



Southampton City Council

Site Flood Plan Guidance

MAY 2017

DISCLAIMER

Southampton City Council, as far as it can ascertain, acknowledges that the advice contained within the Site Flood Plan guidance is suitable for the purposes set out in the National Planning Policy Framework 2012 and the accompanying Planning Practice Guidance.

Site Flood Plans are the sole responsibility of the applicant/property owner, and Southampton City Council cannot accept any responsibility for any omission or error in any such plan, or for any loss, damage or inconvenience which may result from such Plan's implementation.

Any subsequent approval does not impute any approval of those Plans from the Environment Agency or any of the Emergency Services. Site Flood Plans must be reviewed on a regular basis – at least every three years or when information changes which requires it to be amended – to ensure that they are consistent with good practice.

Record of Amendments

Date of Publication	Amendment made
June 2015	First publication
May 2017	Environment Agency quick dial codes updated

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1. Introduction

Southampton City Council's Emergency Planning team have produced this guidance document to support developers and applicants who are required to produce and submit a Site Flood Plan as a requirement of a planning condition or planning obligation.

This guidance document is intended for use by applicants and developers of both individual properties and larger premises, and for all types of development including new build and change of use.

The purpose of this guide is to:

- Set out when and why a Site Flood Plan is required in relation to the planning policy context
- Identify the aim and objectives of a Site Flood Plan
- Provide general guidance on the development of a Site Flood Plan
- Provide a template for the structure and content of a Site Flood Plan
- Provide additional sources of information to assist developers/applicants in developing a Site Flood Plan

1.1 Planning Policy

Paragraph 100 to 104 of the National Planning Policy Framework (NPPF, 2012) set out the policies relating specifically to the management of flood risk. The main emphasis of the NPPF is to protect people and property by avoiding inappropriate development in areas at risk of flooding.

The National Planning Policy Framework and Planning Practice Guidance are available at
<https://www.gov.uk/government/collections/planning-practice-guidance>

The Planning Practice Guidance (2014) that accompanies the NPPF requires developers and applicants to ensure that any new development is safe (including where there is a residual risk of flooding), and that adequate flood warnings and evacuation procedures are in place and available to people using the development, which can be achieved through the use of a Site Flood Plan.

1.2 What is a Site Flood Plan?

The objective of a Site Flood Plan is to provide a means by which those living/working at a development shall be made aware of the flood hazard, and to identify any procedures that will enable them to avoid being directly exposed to the hazard in any future flood events that may affect the site. Preparedness for future floods can help reduce the impact on people and property.

A Site Flood Plan should:

- Raise awareness of the flood hazard at the location specified by the Plan.
- Define the flood warnings and estimated lead-in times available.
- Detail how, when and by who the Plan is triggered.

- Define the responsibilities of those participating in the Plan i.e. the site user/occupants.
- Outline the place of safe refuge, evacuation procedure and the safe evacuation route away from the development.
- Establish the procedure for implementing, monitoring and maintaining the Plan.

1.3 When will a Site Flood Plan be required?

All development must be designed so that it is safe from flooding, including the consideration of residual risks, over its lifetime. Where a site would still be exposed to a flood hazard, because it has been demonstrated that safe access and egress is not feasible, then it may be considered appropriate to rely on flood warning and evacuation procedures.

The considerations for determining whether reliance on flood warning and evacuation procedures are appropriate include:

- The potential flood hazard to the site from a design flood event at the end of the anticipated lifetime of the development and the potential frequency of any flooding at the site.
- Any well-developed proposals for future strategic flood defence schemes that could benefit the site.

Where the development proposals are considered appropriate from a flood risk perspective, we will always request a Site Flood Plan for developments (including change of use) that will be used for more vulnerable uses (as defined in the Planning Practice Guidance). We may request a Site Flood Plan for other developments, such as commercial, leisure or industrial premises, but these will be considered on a case-by-case basis depending upon factors including:

- The potential vulnerability and number of site users i.e. whether elderly or disabled persons or young children will be present at the site and may require additional support to evacuate safely.
- The proposed design of the development, including flood resistance and resilience measures.
- The potential flood hazard on the site over the lifetime of the development.

