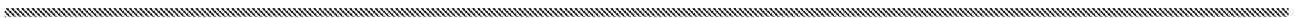
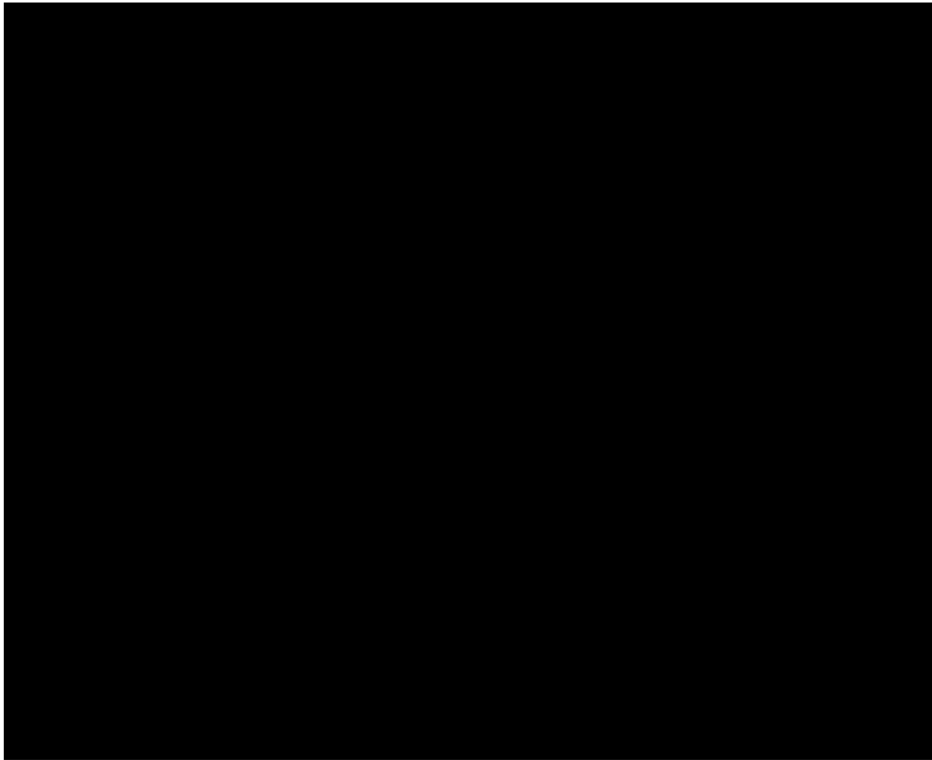


Client: Riverside Caravan Centre
Flood Evacuation Plan for the
Riverside Caravan Centre
Bognor Regis

September 2019





Client: Riverside Caravan Centre

Flood Evacuation Plan for the Riverside Caravan Centre Bognor Regis

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Written by	Checked by
1	0	Final FEP issued by email.	10 June 2013	AB	SMB
2	1	Final FEP issued by email.	17 September 2019	AW	KT



www.herringtonconsulting.co.uk

This report has been prepared by Herrington Consulting Ltd in accordance with the instructions of their client, **Riverside Caravan Centre**, for their sole and specific use. Any other persons who use any information contained herein do so at their own risk.

© Herrington Consulting Limited 2019

This page is left intentionally blank

Contents

1	Scope, Objectives and Background	1
1.1	<i>Site Location and Access/Egress Points</i>	2
1.2	<i>Staff Training & Induction</i>	4
1.3	<i>Site Hazards</i>	4
2	Environment Agency's Flood Warning Service	7
2.1	Environment Agency's Flood Symbols	8
3	Flood Warning Procedure	10
4	Flood Evacuation Plan	12
5	Evacuation Leaflet	14
A	Appendices	Appendices

This page is left intentionally blank

1 Scope, Objectives and Background

Flooding is a major issue in the United Kingdom. The impacts can be devastating in terms of the cost of repairs, replacement of damaged property and loss of business. The objective of this Flood Evacuation Plan (FEP) is therefore to allow the Riverside Caravan Centre to be evacuated safely during times of heightened flood risk at the site.

Prior to the development of this Flood Evacuation Plan, Herrington Consulting Ltd. had been commissioned by Riverside Caravan Centre to prepare a Flood Risk Assessment (FRA) to accompany the planning application for the extension of the permitted holiday season at the Riverside Caravan Centre. This document outlined the risk of such an event occurring and the potential consequences.

Whilst the findings of the report recommended that the development is suitable for its location within the flood risk area, it was, however, also recommended that a Flood Evacuation Plan should be developed for the site, and adopted by the caravan site owners/manager. Consequently, this document has been developed based on those recommendations.

The main aims of this emergency plan are therefore to reduce the risk to life, mitigate damage, and enable a safe and well organised evacuation of the occupants of the premises, before the onset of a flood event. Furthermore, the objectives of this flood warning and evacuation plan are to:

- Raise awareness of the risk of flooding at Riverside Caravan Centre
- Detail the flood warnings and estimated lead time available
- Detail how the plan is triggered, by who and when
- Define any areas of responsibility for those participating in the plan
- Describe what actions are required by the people in the houses
- Establish a safe route to a safe location (above the flood level)
- Outline the evacuation procedure to enable the occupants of Riverside Caravan Centre to reach a safe place of refuge.
- Establish procedures for implementing the plan & updating the plan

The plan should be adopted by the residents and staff of the caravan centre as it includes references to the practical access/egress routes to/from the site during times of flooding. The plan also refers to the Environment Agency's Flood Warning System and identifies how regular updates can be obtained on both a local and regional scale, through the use of media such as radio, television and the internet.

