

**CAR DISMANTLING BUSINESS AT THE YARD, OLD SHIP INN,
BECK BANK, GOSBERTON CLOUGH, SPALDING, PE11 4JL.**

FLOOD WARNING AND EVACUATION PLAN

Written by

Stuart Hemmings B Sc C Eng MICE MIWEM

13 Lea Gardens

Peterborough

PE3 6BY

Tel: 01733 566966 or Mobile: 07804 189365

stuart.hemmings@btinternet.com

15th March 2023

Introduction

This Flood Warning and Evacuation Plan has been written to inform the owners, managers, staff and workforce of their responsibilities in monitoring, recording and reacting to the flood risk at the site of the Car Dismantling Business east of Beck Bank, Gosberton Clough. The plan will be issued to the emergency services to ensure responding agencies are aware of the pre-planned emergency measures.

The aim of this plan is to enable a safe and well organised evacuation of all staff and workforce on the site during a major flood event should one occur.

The main objective of this plan is to raise awareness of the risk of the site being flooded, to detail the Flood Warnings and to outline how the plan is triggered and what actions are required by all managers, staff, the workforce and any visitors to the site. Everyone working on the site should be issued with a copy of the plan so that they are aware of what they should do in the event of an extreme flood event affecting the site and to ensure their safe evacuation from the site if this is necessary. The Evacuation plan will be clearly displayed on the site Notice Boards.

All new staff and workmen should be given a full briefing on the flood risk including this FEWP at their induction course and the plan will explain how it is to be used in the event of a flood event arising from high water levels in the South Forty Foot Drain or a breach in the bank of the tidal River Welland or the River Glen.

Environment Agency Flood Zone Mapping

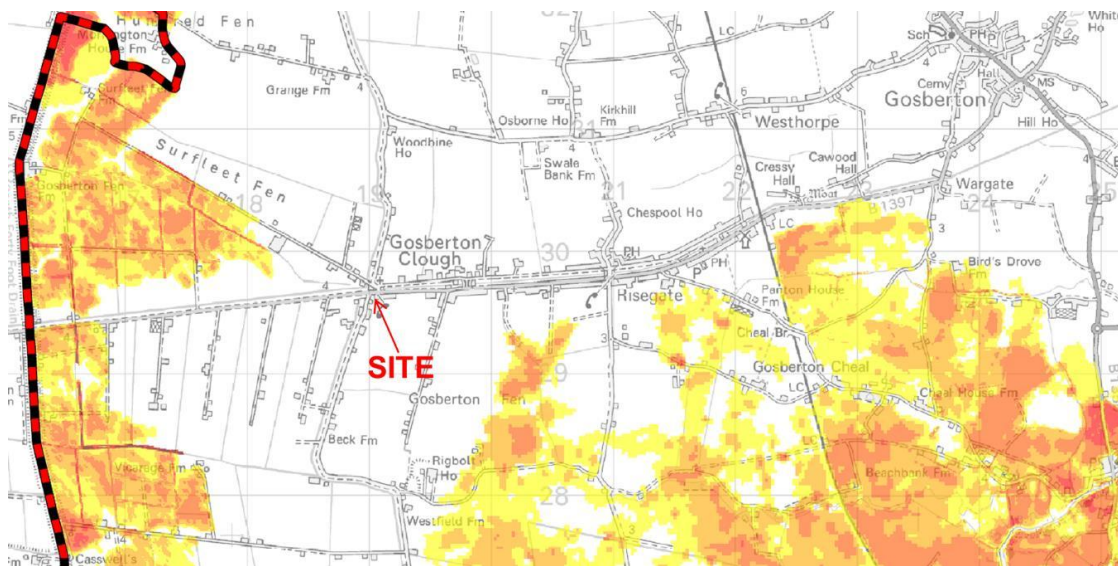
The site is located within a defended area which possibly could flood if flood defences were to fail or pumping stations failed to operate. Most of the site is classified as being within flood zone 1 as shown on the Environment Agency's Flood Maps, an extract from which is shown below.



Flood zone 1 is defined as areas that have a less than 0.1% chance of flooding, and with this categorisation the site can be considered to be at a low risk of flooding, even in an extreme flood event.

Flood Risk to the Site

The risk of either fluvial or tidal flooding to the site is extremely low and would only occur following a rare combination of events such as a breach of the defences at the peak of an extreme tide surge event or after extremely high and prolonged rainfall. The plan below shows the predicted flood depths in this area if a breach occurred in the bank of the River Welland or the River Glen, or if the South Forty Foot Drain overtopped its banks.



The site could become flooded if a failure occurred in one of the following watercourses:

South Forty Foot Drain (located 2.9 km west of the site).

River Glen (located 4.75 km south of the site).

River Welland (9.2 km east of the development site).

