and information from the Met Office. This service operates 24 hours a day, 365 days a year.

Floodline Warnings Direct is a free service operated by the EA that provides flood warnings direct to you by telephone, mobile, email, SMS text message and fax. Sign up for Floodline Warnings Direct by calling Floodline on 0845 988 1188 or online at <https://fwd.environmentagency.gov.uk/app/olr/register>.

If flooding is forecast, warnings are issued using a set of easily recognisable codes, identified in **Appendix F**.

It should be noted that such warnings are issued in respect of flood risk within large river catchment areas and may not specifically apply to the site itself and its immediate neighbourhood: in other words, the EA warning system will frequently issue an alert which may not be applicable to the part of the at-risk-catchment within which the unit lies.

3 GENERAL EVACUATION PROCEDURE

3.1 Safe Exit Plan

Safe Exit Route

The first floor level of the reception building will be at least 4.1mOD. Therefore the first floor will be a safe area even during a critical event.

The Environment Agency will provide at least a 2 hour warning of flooding to the area, therefore, the plan is to escape west along Newland Lane for 1,000m to reach flood zone 1 will be undertaken in the dry.

From here the Safe Exit Plan shown in Appendix C indicates the safest exit route that all people (i.e. occupants and visitors) within the new development should follow once a flood warning has been received. This route is appropriate for vehicle exit from the site.

The exit route and evacuation procedures are appropriate for and should be followed during both construction and operational phases of the proposed development.

Exit Procedure once floods arrive

If occupants of the site find themselves in a position that they have not evacuated the site and reach the centre of Thorne in the dry before the flood water has reached the new development an assessment of the flood depth with the adjacent road should be made.

- If the exit route is flooded it may be unsafe for all users to cross the road safely. All users may need to wait for assistance for the emergency services before crossing. It should be noted that a first floor area will be provided within the reception building above 3.8mOD which will be a safe area during a critical flood event.
- The resources and equipment at the building are enough to support the evacuees – measures to ensure this include the preparation of an emergency kit to be kept easily accessible within the main building. The applicant is aware of the advisories included in the following sections.

From here the Safe Exit Plan shown Appendix C indicates the safest exit route that all people (i.e. occupants, staff and visitors) within the new development should follow once a flood warning has been received.

- It should be noted that there is no statutory power to implement evacuation and the police are only likely to be involved with an evacuation on a priority basis and generally only when lives are at risk.
- The police are not equipped to operate in flood waters and therefore evacuation post flooding tends to fall to the Fire and Rescue Service.

- It should be noted that in times of intensive flooding, the emergency services will experience high levels of demand and are unlikely to be able to manage small scale evacuations unless life was in imminent danger.
- In serious or widespread flooding the Local Resilience Forum partners implement joint plans with joint command protocols. The police role is one of coordination.
- The main purpose of any Flood Evacuation Plan is to implement the evacuation in circumstances and within time scales so as not to leave the vulnerable in jeopardy and to avoid creating additional and unnecessary drain on local services.

Plan Placement

A plan (Appendix C) indicating the flood evacuation route and the procedure (Appendix E) should be placed in each unit and be A4 in size.

The individual needs of the occupants and times required to evacuate specific users of the building will be assessed by the occupants. The occupants will be responsible for producing and issuing the plan. The plan can be trigger by the occupants. They will also ensure that the plan is adhered to and will be undertaken a thorough post evident debrief to establish the effectiveness of the plan. Occupants will make modifications based on lesson learnt from flooding at the site or other relevant sites to ensure the plan has the optimum opportunity for success on any subsequent occasions.