1.1 Site Location and Access/Egress Points

The site is located on the northern extents of the coastal town of Bognor Regis and is accessed primarily from the Shripney Road (A29). The location of the caravan centre site and its primary access point is shown in Figure 1.1 below.

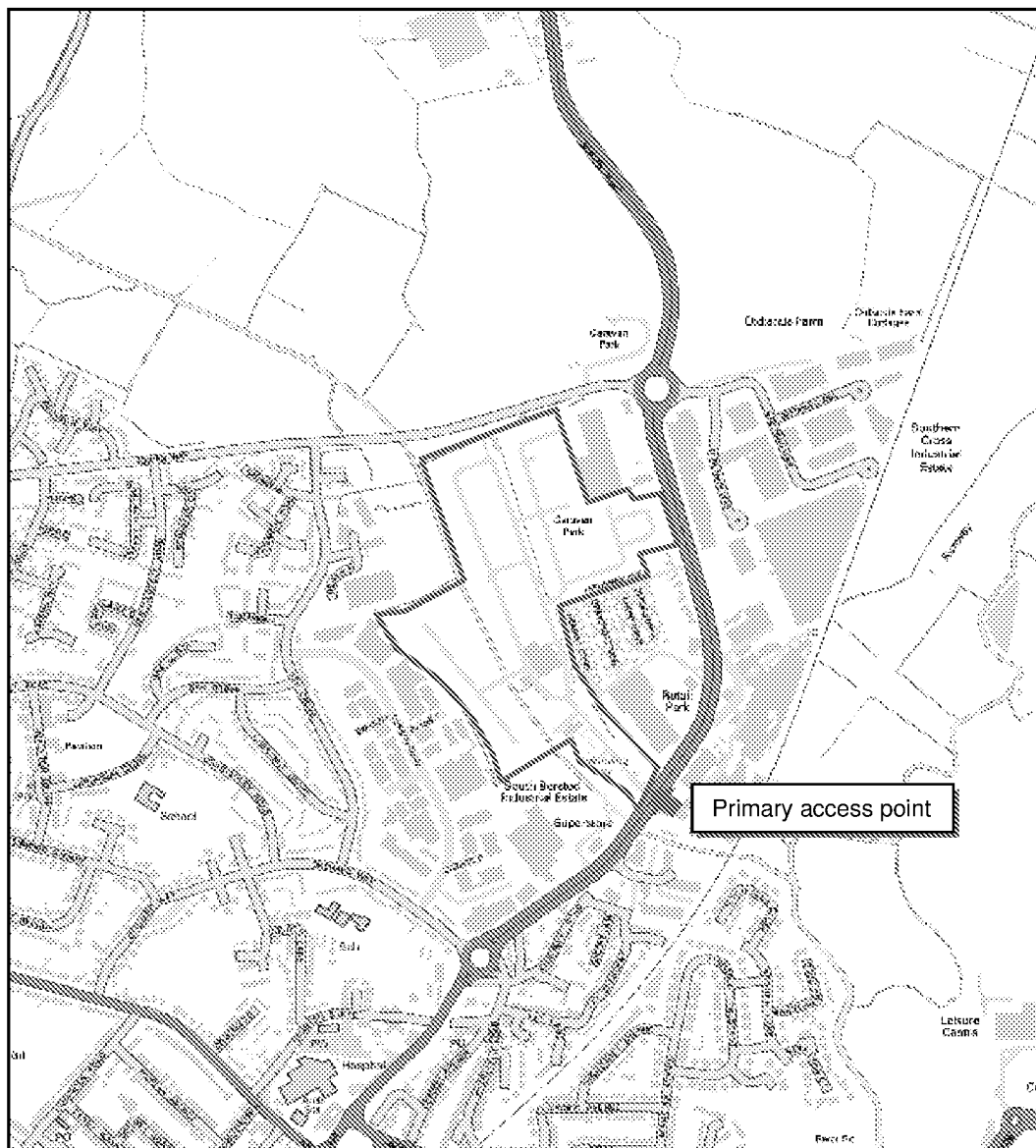


Figure 1.1 – Location of the site (red outline) and Primary Access Point (Contains Ordnance Survey data © Crown copyright and database right 2019).

The Aldingbourne Rife is shown running through the middle of the Caravan Centre. Currently, there are approximately 700 caravans located within the Riverside Caravan Centre site, which consist of privately owned static caravans, static caravans rented to holiday makers by the Centre itself and unoccupied vans that are for sale.

Due to the mixed nature of the site, in use as a holiday centre and used by private owners, it is almost impossible to know the exact population of people within the site boundaries at any one

time. Therefore, it is of utmost importance that the FEP takes into account this unknown population and a robust system is adopted at times of heightened flood risk to ensure that all of the caravans are evacuated safely.

To enable this to be carried out, the site has been divided into 6 discrete zones, namely Zones A –F, as shown in Figure 1.2 below.