Risk of Flooding from the South Forty Foot Drain.

When the level of the South Forty Foot Drain exceeds a level of 3.00m ODN water will flow over the banks flooding lower land south of the site west of West Pinchbeck. As the level of the site is approximately 3.40m ODN (400mm above the maximum level in the SFFD) then it will not be affected by very high water levels in this watercourse.

As this site is within the South Forty Foot Catchment the automated Environment Agency Flood Alert or Flood Warning will normally warn of the following:

- Flooding in Swaton
- Flooding to the B1177 north of Horbling from the Beck
- Flooding in the villages of Threkingham and Horbling from watercourses west of the South Forty Foot Drain.

The site will only flood if the whole of the land area between the South Forty Foot Drain and the site is flooded. Therefore if a flood alert or warning is received from the Environment Agency then the Manager of the site should immediately check whether the land west of the Hammond Beck (the watercourse on the west side of Beck Bank) is flooded and should continue to check if any land becomes flooded. The Manager should also watch the water level of the Hammond Beck which will be very high before any flooding of the site starts to occur.

Risk of Flooding from the River Glen.

The River Glen is an embanked watercourse which conveys water from west of Bourne to the outfall at Surfleet Seas End. If a breach occurred in the north bank of this watercourse after very high and consistent rainfall flood water would flow towards the site. However much of the land between the the River Glen and the site is approximately 1.0 metres lower than the level of the site and flood water would need to be at least 1.0 metres deep in many places before any flood water would be seen on the land west of Hammond Beck.

If a flood alert or flood warning were to be received because of a breach in the bank of the River Glen the Manager should look at the levels in the Hammond Beck, which could rise rapidly conveying the water northwards. If these levels approach the level of Beck Bank the Manager should close and evacuate the site.

Risk of Flooding from the River Welland.

The River Welland is tidal east of the site and if a breach occurred in the west bank of the river flood water would flow towards the site. The risk of tidal flooding of the site is extremely low and would only occur following a rare combination of events such as a breach of the defences at the peak of an extreme tide surge event. A tide surge is dependent on a combination of extreme high tides and weather conditions in the North Sea. which occurs normally during the winter months. The area is protected from flooding by the flood defences along the coastline.

There are areas of land, particularly around Gosberton, between the River Welland and the site which are at a higher level which reduces the risk of flood water reaching the site. It is assumed that the Environment Agency would warn the whole area if the area of flooding was extending towards Gosberton Clough. The manager should listen to Radio Lincolnshire and other media and follow the instructions from the Environment Agency.

Flood Warning From the Environment Agency.

The Environment Agency aim to provide at least 2 hours warning between the Flood Warning alert being issued and the commencement of flooding.

The operator of the site should ensure that the site is registered with the Environment Agency's **Flood Warnings Direct** free flood warning service for the **Site Manager** to receive all levels of warnings including alerts. The Environment Agency will send them a message via a Text, E-mail, mobile or landline or Fax when these have been issued.

In the event of an advance warning being received of a possible flooding to the site itself the manager of the site should ensure that all staff and workmen are informed of the situation. Also, the Environment Agency's website should be monitored regularly for new warnings.

All staff using the site facilities will familiarize themselves with the evacuation procedure and evacuation route, which will be given to them. Local Radio (Lincolnshire Radio and Lincs FM) will be a good source of information on the flood risk.

It is relevant to note that the planning approval only allows the site to operate between 08.00am to 17.00pm. Therefore no-one will be at danger during periods of darkness, which reduces the risk to all workers on the site.

Details of Flood Warnings.

The Plan will have **four** trigger points:

1. Flood Alert



The Environment Agency will issue a Flood Alert status when flooding is possible. Issued 2 hours to 2 days in advance of flooding. The **Site Manager** will be informed and they will inform all staff and workforce on the site that a FLOOD ALERT status had been received.

Means; - Flooding of low-lying land & roads is expected.

What to do;

- Monitor local news and weather forecasts
- Check on an hourly basis with Floodline for updates
- Be aware of water levels near you. Check if river levels are rising. If water is already on the floodplain, consider leaving the site.
- Be prepared to act on your Flood Plan
- Charge mobile phones.

Think about what items you would want to move to safety during a flood.

As this site is within the South Forty Foot Catchment the automated Environment Agency Flood Alert or Flood Warning will normally warn of the following:

- Flooding in Swaton
- Flooding to the B1177 north of Horbling from the Beck
- Flooding in the villages of Threekingham and Horbling from watercourses west of the South Forty Foot Drain.

It is not likely that the roads around Gosberton Clough will be at risk of flooding from the above alert, but the Manager should listen to Local Radio to ascertain the probability of flooding in the Gosberton Clough area.

