

Site-specific flood risk assessment: Checklist

1 - Development site and location

You can use this section to describe the site you are proposing to develop. It would be helpful to include, or make reference to, a location map which clearly indicates the development site.

- a. Where is the development site located? (e.g. postal address or national grid reference)
- b. What is the current use of the site? (e.g. undeveloped land, housing, shops, offices)
- c. Which Flood Zone (for river or sea flooding) is the site within? (i.e. Flood Zone 1, Flood Zone 2, Flood Zone 3). As a first step, you should check the Flood Map for Planning. Check the Strategic Flood Risk Assessment for the area available from the local planning authority to identify if the site is within Flood Zone 1 but at increased risk of flooding in future due to climate change
- d. Also check the Strategic Flood Risk Assessment to identify if there are any other sources of flooding that may affect the site now or in the future.

2 - Development proposals

You can use this section to provide a general summary of the development proposals. It would be helpful to include, or make reference to, an existing block plan and a proposed block plan, where appropriate.

- a. What are the development proposal(s) for this site? Will this involve a change of use of the site and, if so, what will that change be?
- b. In terms of vulnerability to flooding, what is the vulnerability classification of the proposed development? See National Planning Policy Framework Annex 3
- c. What is the expected or estimated lifetime of the proposed development likely to be (e.g. 100 years or 75 years)? See paragraph 006 of this guidance for further advice on how to assess the lifetime of developments for flood risk and coastal change purposes. (It may also be advisable to seek advice from the local planning authority).

3 - Sequential test

For developments in areas identified as being at risk of any source of flooding now or in the future. (If the development lies outside such areas, you can skip this section and go to section 4.) Contents

You can use this section to describe how you have applied the sequential test (if needed as set out in paragraphs 162 to 163 of the National Planning Policy Framework to the proposed development, and the evidence to demonstrate how the requirements of the test have been met. See guidance on the sequential approach for further information. (You are advised to contact the local planning authority to confirm whether the sequential test should be applied and to ensure the appropriate level of information is provided.)

- a. What search area have you used to identify alternative sites with a lower risk of flooding? What is your justification for choosing this search area?
- b. Which alternative site(s) within the search area have you identified? Do you consider the site(s) to be reasonably available and appropriate for the proposed development? If not, what is your justification for this? With reference to the relevant strategic and site-specific flood risk assessments, are the sites at lower flood risk than your proposed site?

c. If you have identified any reasonably available, lower risk site(s), appropriate to the proposed development, do you consider there to be any other wider sustainable development objectives that would make steering the development to these other locations inappropriate? If so, please explain and justify this.

d. As well as flood risk from rivers or the sea, have you taken account of the risk from any other sources of flooding, such as surface water, in selecting the location for the development?

4 - Climate Change

How is flood risk at the site likely to be affected by climate change? (The local planning authority's Strategic Flood Risk Assessment should have taken this into account.) Further advice on how to take account of the impacts of climate change in flood risk assessments is available from the Environment Agency.

5 - Site specific flood risk

You can use this section to describe the risk of flooding to and from the proposed development over its expected lifetime, including appropriate allowances for the impacts of climate change. It would be helpful to include any evidence, such as maps and level surveys of the site, flood data sets (e.g. flood levels, depths and/or velocities) and any other relevant data (e.g. speed of onset and duration), which can be acquired through consultation with the Environment Agency, the lead local flood authority for the area, or any other relevant flood risk management authority. Alternatively, you may consider undertaking or commissioning your own assessment of flood risk, using methods such as computer flood modelling.

a. What is/ are the main source(s) of flood risk to the site? (e.g. tidal/sea, fluvial or rivers, surface water, groundwater, other?). You should consider the flood mapping available from the Environment Agency's Flood Map for Planning, the Strategic Flood Risk Assessment for the area, historic flooding records (e.g. the historic flood and local authority section 19 flood investigation reports and any other relevant and available information).