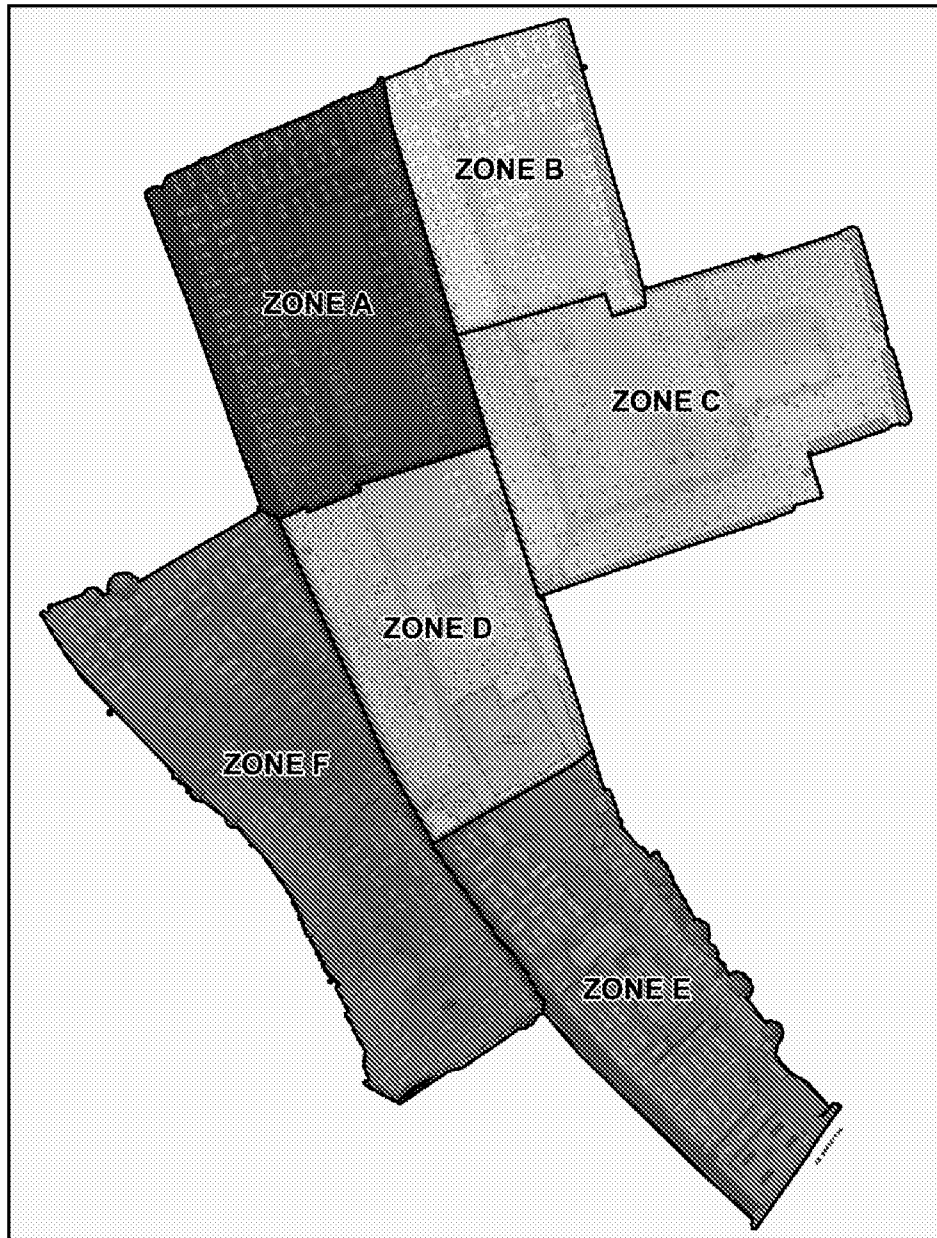


Figure 1.2 – Diagram identifying Zones A –F.

Each of the Zones A – F are colour coded to enable residents to easily identify the safest route in which to evacuate the Centre, and to allow the site management team to systematically warn everyone, and to ensure that each caravan is evacuated with everybody accounted for. The procedures to initiate a flood warning and the evacuation plan itself are discussed further in

Sections 3 & 4 respectively. It is however strongly recommend that a copy of the flood evacuation leaflet, which highlights these procedures in detail, is distributed to all new holiday makers and all caravan owners and is clearly displayed in each caravan to enable the occupants to familiarise themselves with the Flood Warning & Evacuation Plan before the event of a flood.

In addition, a copy of the full Flood Evacuation Plan should be made available for residents to access at the reception of the Riverside Caravan Centre.

1.2 Staff Training & Induction

To ensure the Flood Evacuation Plan is implemented correctly, it is imperative that all staff at the Riverside Caravan Centre have a good understanding of the procedures involved in warning residents of potential flooding and how to evacuate the Centre safely during times of flooding.

To warrant that the above is carried out successfully, all existing and any new members of staff should be made fully aware of the FEP, it is recommended procedures and the information contained within. In particular:

- All flood warning procedures and what they entail
- Any hazards that exist on site
- Contact details of key staff, the Environment Agency and the Emergency Planning department of the Local Authority
- How to implement the evacuation of the site during times of flooding

Appendix A.1 identifies the key contacts that staff should familiarise themselves with. This information should be regularly updated by the site manager and highlighted to all staff members.

1.3 Site Hazards

There are several items located within the site boundaries that may prove to be hazardous during a major flood event. These have been listed below, and staff should be familiar with these hazardous items. The list is not exhaustible and therefore staff should make a sensible judgement when accessing any new hazards introduced to the site.

Large Butane Bottles – Large steel gas canisters may become buoyant when flood water rises. These large items, if not anchored down, may cause considerable damage and injury to people, or impede emergency services visiting the site. Therefore, in order to reduce this risk, it is recommended that such items should be anchored to the caravans by means of a steel chain. In addition, any storage containers holding such items must remain secure when they are not being accessed. (Refer to Figure 1.3 below).