4 USEFUL TELEPHONE NUMBERS AND WEBSITES

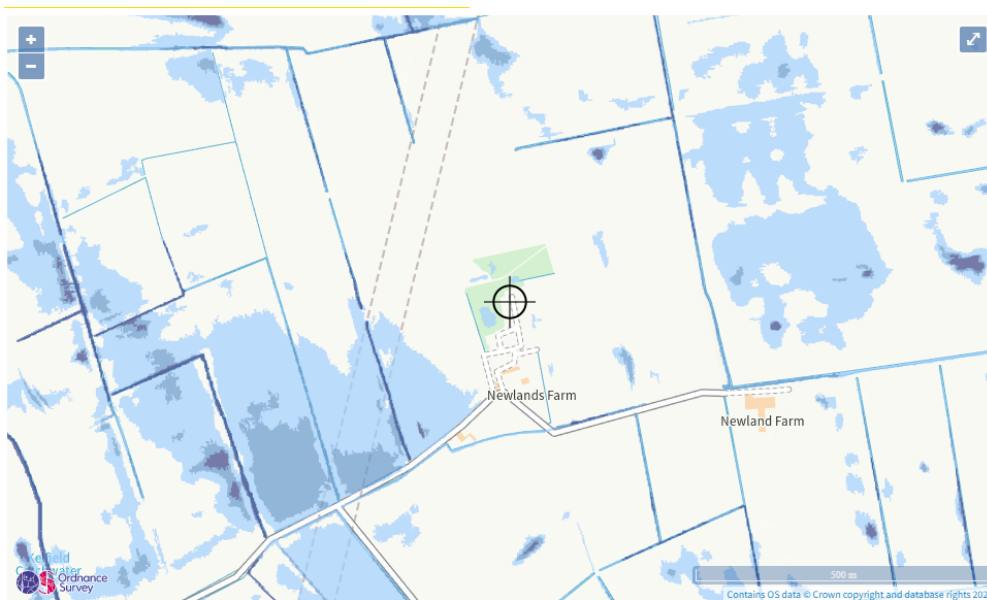
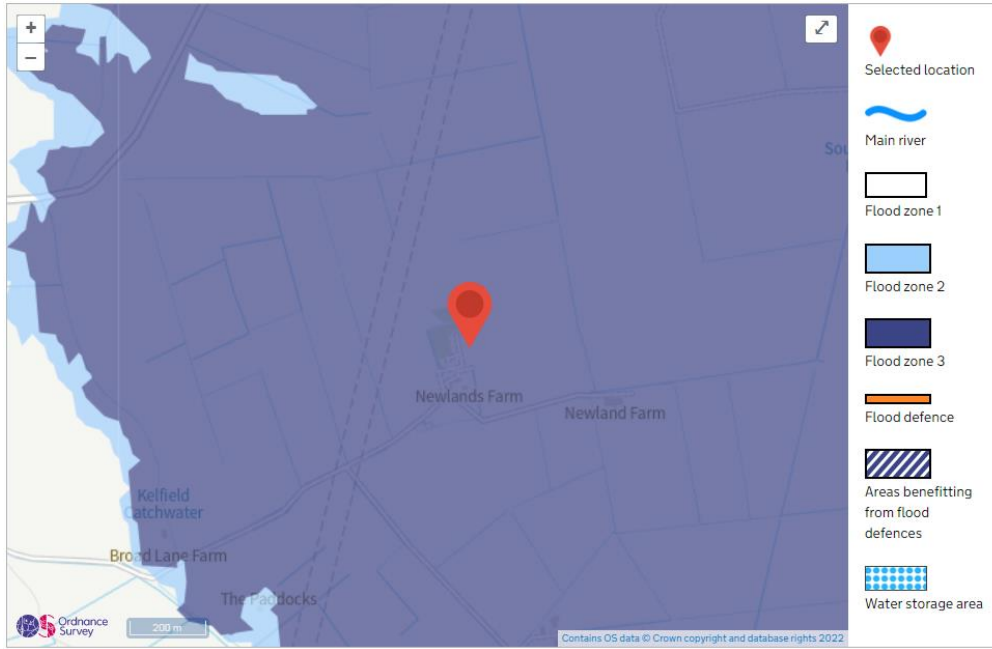
4.1 Telephone Numbers