b. What is the probability of the site flooding, taking account of the maps of flood risk available from the Environment Agency's Flood Map for Planning, the local planning authority's Strategic Flood Risk Assessment and any further flood risk information?

c. Are you aware of any other sources of flooding that may affect the site? What are the interactions between different sources of flooding?

d. What is the expected depth and level for the design flood? See paragraph 002 of this guidance for information on what is meant by a "design flood". If possible, flood levels should be presented in metres above Ordnance Datum (i.e. the height above average sea level).

e. With any relevant flood risk management infrastructure operating effectively, are properties expected to flood internally in the design flood and to what depth and velocity? The nature of any internal flooding resulting from any residual risk should also be specified. Internal flood depths should be provided in metres.

f. How will the development be made safe from flooding and the impacts of climate change, for its lifetime, taking residual risk into account? Demonstrate how the steps set out in paragraph 004 have been followed to develop the strategy for addressing flood risk for the development.

g. How will you ensure that the development and any measures to protect the site from flooding will not cause any increase in flood risk off-site and elsewhere? Have you taken into account the impacts of climate change, over the expected lifetime of the development (e.g. providing compensatory flood storage which has been agreed with the Environment Agency)?

h. Are there any opportunities offered by the development to reduce the causes and impacts of flooding? See paragraph 037 of this guidance for further advice.

i. What are the sources of uncertainty in the assessment of risk and how have they been accounted for in the proposed strategy for addressing flood risk?

6. Surface water management

You can use this section to describe your arrangements for surface water management. Alternatively, these details could be presented in a separate sustainable drainage strategy. Details of what to include can be found in the sustainable drainage systems section.

7. Occupants and users of the development

You can use this section to provide a summary of the numbers of future occupants and users of the new development; the likely future pattern of occupancy and use; and proposed measures for protecting vulnerable people from flooding.

a. Will the development proposals increase the overall number of occupants and/or people using the building or land, compared with the current use? If this is the case, by approximately how many will the number(s) increase?

b. Will the proposals change the nature or times of occupation or use, such that it may affect the degree of flood risk to these people? If this is the case, describe the extent of the change.

c. Where appropriate, are you able to demonstrate how the occupants and users that may be more vulnerable to the impact of flooding (e.g. residents who will sleep in the building; people with health or mobility issues etc) will be located primarily in the parts of the building and site that are at lowest risk of flooding? If not, are there any overriding reasons why this approach is not being followed?

8. Exception test

You can use this section to provide the evidence to support certain development proposals in flood zones 2 or 3 if, following application of the sequential test, it is appropriate to apply the exception test, as set out in paragraphs 163-164 of the National Planning Policy Framework. See this guidance for further information on the exception test. It is advisable to contact the local planning authority to confirm whether the exception test needs to be applied and to ensure the appropriate level of information is provided.

a. Would the proposed development provide wider sustainability benefits to the community? If so, with reference to the site-specific flood risk assessment, could these benefits be considered to outweigh the flood risk to and from the proposed development? See paragraph 36 of this guidance for further information.

b. How can it be demonstrated that the proposed development will remain safe over its lifetime, taking account of the vulnerability of its users, without increasing flood risk elsewhere? See paragraph 038 of this guidance for further information.

c. Will it be possible for the development to reduce flood risk overall (e.g. through the provision of new or improved flood defences, or improved drainage)? See paragraph 038 for further advice

9. Residual risk

You can use this section to describe any residual risks that remain after the flood risk management and mitigation measures are implemented, and to explain how these risks can be managed to keep the users of the development safe over its lifetime. See addressing residual flood risk for more information.

- a. What flood related risks will remain after the flood risk avoidance, management and mitigation measures have been implemented?
- b. How, and by whom, will these residual risks be managed over the lifetime of the development? (e.g. putting in place emergency plans).

10. Flood risk assessment credentials

You can use this section to provide details of the author and date of the flood risk assessment.

- a. Who has undertaken the flood risk assessment?
- b. When was the flood risk assessment completed?