Figure 1.3 – Photographs of Large Butane Bottles, storage methods and anchoring examples.

Manhole Covers – The site has an extensive drainage system, and as such there are many manhole covers scattered around the site, however, the majority of these are located away from the access roads. During times of flooding the excessive water in this system can result in increased pressure, which may cause the manhole covers to become dislodged. This poses the potential hazard of people falling down the manhole itself and into very deep floodwater. Consequently, this Evacuation Plan has been structured such that evacuation occurs before any flooding takes place so as to reduce this risk.

For information purposes, Figure 1.4 below identifies a typical manhole cover within the site.

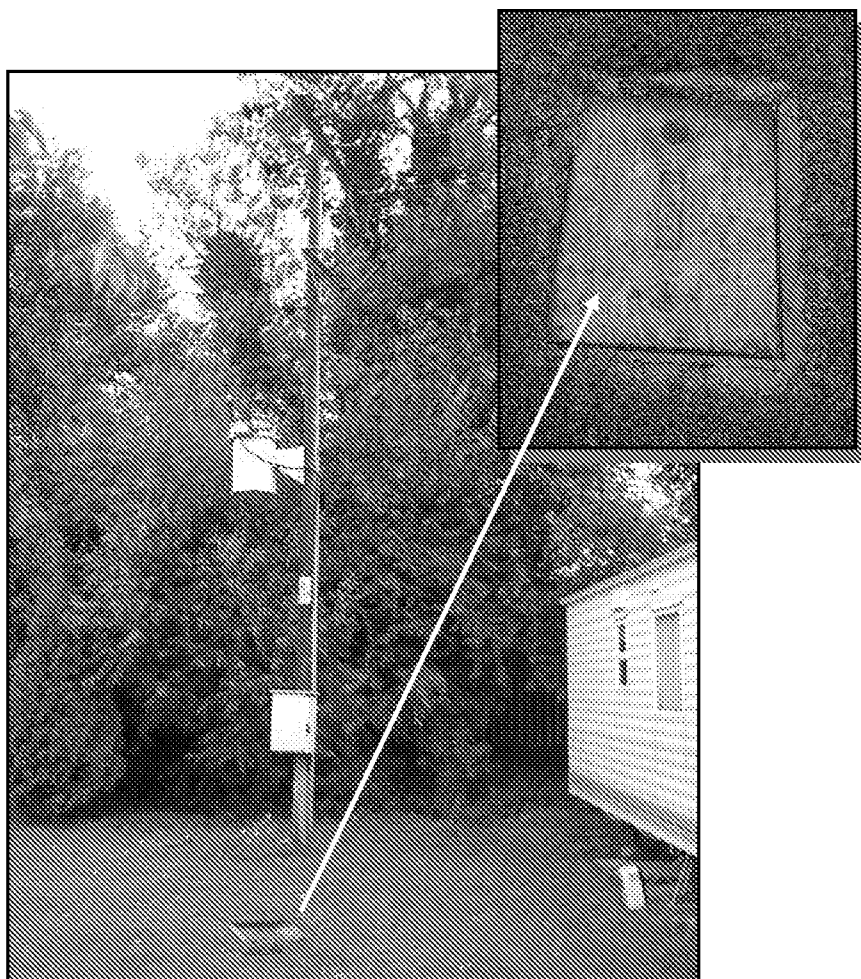


Figure 1.4 – Photograph of a typical manhole cover within the site & electricity pole.

Electricity Cables & Gas – All contact with electricity and gas should be avoided during times of flooding. The appropriate service companies should be contacted to ensure that both the electricity and gas supply to the site is cut in order to prevent people becoming electrocuted, and to reduce the risk of a gas leak and/or a gas explosion. The contact numbers for these service companies are located in Appendix 1. This list should be updated by the site manager regularly.

Due to the possibility of there being a power cut during a flood event it is recommended that staff should be equipped with adequate torches to enable them to aid the safe evacuation of the site.

Chemicals & Paint – All chemicals, including cleaning products, and paints should be held in sealed containers and located above ground level to prevent them from spilling during a flood and contaminating floodwater with dangerous substances, which may be harmful to both people and the environment. A list of these substances should be recorded in Appendix A.1.

2 Environment Agency's Flood Warning Service

The Environment Agency 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, in-house predictive models, rainfall radar data and information from the Met Office. This service operates 24 hours a day, 365 days a year.

Reference to the Environment Agency's website shows that the site is within an area that benefits from a flood warning service. The flood warning area specific to the site area is highlighted in Figure 2.1 and is referred to as '**Coastal areas from Selsey Bill to western arm Littlehampton Harbour including Selsey East Beach, Pagham, Bognor, Felpham, Elmer and Climping**'. This warning system does not however cover the Aldingbourne Rife, and therefore during periods of adverse weather staff should monitor the water level of the Aldingbourne Rife within the site and seek advice from the Environment Agency if the levels begin to rise rapidly.

If water levels in the Rife do begin to rise rapidly, this situation should be treated the same as for a formal Flood Warning (see definition below) and be prepared to evacuate the site, in particular Zone F, as the access may become restricted if the water level becomes too high. (Refer to Figure 3.1).



Figure 2.1 – Areas benefiting from the flood alert/warning service (purple), site located in red (Environment Agency Website).