For any less vulnerable and water compatible developments where a site flood plan has not been requested through a planning condition or planning obligation but a flood hazard exists at the site, it would be advised that the responsible owner/operator of the premises/operation develops a suitable flood evacuation procedure applicable to the future activities on the site which is communicated to staff and users so they are able to avoid being exposed to future flood hazards on the site.

1.4 The Expected Approach to Evacuation and Safe Refuge

The council's preference is always (in circumstances where a Flood Warning and Evacuation Plan would be required) to evacuate occupants before a flood event occurs, not during an event. Safe refuge (staying within the building, proving that finished floor levels are above the design flood event levels) should only be considered where dry access and egress from the building to an area/community building not at risk of flooding cannot be achieved.

However, in some circumstances safe refuge may provide a more achievable and potentially safer means of dealing with any flood risk. Justification and evidence should be used to highlight when and where these circumstances are acceptable and the Local Planning Authority will consider this in consultation with their Emergency Planners and the Emergency Services.

Where evacuation is proposed, wherever possible, safe access routes should be provided that are located above the design flood levels and avoiding known flow paths (i.e. dry access provided).

Evacuation during a flood event should only occur in exceptional circumstances where a Flood Warning has not reached either the occupants or relevant management company responsible for triggering the Flood Warning and Evacuation Plan for a development in a flood risk area; and it is deemed safe to do so by the Emergency Services. It should not be left to the discretion of the occupants as to whether it is safe to evacuate during a flood event. The preference in this exceptional circumstance would be for the occupants to remain indoors and seek safe refuge at the upper level of the building and call the emergency services.

For the purposes of this guidance ‘safe refuge’ is an area of a development/property that provides a sanctuary from rising flood levels during a flood event. This would include areas of properties/developments that are above the predicted design flood event for the lifetime of the development in question.

A ‘safe refuge’ should consist of (but not exclusive to) an area that:

- Is above the design flood event level.
- Has access to clean water.
- Has medical equipment.

2. Site Flood Plan: Structure and contents

This chapter provides a guide to the suggested structure and content of a Site Flood Plan. Sections should be modified and adapted to suit the nature and scale of the development. When developing a Site Flood Plan it should be pitched at those who may have limited local knowledge, and use language that is clear and easy to understand by the intended site users.

Introduction, scope and objectives

The opening chapter should set the context and emphasise the importance of the Plan, including information on the location of the site, who the plan is aimed at, why it has been prepared and who it has been prepared by.

- State who has prepared the Site Flood Plan [e.g. the name of the landlord or management company], and the location/address of the development that the Plan refers to.
- Briefly describe the development e.g. residential unit above a commercial premises, 3 storey residential block, single residential dwelling.
- Provide a map showing the site location. Include local road names and clearly identify the site.
- State the objectives of the Site Flood Plan e.g. to raise awareness of the risk of flooding at the development location, provide detail on flood warnings and how to act on them, and the details of the evacuation procedure.
- Explain to the user the importance of the Site Flood Plan because the site (or part of the site) is located within a Flood Zone.

Summary of flood risk

This section should be used to inform the site occupants/users of the risk of flooding that exists at the site. It should draw on the information included within the Flood Risk Assessment carried out for the site, including details of the source of flooding, the potential frequency, duration and depth of flooding.

- Outline the dominating source(s) of flooding and the Environment Agency Flood Zone that the site is within, and what this means in terms of the probability of flooding e.g. Flood Zone 3 is classed as land with a 1 in 100 or greater annual probability of river flooding, or 1 in 200 year or greater tidal flooding etc. (See the Environment Agency flood maps to obtain this information: <http://www.environment-agency.gov.uk/homeandleisure/floods/31650.aspx>)
- Provide a clear map showing the development in relation to the Flood Zone(s). Highlight the development site on the map.
- Provide a brief explanation of the factors leading to flooding e.g. heavy rainfall, tidal flooding due to a storm surge, fluvial flooding etc.