2. Flood Warning



The flood warning will be issued, half an hour to 1 day, in advance of flooding, when water levels are rising, it is advised to safeguard the property and prepare to evacuate.

The **Site Manager** will ensure upon receipt of this warning that steps are taken to close the site. In the case of the situation deteriorating but if there is water already on the flood plain, be aware that parts of the evacuation route may be flooded. All important office machinery and records should be moved to a safe place as high as possible.

The safe evacuation routes are shown on page 6. If the source of flooding is from the South Forty Foot Drain or the River Glen then the escape route should be eastwards along the B1397.

If the source of flooding is a breach or overtopping of the tidal River Welland then the escape route should be westwards along the B1397.

Means; Flooding of homes and businesses is expected to ACT NOW.

What to do.

- Act on the flood plan
- Move all cars to safety
- Prepare to turn off gas, water and electricity from all equipment. Safety lockout procedures should be used
- Protect yourself, and help others

3. Severe Flood Warning



A severe flood warning means that severe flooding is expected. This will be issued when flooding poses a significant threat to life and different actions are required. There will be an extreme danger to life and property and people are advised to act immediately i.e. **Evacuate if safe to do so.**

If this situation occurs then much of the land surrounding Gosberton Clough will already be flooded. This flood water will only be rising slowly. It is assumed that as this situation will have taken at least a day or two to develop the Site Manager and the workforce will be staying at their homes to ensure that suitable flood precautions have been made at their homes.

Upon receiving this warning, the **Site Manager** must, if he has not done so already, **close down** the site. The local authority, the emergency services and the Environment Agency will be managing the situation, with widespread flooding potentially over a large area, and will endeavour to provide advice on an evacuation route, shelter and assistance to the evacuees. Ensure that all staff involved in the flood plan know the location of the gas, electricity and water main supplies and how to turn them off.

Before evacuating the site, the **Site Manager** must ensure that the site is secure. If flood waters have entered the site, switch off all power by removing the mains isolators, to minimise risk of fire or electrocution. All staff should be sent home. Staff are advised to call the Site Manager for further information on the site reopening.

Means: Act now as severe flooding is expected and extreme danger to life and property.

What to do;

- If safe to do, stay in a high place, with a means of escape or evacuate the site as stated in the plan or as advised by the Emergency Services.
- Avoid electricity sources
- Avoid walking or driving through flood water
- In danger, call 999 immediately
- Listen to emergency services.

Act on the flood plan.

4. **Warnings no Longer in Force-**

Means: - No further flooding is expected. Water levels will go down.

What to do;

- Listen to emergency service.
- Keep listening to weather reports
- Only return to evacuated sites when told to do so.
- Beware of sharp objects and pollution in floodwaters.

When the Environment Agency has issued the all clear notice for the area, the **Site Manager** should contact the local authority to check that it is safe to return to their property.

The **Site Manager** should be aware that if floodwaters have flooded the site and buildings the latter will need to be cleaned disinfected and repaired and fully dried out

prior to reoccupation. Ask for advice before cleaning up. The building must be checked to ensure it is safe before entering the building, and if there are any doubts professional opinion should be sought.

If there is any doubt that appliances may be water damaged, they must be checked before switching the power or gas back on. Contact the insurance company as soon as possible to get their approval before arranging any clean-up or repairs.

Annual Review

This Flood Evacuation Plan should be reviewed at least annually, in accordance with Environment Agency guidance and considering the rise in sea/river level due to global warming and the following actions: -

- Read and understand the plan and update the contact lists.
- Contact the Environment Agency to check that the flood risk to the property has not changed.
- Contact the Environment Agency Floodline Service to ensure that you are still registered to receive flood alerts by your preferred method.
- Know how and where to isolate gas, water and electric supplies.
- At least once a year a test, of the evacuation plan will be carried out with all staff to ensure that all they are familiar with the plan and its procedures.

An Emergency grab kit must be provided on site within a safe area and maintained on a regular basis, which contains the following: -

- Bottled water
- A first-aid kit, including a supply of any essential medication.
- A windup or battery torch radio and supply of batteries.
- A list of useful telephone numbers.
- Wellington boots or similar waterproof boots.
- Know how to turn off the gas, electricity and water mains supplies.
- A copy of the insurance cover – ensure it covers flood damage.

REMEMBER

Do not walk through flowing water- Currents can be deceptive and shallow fast flowing water can knock you off your feet.

Do not swim through fast flowing water- You may get swept away or struck by an object in the water

If you must walk in standing water- Use a pole to ensure that you do not step into deep water, open manholes or ditches.

Do not drive through a flooded Area- You may not be able to see abrupt drop offs and depths over 0.5m can carry a car away.

Avoid contact with flood Water- It may be contaminated with sewage, oil chemicals or other substances.

The **Floodline** telephone number is **0345 988 1188** for up to date flood information.