It is therefore recommended that the managers and caravan owners of the site sign up to the Environment Agency's free Flood Warning Service either by calling 0345 988 1188, or by visiting;

<https://www.gov.uk/sign-up-for-flood-warnings>

The Environment Agency also provide a **Five Day Flood Risk Forecast** on their website - <https://flood-warning-information.service.gov.uk/5-day-flood-risk>

In addition, a regional **Flood Warnings in Force** service is updated every 15 mins and can be found at – <https://flood-warning-information.service.gov.uk/map>

Keep in touch with the Environment Agency using their social media sites:

Twitter – <https://twitter.com/envagency>

Facebook – <https://www.facebook.com/environmentagency?ref=search>

Updates on local and regional flooding can also be received through the following media services:

Updates on local radio:

• 103.2 Power Fm	• Southern FM
• Capital Gold Hampshire	• Spirit Fm
• Capital Gold Sussex	• Absolute Radio 1215AM
• Ocean Fm	• Wave 105 Fm

Updates on Local TV:

- BBC – South
- ITV – Meridian – South
- ITV – South

It is also recommended that the following Emergency Flood Response and Evacuation Plan should be followed.

2.1 Environment Agency's Flood Symbols

The Environment Agency flood warning service has three types of warnings that will help prepare for flooding and take action. They are:

- Flood Alert
- Flood Warning
- Severe Flood Warning

	What it means	When it's used	What to do
	Flooding is possible. Be prepared.	Two hours to two days in advance of flooding.	Be prepared to act on your flood plan. Prepare a flood kit of essential items. Monitor local water levels and the flood forecast on our website.
	Flooding is expected. Immediate action required.	Half an hour to one day in advance of flooding.	Move family, pets and valuables to a safe place. Turn off gas, electricity and water supplies if safe to do so. Put flood protection equipment in place.
	Severe flooding. Danger to life.	When flooding poses a significant threat to life or significant disruption to communities.	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.
Warnings no longer in force	No further flooding is currently expected in your area.	When river or sea conditions begin to return to normal.	Be careful. Flood water may still be around for several days. If you've been flooded, ring your insurance company as soon as possible.

Table 2.1 - Environment Agency Flood Symbol Guidance for Residents.

The Environment Agency aims to provide at least 2 hours warning between the Flood Warning alert being issued and the commencement of flooding. This is however founded on a best endeavour basis.

3 Flood Warning Procedure

Notification of the flood warning status should be posted at the main reception building and updated as soon as a flood warning is received. Residents should be informed of the presence of the flood warning status notices. At times of flood warning, a notice board should also be placed at the entrance/exit to the Caravan Centre to ensure that all of the residents are informed.

Flood Alert – Upon receiving notification of a Flood Alert status, the site manager should notify all staff on site and ensure that all residents, where possible, are notified. Residents and site staff should be encouraged to either watch local TV stations or listen to local radio for flood warning updates. Residents should also be given the opportunity to leave the site and return to their permanent homes if this is possible.

Residents and staff should also be briefed on the evacuation procedures and instructed to prepare themselves for immediate evacuation if the flood warning status reaches 'Flood Warning'. Leaflets showing the emergency evacuation procedures and egress routes should be issued. Staff should ensure that all emergency evacuation routes within the site are clear and that any barriers or obstructions are raised/removed.

Flood Warning – If the Flood Alert status is elevated to Flood Warning, the site staff should re-notify all occupants and begin evacuation procedures. As the Riverside Caravan Centre is a holiday park, all residents should be encouraged to leave the site immediately and return to their permanent homes where possible. Staff should be instructed to monitor water levels in the Aldingbourne Rife, and if water levels begin to rise, the Environment Agency should be contacted and a Severe Flood Warning status should be assumed.

Severe Flood Warning – As for Flood Warning and Flood Alert, however staff should evacuate the entire site, starting with the low-lying parts of the site (Zones A, D, E & F). Zone F should be evacuated first, as the only access/egress point is across the Aldingbourne Rife, which may prove hazardous if water levels exceed the level of the bridge, see Figure 3.1. The full evacuation procedure and meeting points for each flood zone are highlighted in Section 4 and in the Flood Evacuation Leaflet. The local authority emergency planning department and the Environment Agency should also be informed.

Flood Warning Procedure & Evacuation Strategy

In the case that a Flood Alert or Warning has been issued the following Evacuation Procedures apply:

Flood Alert - Upon receiving notification of a Flood Alert status, residents are encouraged to; watch local TV stations, check the internet, listen to local radio for flood warning updates.

Flood Warning -- If the Flood Alert status is elevated to Flood Warning, residents should begin evacuation procedures. DO NOT WAIT FOR A SEVERE FLOOD WARNING TO ACT

Severe Flood Warning -- All residents should EVACUATE IMMEDIATELY to an area of high ground, following the flood evacuation route identified in this plan. Only if water has reached the building or surrounding area should occupants remain within the property and be prepared to move to the upper floors of the property if necessary.



Figure 3.1 - Access/Egress to/from Zone F over a bridge spanning the Aldingbourne Rife.

4 Flood Evacuation Plan

1 - If a Flood Warning has been received, or the levels of the Aldingbourne Rife are rising rapidly, and flooding has not yet occurred, the most appropriate action is to instruct all residents to leave the site and return to their permanent homes immediately.

If this is not possible then all residents within the area identified as being at risk of flooding should be moved to higher areas of the site that are raised above the predicted flood level. The flood evacuation route and evacuation meeting points for each Zone within the site are located on the Flood Evacuation Leaflet (to be located within each caravan) and signage should be erected to identify areas where residents should exit and meet if assistance is required.

Site staff should help to warn residents and implement the evacuation of all of the residents safely. Staff are required to follow the procedures set out below and to relocate residents to an area of the site that is identified as being outside of the flood risk zone.

