

# Appendix G Flood Risk Assessment



# Basic Level 1 Flood Risk Assessment (FRA) screening study

Minor development is relation to flood risk is classified as:

- A minor non-residential extensions: industrial/commercial/leisure etc extensions with a footprint less than 250 square metres.
- Alterations: development that does not increase the size of buildings eg alterations to external appearance.
- Householder development: For example; sheds, garages, games rooms
  etc within the curtilage of the existing dwelling, in addition to physical
  extensions to the existing dwelling itself. This definition excludes any
  proposed development that would create a separate dwelling within the
  curtilage of the existing dwelling eg. Subdivision of houses into flats.

For minor developments the assessment should include:

- Your site address
- A description of your development
- An assessment of the flood risk from all sources of flooding for your development, plus an allowance for climate change
- The estimated flood level for your development, taking into account the impacts of climate change over its lifetime
- Details of the finished floor levels
- Details of your flood resistance and resilience plans
- Any supporting plans and drawings
- Any other information the relevant standing advice tells you to include

#### Advice for minor extensions:

- You will need a plan showing the finished floor levels and the estimated flood levels.
- State in your assessment all levels in relation to Ordnance Datum (the height above average sea level). You may be able to get this information from the Ordnance Survey (<u>www.ordnancesurvey.co.uk</u>). If not, you'll need to get a land survey carried out by a qualified surveyor.
- Make sure floor levels are either no lower than the existing floor levels or 300mm above the estimated flood level.
- If you cannot raise the floor levels in this way, you will also need to include extra flood resistance and resilience measures. These measures should protect to at least 300mm above the estimated floor level.

# As a minimum it is suggested that developers/applicants should answer the following questions:

- What type of development is proposed and where will it be located?
   Include whether it is new development, an extension to existing development or change of use etc.
- What is its vulnerability classification?
- What sources of flooding could affect the site?

Should the policy guidance within the Planning Practice Guidance (as confirmed by the Environment Agency) identify Flood Zone Level 2 or Level 3 or over 1hectare in Flood Zone 1 a more detailed study is required to cover the following:

### **Development description and location:**

- The type of development proposed and where it will be located.
- The vulnerability classification
- Whether the proposed development is consistent with the local development documents.
- Evidence that the Sequential Test and Exception Test (if necessary) has been applied in the selection of this site for the development type proposed, or reference to this if presented in other planning documents.

#### Definition of the flood hazard:

- All sources of flooding that could affect the site.
- Identify sources, describe how flooding would occur, with reference to any historic records wherever these are available.
- The existing surface water drainage arrangements for the site.

#### **Probability:**

- The flood zone the site is within.
- The probability of the site flooding.
- The existing rates and volumes of run-off generated by the site, including information on flow and rate of onset.

### Climate change:

- The effects of climate change on flood risk for the lifetime of the development-use detailed development proposals:
- Details of the development layout, referring to the relevant drawings (cross referring to the main application).
- Where appropriate, demonstrate how land uses most sensitive to flood damage have been placed in areas within the site that are at least risk of flooding (applying the Sequential Test at site level).
- What are the existing surface water drainage arrangements for the site in compliance with Surface Water Management Good Practice Principles and Standards i.e. management of surface water run off must not increase flood risk either on site or elsewhere.
- Which flood zone is the site within? (Check with the Environment Agency or Local Planning Authority).
- If applicable, include evidence to demonstrate compliance with the Shoreline Management Plan.

# Flood risk management measures:

 How will the site be protected from flooding, including the potential impacts of climate change, over the development's lifetime?

#### **Off-site impacts:**

 Demonstrate how the measures to protect the development from flooding will ensure that there will be no increased flood risk elsewhere.

- Measures to prevent run-off from the completed development causing an increased impact elsewhere.
- The incorporation of sustainable drainage systems in the overall design of the development or justification of why they are not suitable.

#### Residual risks:

- An assessment of the flood related risks that remain after measures to protect the site from flooding have been implemented.
- Who will manage the risks and enforce compliance over the lifetime of the development. (This may need to be secured via planning conditions or a \$106 agreement).

#### Other information

Flood Risk Assessments should always be proportionate to the degree of flood risk in each case and appropriate to the scale, nature and location of the proposed development or change of use.