- Determine the estimated lead time between the Environment Agency sending out a flood warning and the time flooding might occur, and depending on the cause/type of flooding, the estimated duration of flooding, and potential depth of flood waters.
- Provide details of any areas of the site that are low-lying or designed to flood e.g. ground level car parking and amenity areas – all site users must be made aware of this risk.

Flood warnings and associated actions

It is important that the site occupant(s)/user(s) are familiar with the warning system operated by the Environment Agency, including what the warnings mean, when they are issued and any associated actions that the user should take to respond.

- Explain that the Environment Agency are the competent warning authority and operate a flood warning service covering all areas at risk of flooding from tidal and fluvial sources. More information is available from www.environment-agency.gov.uk
- Explain the Flood Warnings Direct service provided by the Environment Agency including the 24-hour Floodline service and the ability to use a quick-dial code to reach location specific information (to find the quick-dial area covering the site, please refer to the Environment Agency Flood Maps).
- Provide a map showing the flood warning areas in relation to the site.
- Provide a clear statement recommending that the site occupier(s)/user(s) sign up to receive flood warnings and how they can do this.
- Explain ‘Flood Alert’, ‘Flood Warning’, ‘Severe Flood Warning’ and ‘Warnings no longer in force’ (see the table on the next page for example text). The ‘actions’ will need to be tailored as these will be specific to each site.

Environment Agency Floodline quick-dial codes

To use a quick-dial code, call Floodline on 0345 988 1188, press 1 and when requested enter the number for the relevant flood warning or alert area:

Flood Warning Area

Chandlers Ford to Swaythling: 316 085

Calshot, Hythe, Marchwood, Eling and Redbridge: 316 005

Lord’s Hill and Lordswood to Millbrook on the Tanners Brook: 316 077

Ocean Village: 316 006

Itchen Estuary: 316 007

Mansbridge and Woodmill on River Itchen: 316 084

Flood Alert Area

Monks Brook: 216 065

Lower Itchen: 216 064

Southampton Water: 216 019

Tanners Brook: 216 061

You should check with the Environment Agency about which warning area the site lies within to select the correct quick-dial code for your Site Flood Plan.

Flood warnings: example text

Warning	Meaning / Response Actions
Flood Alert 	<p>What it means: Flooding is possible – be prepared.</p> <p>When it is used: The Environment Agency will issue a Flood Alert status when flooding is possible. It is usually issued between 2 hours and 2 days in advance of flooding, dependant on the form and characteristics of the flood risk.</p> <p>Triggers: Forecasts that indicate that flooding from rivers or the sea may be possible, when intense rainfall that may affect rivers with a rapid response rate, and forecasts of high tide, surges or strong winds.</p> <p>How is it issued: This will be issued through the Environment Agency website and via the Flood Warnings Direct service, based upon weather and river conditions</p> <p>Actions: When a Flood Alert is issued, residents should:</p> <ul style="list-style-type: none"> • Be prepared to act on your Site Flood Plan. • Prepare a flood kit of essentials and have it ready if needed. • Monitor local water levels and forecasts on the Environment Agency website and on the Local TV/radio stations. <p>Further information: Contact Floodline on 0345 988 1188, press option 1 and enter the quick-dial code [<i>insert relevant quick-dial code</i>] for the [<i>insert area e.g. Itchen Estuary</i>] and listen to the Environment Agency advice.</p>
Flood Warning 	<p>What it means: Flooding expected – immediate action is required.</p> <p>When it is issued: Flood Warnings will be issued when water levels are rising and further rain is expected. It is usually issued between 30 minutes to 1 day in advance of flooding.</p> <p>Triggers: High tides and storm surges coupled with strong winds, heavy rainfall forecast to cause flash flooding of rivers and forecast flooding from rivers.</p> <p>How it is issued: This will be issued through the Environment Agency website and via the Flood Warnings Direct service, based upon weather and river conditions.</p> <p>Actions: When a Flood Warning is issued, residents should:</p> <ul style="list-style-type: none"> • If necessary, move possessions, valuables and pets to a higher or safe place. • Locate keys to lock windows and tools to switch off gas and electricity supplies in the event evacuation is required. • If flood protection measures are available (e.g. flood gates and airbrick covers), put them in place. • Consider moving any vehicles parked at ground level to a higher level or area outside of the Flood Zone. • Contact Southampton City Council to find out whether evacuation is considered necessary, and if so, where they are providing for evacuees.