2 - If a Severe Flood Warning has been received, or the levels of the Aldingbourne Rife are approaching the top of the river bank, the most appropriate action is to evacuate each and every Caravan within Zones A - F and ensure that all residents leave the site as quickly as possible and meet at the relevant evacuation points if assistance is required.

At least 6 members of staff should inform each zone A – F simultaneously, to ensure that every Caravan is informed and to aid the safe evacuation of the residents. Residents should be directed to leave the site immediately by the red exits identified on the evacuation leaflet, without stopping to collect belongings, and if assistance is required residents should be directed to the appropriate evacuation point for the zone in which they reside. When each zone is clear (starting with Zone F), staff members should direct residents away from the flooding outside of the site to an area that is identified as being outside of the flood risk zone, namely by the red exits located on the Flood Evacuation Leaflet.

The procedures set out below identify how staff should evacuate the Riverside Caravan Centre.

1 – At least 1 member of site should visit Zone F. That member of staff should systematically knock on every caravan and instruct everyone to leave the site immediately by the route identified on the Evacuation Leaflet and meet at the designated Evacuation Point for Zone F if assistance is required.

2 – At least 1 member of site should visit Zone A. That member of staff should systematically knock on every caravan and instruct everyone to leave the site immediately by the route identified on the Evacuation Leaflet and meet at the designated Evacuation Point for Zone A if assistance is required.

- 3 – At least 1 member of site should visit Zone B. That member of staff should systematically knock on every caravan and instruct everyone to leave the site immediately by the route identified on the Evacuation Leaflet and meet at the designated Evacuation Point for Zone B if assistance is required.
- 4 – At least 1 member of site should visit Zone C. That member of staff should systematically knock on every caravan and instruct everyone to leave the site immediately by the route identified on the Evacuation Leaflet and meet at the designated Evacuation Point for Zone C if assistance is required.
- 5 – At least 1 member of site should visit Zone D. That member of staff should systematically knock on every caravan and instruct everyone to leave the site immediately by the route identified on the Evacuation Leaflet and meet at the designated Evacuation Point for Zone D if assistance is required.
- 6 – At least 1 member of site should visit Zone E. That member of staff should systematically knock on every caravan and instruct everyone to leave the site immediately by the route identified on the Evacuation Leaflet and meet at the designated Evacuation Point for Zone E if assistance is required.
- 7 – When all of the residents from each zone that require assistance are located at the appropriate Evacuation Point (identified in the Evacuation Leaflet) and staff are confident that all of the residents have left the caravans in each zone, staff should lead those residents who require assistance away from the evacuation points towards an area outside of the flood zone (marked by red arrows on the Flood Evacuation Leaflet).

5 Evacuation Leaflet

To be completed by
caravan owner

Flood Evacuation Plan

YOU ARE LOCATED IN ZONE

1 - Flood Warning Procedure

FLOOD ALERT
Flood Alert - Upon receiving notification of a Flood Watch status, all residents should be aware of the evacuation procedures in this leaflet and prepare for immediate evacuation. If the flood warning status reaches 'Flood Warning'.

FLOOD WARNING
Flood Warning - If the Flood Watch status is elevated to Flood Warning, all residents should be encouraged to pack up their belongings, leave the site immediately and return to their permanent homes where possible.

SEVERE FLOOD WARNING
Severe Flood Warning - As for Flood Warning and Flood Watch, however, the evacuation of the site. (Zones A, D, E & F should be evacuated first. Residents should locate the Zone that they are located in and follow the full evacuation procedure listed in this leaflet).

2 - Flood Evacuation Procedure

Identify which Zone you are located in (printed on the FRONT of this leaflet)

Evacuate IMMEDIATELY

Follow the Evacuation Route for your Zone. (See map located on the reverse of this leaflet)

Leave the site via the RED EXIT signs. DO NOT wait at the Evacuation Meeting Point identified for your Zone and wait to be directed by Riverside Caravan Centre Staff. (See the reverse of this leaflet)

DO.....

Listen to and follow the instructions of our Riverside Caravan Centre Staff

Follow the with Evacuation Route identified

If assistance is required, contact the appropriate Evacuation Meeting Point until Riverside Caravan Centre Staff can help.

DO NOT.....