- Floodline Direct (Environment Agency) - **0845 988 1188**
- Doncaster Police Station, 70 Waterdale Doncaster DN13BU – **0114 2196905**
- Doncaster Fire and Rescue, Leicester Avenue Doncaster DN26DR – **0114 27207202**
- Doncaster Royal Infirmary, Armthorpe Road Doncaster DN25LT – **01302 366666**
- General Emergency Services Number – **999**

4.2 Websites

- <http://www.environment-agency.gov.uk/subjects/flood>
- <http://www.southyorks.police.uk>
- <http://www.syfire.gov.uk>
- <http://www.dbth.nhs.uk>
- <http://www.defra.gov.uk>

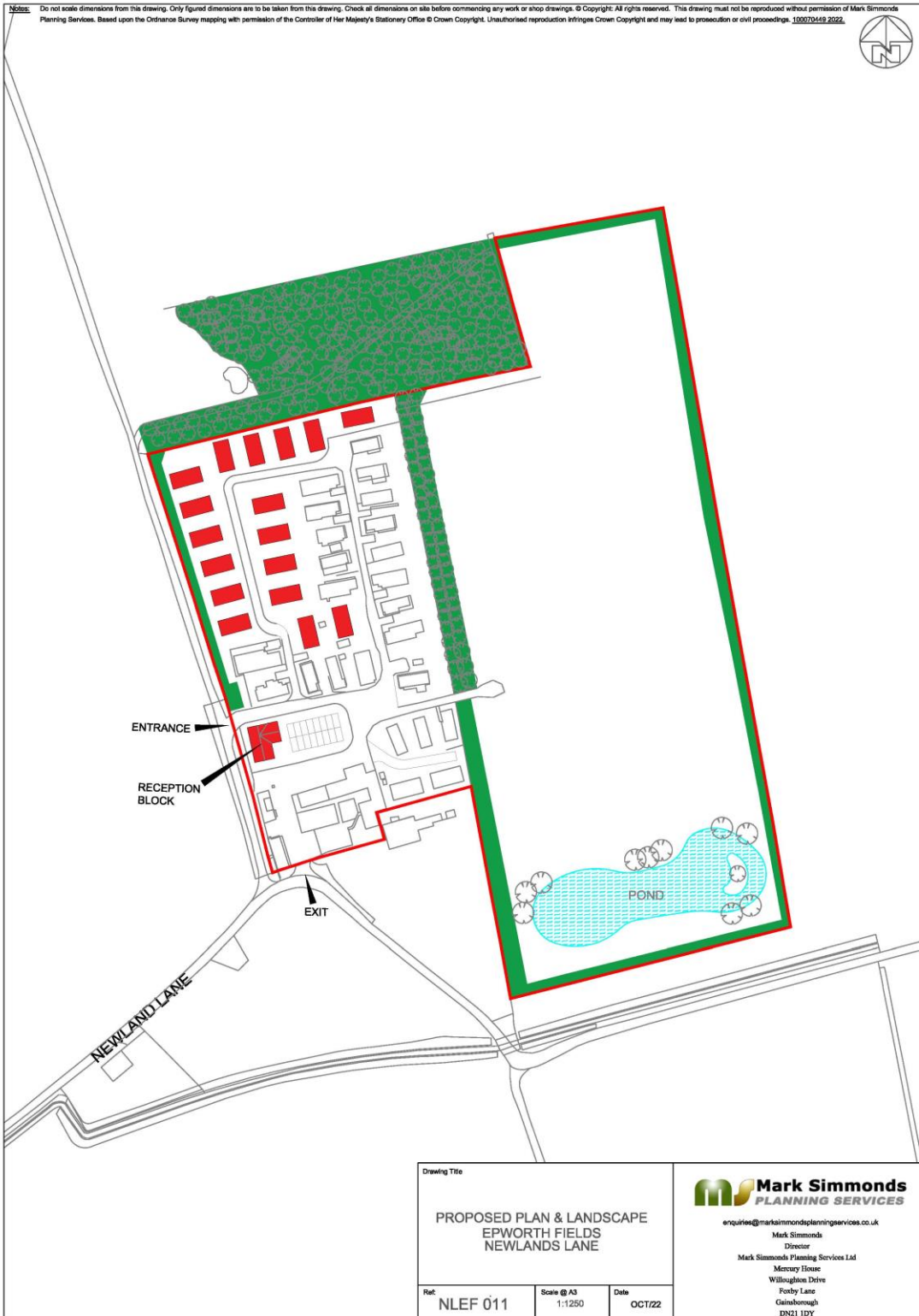
Appendix A: - Flood Map of Area



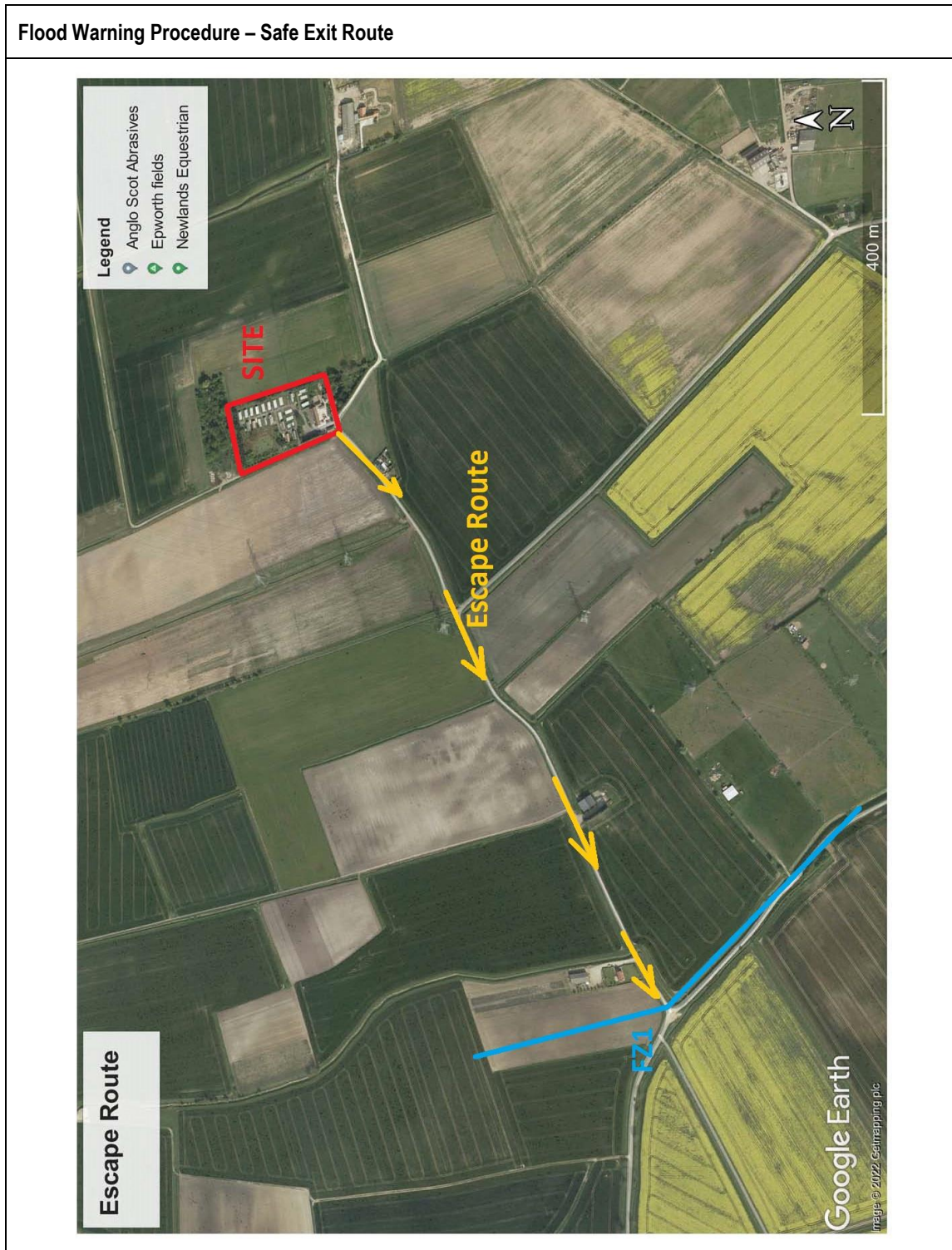
Extent of flooding from surface water

● High ● Medium ● Low ○ Very low 📍 Location you selected

Appendix B: - Proposal Plan



Appendix C: - EVACUATION ROUTE



Appendix D: - FLOOD PLAN

Every unit should be given a copy of this flood plan upon taking ownership of their property and will be kept up to date with any changes to this plan. Included in **Appendix G** is a copy of the Environment Agency Personal Flood Plan Template. This should be filled in by the unit occupant as it will help them to prepare for flooding and provide a useful source of information in the case of an emergency, as it will contain the numbers for emergency services, local council and other necessary contacts. The residents should sign up to the Environment Agencies Floodline Warnings Direct System as detailed in **Section 1.3** of this plan. This will