	<ul style="list-style-type: none"> If evacuation is required, switch off the gas and electricity supply before leaving the property (if safe to do so). <p>Further information: Contact Floodline on 0345 988 1188, press option 1 and enter the quick-dial code [<i>insert relevant quick-dial code</i>] for the [<i>insert area e.g. Itchen Estuary</i>] and listen to the Environment Agency advice.</p>
Severe Flood Warning 	<p>What it means: Severe flooding. Danger to life.</p> <p>When it is used: When flooding poses a significant threat to life.</p> <p>Triggers: Actual flooding where the conditions pose a significant risk to life and/or widespread disruption to communities, onsite observations from flooded locations or a breach in defences or failure of a barrier that is likely to cause significant risk to life.</p> <p>How it is issued: This will be issued through their website and via the Flood Warnings Direct service based upon weather and river conditions.</p> <p>Actions: When a Severe Flood Warning is issued, residents should:</p> <ul style="list-style-type: none"> Stay in a safe place with a means of escape. Be ready should you need to evacuate the property. Cooperate with the emergency services. Call 999 if you are in immediate danger. <p>Further information: Contact Floodline on 0345 988 1188, press option 1 and enter the quick-dial code [<i>insert relevant quick-dial code</i>] for the [<i>insert area e.g. Itchen Estuary</i>] and listen to the Environment Agency advice.</p>
Warning no longer in force 	<p>What it means: No further flooding is currently expected in your area.</p> <p>When it is used: When a Severe Flood Warning, Flood Warning or Flood Alert is no longer in force.</p> <p>Triggers: The risk of flooding has passed, river/sea levels have dropped below the warning level and no further flooding is affected.</p> <p>How it is issued: This will be issued through their website and local TV/radio stations and news bulletins.</p> <p>Actions: When a warnings no longer in force status is issued, residents should:</p> <ul style="list-style-type: none"> If evacuation has occurred, check with Southampton City Council that it is safe to return to the property/building. Be careful as flood water may still be around for a few days and could be contaminated. If there has been flooding to the property contact your landlord/management company for advice (if applicable), take photographs of any damage and contact your insurance company. If you need to make an insurance claim do not throw anything away until the insurance company says so.

Safe refuge and evacuation procedure

This section is very important as it details the evacuation procedure including the route to take when leaving the building in order to avoid the flood hazard. It must be accurate and easy to understand by any recipients of the Plan. Persons with disabilities, mobility issues or limited local knowledge must be taken into consideration when developing this section.

Safe refuge

- Give details of safe refuge onsite, or if this is not possible, where a person can find safe refuge offsite. State why the area is safe i.e. finished floor levels above the flood level, and whether this is permanent or temporary.
 - For onsite refuge to be considered ‘safe’, the place of refuge must be above the predicted flood level (with an allowance for freeboard) over the lifetime of the development.
- Provide the expected duration of flooding to the site.
- Suggest that a flood kit or ‘grab bag’ of essential items is kept onsite to support a short-term refuge and/or evacuation. Provide information on the basic items a flood kit should contain, either as an appendix to the Plan, or a link to further information on how to create one.

Evacuation procedure

- State when the evacuation procedure should be implemented i.e. the circumstances that will trigger an evacuation.
- If applicable, state whether there is an alarm which will signal evacuation, signposts to follow or if there are any assembly points.
- Provide a clear map showing the safe route to and from the development, along with written step-by-step instructions detailing where to go. The safe route should avoid flood hazards and lead to a location outside of the Flood Zone.
- Provide details of how the welfare of people will be maintained should an evacuation be required e.g. people will be directed to the nearest rest centre.