Stay from this designated route

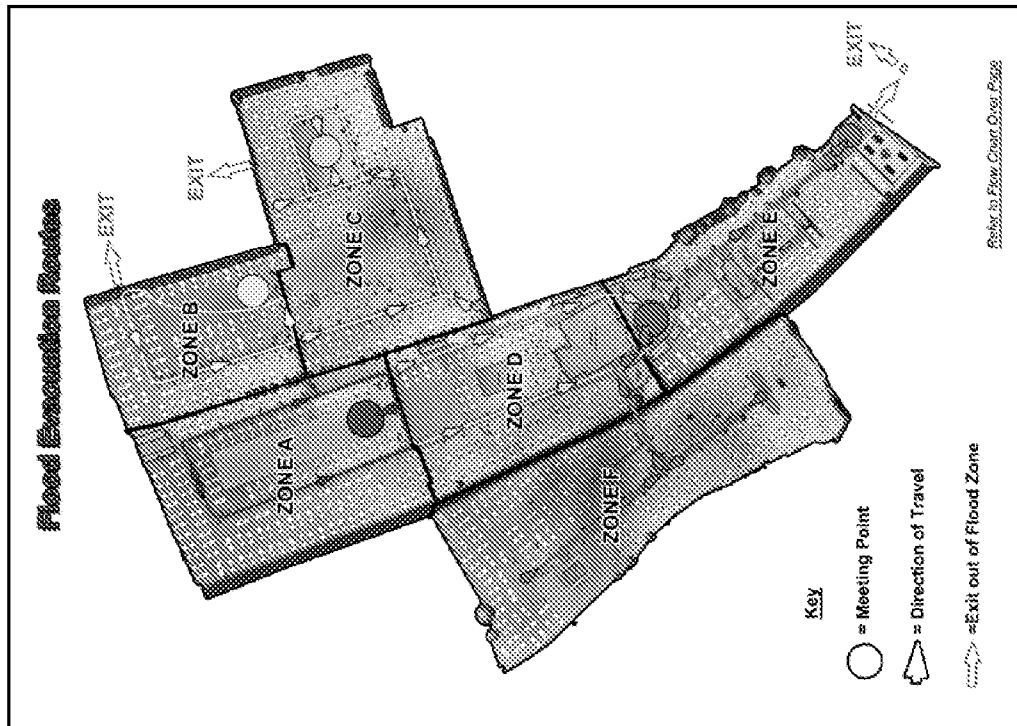
Walk through the caravan unless absolutely necessary

If a 'SEVERE FLOOD WARNING' has been issued DO NOT stop to collect personal belongings.

Important Contact Details:
Riverside Caravan Centre
Tel: +44 (0)1243 869823
Environment Agency Floodline
Tel: 0845 988 1138
(area number 012432)

Zone Map:
A map showing the layout of the site with zones A through F marked. A North arrow points upwards. The Aidingrains Rd is indicated at the bottom.

Side 1



Side 2

Appendix A.1 – Key Information and Procedures

General contact list

	Company name	Contact name	Telephone	Mobile
Floodline	Floodline	--	0345 988 1188	--
Electricity provider				
Gas provider				
Water company				
Telephone provider				
Local public transport				
Local council emergency services	Arun District Council		01903 737500	
Insurance company				
Insurance agent				

Staff

Staff contact list - please continue on a separate sheet if necessary

Name	Job title	Home telephone & address	Mobile	Emergency contact	Emergency telephone & address

Key Contacts

Service cut-off	Description of location
Electricity	
Gas	
Water	

Hazardous Materials

Answer the following (if applicable):

Hazardous material	Description of location	How to protect from a flood (i.e. move, cover, tie down)
Chemicals (including cleaning products)		
Oil based products (gasoline, oil, cooking oil etc.)		
Other contaminants (i.e. asbestos insulation, lead-based paint)		

Protective actions

Identify stock, equipment and possessions that may need special protective measures, and describe the actions you will take to prevent their damage in the event of a flood. We have suggested items and ways to protect them, but make sure you follow these through on your plans. For example, if you say you will move an item to a safer location, then do it!

Items to consider:

- Computers
- In-store stock
- Chairs / stools
- Computer files
- Staff files
- Paper files
- Databases
- Vehicles
- Food
- Electrical equipment

Ways to protect items

- - Make a copy and store in safe location
- - Raise above ground level
- - Buy flood protection products
- - Buy new flood-resistant item
- - Move to safer location

Valuable item	Protective action	New location (if applicable)	Done

Please continue on a separate sheet if necessary.

List companies whose help you may need after a flood. Make sure that you follow through on your plans, and get contracts in place, or know who to call for assistance. If help is not needed, you can leave this section blank. If you contract in advance, attach the contract to this flood plan.

Flood service company	Company name	Contact	Telephone / mobile	Contract agreed
Water pumping services				
Suppliers of emergency power / equipment				
Equipment repair				
Earthmoving or engineering				

Identify people who can help you before, during and after a flood, and what they can do.



Flood Evacuation Plan

YOU ARE LOCATED IN **ZONE**

1 - Flood Warning Procedure



Flood Watch - Upon receiving notification of a Flood Watch status, all residents should be aware of the evacuation procedures in this leaflet and prepare for immediate evacuation if the flood warning status reaches 'Flood Warning'.



Flood Warning - If the Flood Watch status is elevated to Flood Warning, all residents should be encouraged to pack up their belongings, leave the site immediately and return to their permanent homes where possible.



Severe Flood Warning - As for Flood Warning and Flood Watch, however, low-lying parts of the site (Zones A, D, E & F) should be evacuated first. Residents should locate the Zone that they are located in and follow the full evacuation procedure listed in this leaflet.

2 - Flood Evacuation Procedure

Identify which Zone you are located in
(printed on the FRONT of this leaflet)

Evacuate **IMMEDIATELY**

Follow the Evacuation Route for your Zone,
(See map located on the reverse of this leaflet)

Leave the site via the **RED EXIT** signs,
OR if assistance is required, wait at the
Evacuation Meeting Point identified
for your Zone and wait to be directed by
Riverside Caravan Centre Staff.
(See the reverse of this leaflet)

DO.....