allow them to receive timely updates and flood warnings that may affect them. Further information regarding weather warnings can be gathered from the Met Office Website, local radio and news. Occupants should prepare a Flood Kit and keep this in a safe, dry place. The kit should include:-

- Torch (windup if possible or spare batteries)
- Blankets
- Waterproof clothing
- Wellingtons
- Water
- Non-perishable food
- First aid kit
- Portable radio (windup if possible or spare batteries)
- Rubber gloves
- Medications
- Mobile Phone
- Key personal documents (in a waterproof folder)
- Toys for children or pets
- A copy of this flood plan

It is recommended that precious items such as photo albums, insurance documents, passports and other important documents are not kept on site. The individual units are located below the predicted critical flood level of 3.8mOD.

In the event of flooding the site should be evacuated prior to flood waters reaching the properties. Evacuation from the site should follow the routes shown on the plan included in **Appendix C**. Units should be secured and electricity, gas and water supplies shut off wherever possible.

HumberSide Police will lead the evacuation of areas affected by flooding and they hold evacuation plans for the area. There are designated evacuation points/rest centres that are made available in the event of flooding. The nearest ones to the site are located below:

- to be provided by occupants as plan evolves
- to be provided by occupants as plan evolves

In the event that floodwaters reach the building prior to evacuation taking place then residents should remain within the building and await rescue by the emergency services.

Occupants should only return to units when it safe to do so.

The emergency services working with other key agencies in the Local Resilience Forum would provide factual information about general conditions in terms of further anticipated flooding, and any associated risk and if they were able, for example they would give information on the status of utilities etc., or other key information that may be available.

In light of this, occupants would be advised to follow local media reports and gauge for themselves, given their own personal circumstances when it might be sufficiently safe to return. For example, young fit and abled individuals may well feel a return to their property was 'safe' for them where a family with young children may not.

In addition to the above, individual parties would need to assess any post flooding damage to determine whether it was safe or suitable to return to a property to live.

The following procedure should be followed by all residents:

General Conditions – No Warnings Received

The **Occupants** should be aware of potential risk factors (forecasted bad weather, tide times) which may result in a change in flood warning.

The **Occupants** shall pay particular attention to weather conditions and flood warnings during these times of high risk.