Responding to flood warnings

Once a flood warning has been issued, occupants/users need to know how to respond to them. This section needs to clearly outline the initial advice, such as remaining within the safe refuge area, and knowing when to evacuate.

- Provide a statement that this Site Flood Plan will be overridden by any advice given by competent authorised staff including the Emergency Services or Local Authority responders on the ground in the event of a serious flood event.
- Provide information on the options following notification of a flood warning e.g. remain within the area of safe refuge, monitor the flood warning situation, or evacuate prior to flooding.

- Provide information on the location of key service cut off points e.g. water, gas and electricity, and how to switch them on/off.
- If applicable, provide details of any flood mitigation measures in place and, if required, instructions on how to use them e.g. flood doors, flood boards, air brick covers etc.

Role of the emergency services, local authority, Environment Agency and utility companies

During a significant flood event, a number of organisations will be working together at a local level to ensure that people are kept safe. This section should inform the user of the roles of key authorities and their duties during a flood event. The text below can be copied straight from this template and incorporated into the Site Flood Plan to ensure consistency amongst other Site Flood Plans being prepared.

The response to a major flood event will involve a number of organisations working together at a local level, including the emergency services, local authority, the Environment Agency and utility companies. The Hampshire and Isle of Wight Local Resilience Forum (HIOW LRF) Multi Agency Flood Plan has been produced to provide relevant information and outline the response arrangements in place for a coordinated multi agency response.

The general roles of the main bodies in relation to a major flood event in Southampton are summarised below. It should be noted that this is a general list, and specific duties may vary between different bodies.

Hampshire Constabulary (Police):

- Overall coordination of the multi agency response at a major flood event.
- Coordinate any multi agency decision to evacuate in consultation with key partner agencies.
- Save life in cooperation with the other emergency services.

Hampshire Fire and Rescue Service:

- Assist with evacuation and coordinate search and rescue operations.
- Provide and/or obtain specialist advice and assistance where hazardous materials are involved.
- Obtain New Dimensions specialist equipment such as High Volume Pumps.
- Assist other relevant agencies, particularly the local authority, to minimise the effects of major flooding on the community.

Southampton City Council as the Local Authority:

- Provide Rest Centre capability for flood risk affected communities and activate support staff and voluntary sector to support this.
- Provide emergency transport for people, equipment and materials, and if necessary evacuation.
- Provide advice and information to the public (websites, customer service centres, and social media) in accordance with the information provided in the HIOW LRF Multi Agency Flood Plan.

- Flood alleviation – for flood prevention, such as the placement of demountable flood barriers, clearing blocked culverts, for dealing with flooded roads and diversions and for other assistance to the public such as drying-out facilities.
- Emergency environmental health advice for action relating to environmental problems caused by flooding.
- Coordination of the voluntary response.

The Environment Agency:

- Issue flood alerts/ warnings and/or Operational Messages using their Flood Warning services to warn and inform the public and partners.
- Responsibility for maintenance and operation of Environment Agency owned flood defences. Checking defences and undertaking essential repairs and maintenance on Environment Agency owned flood defences and advise other owners on their maintenance responsibilities.
- Monitor water levels and flows, assessing the risk, clearing obstructions from known pinch points and advising the emergency services and the local authority.
- Along with partners, deploy temporary flood defences where impacts can be mitigated.
- Support the police and local authority by providing materials, equipment and manpower as far as resources and other duties permit, once own systems and flood defences are secure.

Utility Companies:

- Maintain the safety and integrity of the electricity/ gas/ water supply system.
- Liaise with partner agencies and obtain pumps to maintain the supply at key locations.
- Repair services and seek alternative means of supply during any disruption and restore supplies as soon as possible.
- Implement Business Continuity Plans.

Useful contacts

Within the Site Flood Plan it is beneficial to provide the user with a directory of useful contact telephone numbers, and sources of information that can be used to get help or advice quickly. It is important that this section is reviewed and updated regularly, or when changes occur.