Listen to and follow the instructions of the
Riverside Caravan Centre Staff

Follow the safe Evacuation Route identified

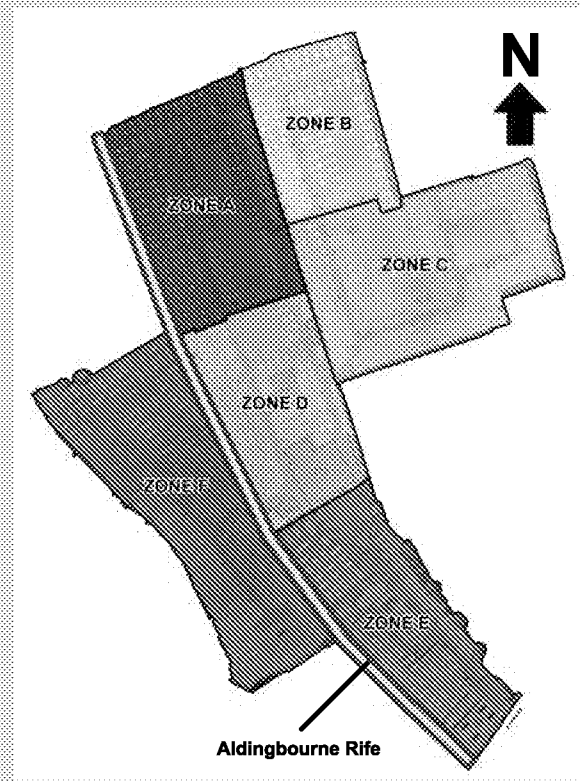
IF assistance is required, remain at the appropriate
Evacuation Meeting Point until Riverside Caravan
Centre Staff can help.

DO NOT.....

Stray from the designated route

Walk through floodwater unless absolutely necessary

IF a 'SEVERE FLOOD WARNING' has been issued
DO NOT stop to collect personal belongings.



6 Zones - A -F

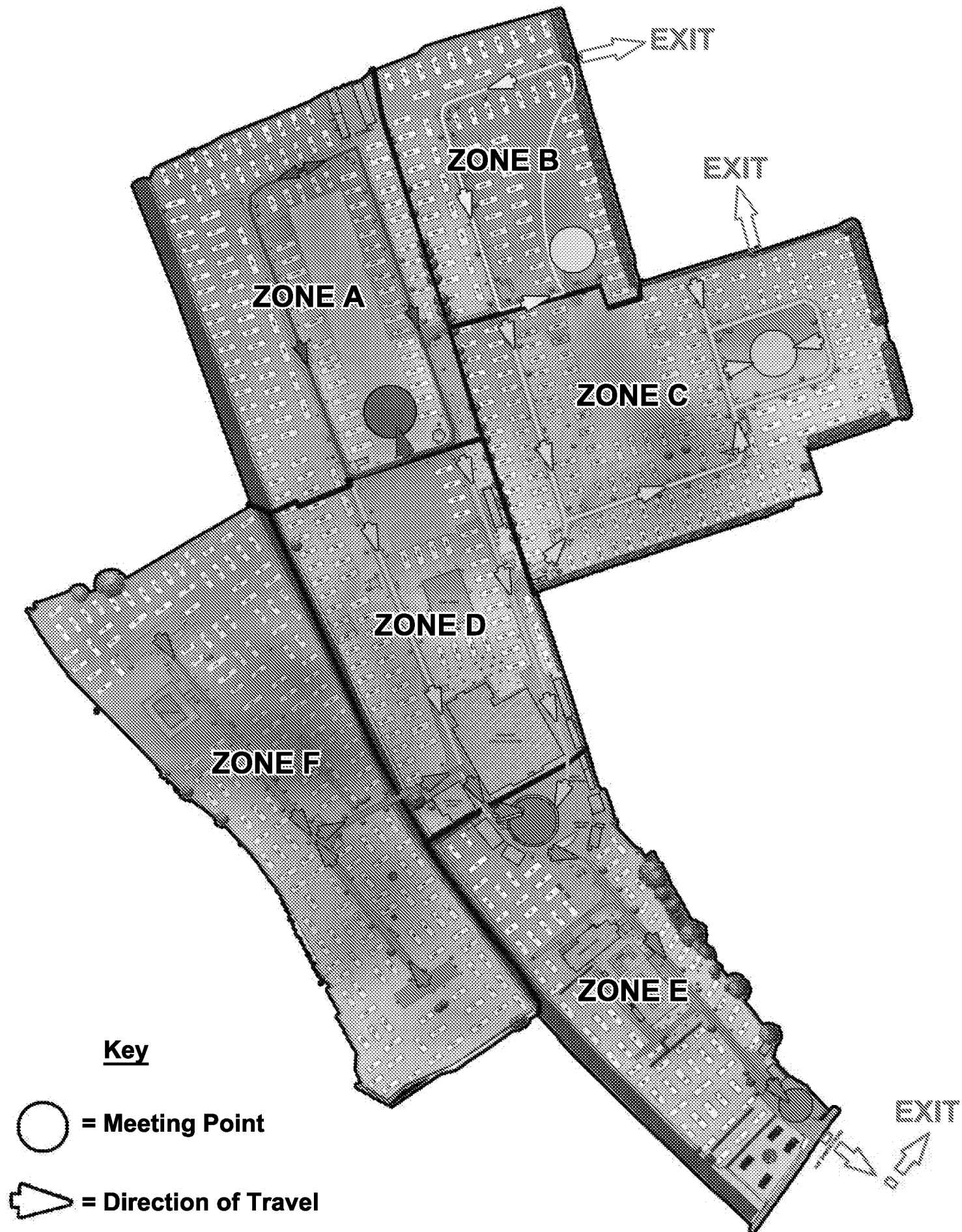
Important Contact Details:

Riverside Caravan Centre
Tel: +44 (0)1243 865823

Environment Agency Floodline
Tel: 0845 988 1188

(area number 012312)

Flood Evacuation Routes



Refer to Flow Chart Over Page