Although the Environment Agency undertake to formally provide a 2 hour notice of flooding the following will give a very clear indication of potential flooding in this County:

- Short periods of very intensive precipitation
- Long periods of less intensive precipitation
- Any combination of the two
- The risk is exacerbated when river levels are already high or the ground is saturated and flood plains are at or nearing capacity.

Flood Alert

Upon receipt of a 'Flood Alert' Warning the **Occupants** shall:

- Notify any vulnerable individuals of the Flood Watch warning level.
- Check that the Flood Emergency Kit is available and in good condition.
- Monitor weather conditions and EA flood forecast (using the EA website).

Weather Conditions can be monitored using the following services:

- Weather Advice – www.metoffice.gov.uk
- News Services – www.bbc.co.uk/news
- AA Roadwatch (broadcasts warnings) – www.theaa.com
- Local Radio Stations

Appendix E: - FLOOD PLAN NOTICE

General Conditions – No Warnings Received

The **Occupants** should be aware of potential risk factors (forecasted bad weather, tide times) which may result in a change in flood warning.

The **Occupants** shall pay particular attention to weather conditions and flood warnings during these times of high risk.

All residents should sign up to receive the EA Flood Warnings by ringing 0845 988 1188.

Flood Alert

Upon receipt of a 'Flood Alert' Warning the **Occupants** shall:

- Notify any occupants or vulnerable individuals of the Flood Watch warning level.
- Check that the Flood Emergency Kit is available and in good condition.
- Monitor weather conditions and EA flood forecast (using the EA website).

Flood Warning

Upon receipt of a 'Flood Warning' the **Occupants** shall:

- Notify any occupants or vulnerable individuals of increase in flood warning level.
- Visually monitor the water levels within the vicinity of the site– minimum half hourly,
- Cancel any anticipated deliveries.
- The Development Flood Warden should ensure all residents know there is a Flood Warning.
- Each **Occupant** should ensure the Development Flood Warden knows there is a Flood Warning.

Severe Flood Warning

Upon receipt of a 'Flood Severe Warning' the **Occupants** shall:

- Notify any occupants or vulnerable individuals of the increase in flood warning level.
- Continue regular visual monitoring of water level within the vicinity of the site (as above).
- The Occupants should decide when to remove all cars and bicycles from the on site car parks
- The Occupants should decide when to evacuate the premises such that escape route is still dry

Evacuation

At any time should water levels exceed the South Soak Drain bank top level then the **Occupants** should immediately evacuate the building. This shall involve:

- **Occupants** to isolate building services (gas / water / electric)
- Evacuation of all residents. **Occupants** shall gather immediate family members and any guests, collect the **Flood Kit** and leave the building. All buildings should be secured on leaving. Residents to be aware of vulnerable individuals who may need assistance securing and leaving their premises. All residents should move to the designated areas of higher ground within Epworth where they will muster. Residents are to follow the direction of the emergency services at all times. Where necessary move to the nearest evacuation point/rest centre or as directed.

The Occupants should check all the residents and visitors have evacuated the buildings.

The Flood Evacuation Route is included in **Appendix C**.

- Any cars / bicycles within the car park at the start of a building evacuation shall be left in place. No attempt shall be made to remove these vehicles from site once a building evacuation has commenced.
- State the Rest Centres when known?




Water Level Dropping or Warnings no longer in force

As noted the Flood Warnings identify a potential rather than actual threat. It is noted therefore that not all events will result in an automatic progression from one warning to another with the end result being flooding of the site. It is possible for smaller events to trigger initial warnings with water levels dropping before flooding of the site occurs.

If visual monitoring confirms a sustained drop in water level over an hour period the site can revert to a Flood Watch status, until such time as the EA remove the catchment wide flood warning and provide an 'All Clear'.

Under no circumstances should anyone attempt to re-enter a building to isolate services once flooding has started. At no point should any individual put his/her life in danger by entering flood waters.