- Include a table detailing useful contacts. Include the company/organisation name, telephone number and website (if applicable). Consider details for:
 - The Environment Agency Floodline number and relevant quick-dial code.
 - The landlord/site management.
 - The local authority including daytime and out of hours numbers.

- Non-emergency police e.g. Hampshire Constabulary.
- Non-emergency fire service e.g. Hampshire Fire and Rescue.
- Electricity, gas, water and telephone service providers for the site.
- Insurance company or provider.
- Local public transport e.g. bus and train companies, local travel news provider.
- Local radio and television stations.

Monitoring and review of the Plan

It is important that the Site Flood Plan is kept up-to-date and accurate. It is the responsibility of the Plan owner to maintain and update the Plan at least every three years, when new information becomes available or a change in circumstances that may affect it occurs.

- Detail who is responsible for monitoring and the review of the Plan e.g. the name of the landlord, Management Company or site manager.
- Provide contact details of the Plan owner (address, email and telephone number) where the user can send changes that may affect the Plan.
- Include a table that can be filled in to record any changes made to the plan, the date and by whom.

Suggested appendices to the Site Flood Plan

Appendix A: Useful information

Including a list of links to further information will provide a starting point for the site user to find out more about flood risk in their area and how to prepare for flooding to avoid the risk. The list provided below contains links to generic information, however is not exhaustive and should be tailored to the site use, and updated as necessary.

General advice

- Find out if your property is at risk of flooding - <http://www.environment-agency.gov.uk/homeandleisure/floods/31650.aspx>
- Sign up to receive flood warnings - <https://www.gov.uk/sign-up-for-flood-warnings>
- Monitoring flood warnings and river levels- <https://www.gov.uk/check-if-youre-at-risk-of-flooding>
- Make a personal flood plan <https://www.gov.uk/prepare-for-a-flood/make-a-flood-plan>
- Preparing your property for flooding - <https://www.gov.uk/government/publications/prepare-your-property-for-flooding>
- What to do before, during and after a flood - <https://www.gov.uk/government/publications/flooding-what-to-do-before-during-and-after-a-flood>
- Using sandbags to reduce flooding - <https://www.gov.uk/government/publications/sandbags-how-to-use-them-to-prepare-for-a-flood>

- Advice on obtaining home insurance - <https://www.gov.uk/prepare-for-a-flood/get-insurance>

Improving the resistance and resilience of your property

- Improving your property's flood protection - <https://www.gov.uk/prepare-for-a-flood/improve-your-propertys-flood-protection>
- Blue Pages - directory of businesses providing flood resistance and resilience products - <http://www.bluepages.org.uk/>

Business/commercial premises specific advice

- Prepare your business for flooding - <https://www.gov.uk/government/publications/preparing-your-business-for-flooding>

Emergency Planning Advice

- Hampshire and Isle of Wight Multi-Agency Flood Response Plan - <http://www.southampton.gov.uk/environmental-issues/emergency-planning.aspx>
- Direct Government Preparing for Emergencies - <https://www.gov.uk/government/policies/reducing-the-threats-of-flooding-and-coastal-change/supporting-pages/planning-for-and-dealing-with-flood-emergencies>
- UK Resilience - <http://www.cabinetoffice.gov.uk/ukresilience.aspx>

Appendix B: List of owner occupiers (OFFICIAL-SENSITIVE: FOR MASTER COPY ONLY)

A list identifying site occupiers/residents who may be more vulnerable and require additional help or support during times of flooding should be included. This section is confidential and should be included in the master copy only, with permission from the person identified.

Property Number	Occupier name	Occupier contact telephone number	Details of vulnerability e.g. mobility or health concerns
<i>Example</i> Flat A	Mr. J Smith	<i>Landline: 023 0000 0000 Mobile: 070 0000 0000</i>	<i>Wheelchair user.</i>

Emergency Planning

Southampton City Council

City Depot & Recycling Park

First Avenue

Southampton

SO15 0LJ

flooding@southampton.gov.uk

emergency.planning@southampton.gov.uk