Appendix F: - ENVIRONMENT AGENCY WARNING CODES

<p>Flood Alert</p> 	<p>Key Message: Flooding is possible. Be prepared</p> <p>Timing: 2 hours to 2 days in advance of flooding</p> <p>Actions: Be prepared for flooding Prepare a flood kit of essential items Monitor local water levels and flood forecasts</p> <p>Channels: Floodline Warnings Direct Floodline Internet</p> <p><i>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.</i></p>
<p>Flood Warning</p> 	<p>Key Message: Flooding is expected. Immediate Action Required</p> <p>Timing: Half an hour to 1 day in advance of flooding</p> <p>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</p> <p>Channels: Floodline Warnings Direct Floodline Internet Sirens Loudhailers Media</p> <p><i>Flood Warnings are to warn people flooding is expected and encourage them to take immediate action to protect themselves and their property.</i></p>
<p>Severe Flood Warning</p> 	<p>Key Message: Severe flooding. Danger to life</p> <p>Timing: When flooding poses a significant threat to life and different actions are required</p> <p>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</p> <p>Channels: Floodline Warnings Direct Floodline Internet Sirens Loudhailers Media</p> <p><i>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.</i></p>
<p>Warnings no longer in force</p> <p>(no icon)</p>	<p>Key Message: No further flooding is currently expected for your area</p> <p>Timing: When river or sea conditions begin to return to normal</p> <p>Actions: Be Careful. Flood water may still be around for several days and could be contaminated</p> <p>Channels: If you've been flooded, ring your insurance company as soon as possible Floodline Warnings Direct Floodline Internet</p> <p><i>Warnings are removed to inform people that the threat has now passed.</i></p>

Appendix G: - ENVIRONMENT AGENCY
 PERSONAL FLOOD PLAN

Personal flood plan

Name

Environment Agency

Let us know when you've completed your flood plan by calling Floodline on 0845 988 1188.
 This will help us learn more about how people are preparing for flooding.

Are you signed up to receive flood warnings?
 If not call Floodline on 0845 988 1188 to see if your area receives free flood warnings.

General contact list	Company name	Contact name	Telephone
Floodline	Environment Agency		0845 988 1188
Electricity provider			
Gas provider			
Water company			
Telephone provider			
Insurance company and policy number			
Local council			
Local radio station			
Travel-/weather info			

Key locations

Service cut-off	Description of location
Electricity	
Gas	
Water	

Who can help/who can you help?

Relationship	Name	Contact details	How can they/you help?
Relative			
Friend or neighbour			

Be prepared for flooding. Act now

Personal flood plan

What can I do NOW?

Put important documents out of flood risk and protect in polythene

Check your insurance covers you for flooding

Look at the best way of stopping floodwater entering your property

Make a flood plan and prepare a flood kit

Find out where you can get sandbags

Identify who can help you/ who you can help

Identify what you would need to take with you if you had to leave your home

Understand the flood warning codes

What can you do if a flood is expected in your area?

Actions	Location
Home	
1 Move furniture and electrical items to safety	
1 Put flood boards, polythene and sandbags in place	
1 Make a list now of what you can move away from the risk	
1 Turn off electricity, water and gas supplies	
1 Roll up carpets and rugs	
1 Unless you have time to remove them hang curtains over rods	
1 Move sentimental items to safety	
1 Put important documents in polythene bags and move to safety	
Garden and outside	
1 Move your car out of the flood risk area	
1 Move any large or loose items or weigh them down	
Business	
1 Move important documents, computers and stock	
1 Alert staff and request their help	
1 Farmers move animals and livestock to safety	
Evacuation - Prepare a flood kit in advance	
1 Inform your family or friends that you may need to leave your home	
1 Get your flood kit together and include a torch, warm and waterproof clothing, water, food, medication, toys for children and pets, rubber gloves and wellingtons	

There are a range of flood protection products on the market to help you protect your property from flood damage. A directory of these is available from the **National Flood Forum** at www.bluepages.org.uk

Be prepared for flooding. Act now

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