
Links to all referenced policies, standards, guidance and supporting resources are provided at the end of this document.

Surface Water Flood Risk – LLFA Planning Role

Leicestershire County Council as the Lead Local Flood Authority (LLFA) is a statutory consultee for major planning applications where surface water flood risk is a consideration. This standing advice supports Local Planning Authorities (LPAs) in assessing non-major planning applications for surface water flood risk.

Major development is defined by The Town and Country Planning (Development Management Procedure) (England) Order 2010 (Article 2) as:

- Minerals development.
- Waste development.
- Residential development of 10 or more dwellings.
- Residential development on a site of 0.5 hectares or more where the number of dwellings is unknown.
- Development creating 1,000m² or more of floorspace.
- Development on a site of 1 hectare or more.

The LLFA should normally only be consulted on major development. Consultation on non-major (sometimes also referred to as ‘minor’) development may be appropriate where:

- There are existing known flood risk issues in the area.
- The application forms part of a wider development on which the LLFA has previously commented.
- Credible surface water flood risk concerns have been raised by others.

Where consultation is requested for a non-major application, the reason should be clearly stated by the LPA within the consultation correspondence.

The ‘non-major’ or ‘minor’ designation should not be used to downplay the potential significant implications the proposed development may have on flood risk.

Fluvial Flood Risk – Environment Agency (EA)

The responsibility for fluvial flood risk rests with the EA. The EA should be consulted where fluvial flood risk is present. Proposals within 20 metres of a Main River or flood defence should always be referred to the EA. In some cases, the EA standing advice should be followed.

EA advice (including when to consult with them) and mapping of flood risk, main rivers and flood defences are linked at the end of this document.

1. Flood Risk Assessments - National Planning Policy Framework (NPPF)

LPA's should ensure that development does not increase flood risk elsewhere and should only permit development in areas at risk of flooding where a site-specific Flood Risk Assessment demonstrates that it will be safe for its lifetime and its users.

To support this, a site-specific Flood Risk Assessment (FRA) should be submitted with:

- All development proposals located within Flood Zones 2, 3a or 3b.
- Development proposals within Flood Zone 1 where:
 - The site is 1 hectare or larger;
 - The Environment Agency has identified the site as being within an area of critical drainage problems; or
 - The site is identified by the Strategic Flood Risk Assessment (SFRA) or Flood Map for Planning as being at risk of flooding from any source, either now or in the future.

Any FRA should be proportionate to the scale, nature and location of the proposed development and should demonstrate that flood risks have been appropriately assessed and managed.

For development which does not trigger the need to a formal FRA, flood risk does still need to be considered within any decision made by the LPA.

2. Land Drainage Consent

If there are any works proposed as part of an application which are likely to affect flows in an ordinary watercourse or ditch, then the applicant may require consent under s.23 Land Drainage Act 1991. This legislation is separate from the planning process. Guidance on this process and a sample application form can be found on our website linked below.

For development proposed within 5 metres of a watercourse or ditch, the developer should contact the County Council at an early stage to determine whether Land Drainage Consent or other approvals may be required.

3. Ordinary Watercourses (inc. Ditches and Culverts)

NPPF Policy F8 Section 3 states that development proposals should not enclose existing watercourses where this is not already the case, unless there are compelling reasons to do so; and should where possible, remove existing culverts and re-naturalise existing river channels, unless to do so would increase flood risk, result in other environmental harm or cause harm to heritage assets.

Where a drainage ditch adjoins or passes through a development, suitable maintenance access should be retained for the lifetime of the development. The ownership and responsibility for maintenance of the ditch should also be clearly identified and conveyed to the relevant parties.

LPA's should also consider any land drainage byelaws local authorities have and how these could impact on the development.

Any application approved by the LPA which includes culverting will still require s.23 approval by the LLFA. This approval could be withheld if deemed inappropriate and can result in the

need for planning variation or revised submissions being required. As such, this should be fully considered to avoid any abortive work.

4. Surface Water Disposal

In line with In line with Approved Document H of the Building Regulations 2010 and the National Standards for SuDS (NSS), runoff from the development shall be discharged to the following final destinations, to the maximum extent practicable, in accordance with the below hierarchy (with 1 being the highest priority and 5 the lowest):

- 1) Collected for non-potable use (where practicable)
- 2) Infiltrated to ground
- 3) Discharged to an above ground surface water body
- 4) Discharged to a surface water sewer, or another piped surface water drainage system
- 5) Discharged to a combined sewer

Applicants should demonstrate why higher-ranking options are not viable where lower-ranking options are proposed.

Where outfalls and point of connections are within or through land outside the development site boundary, suitable arrangements and easements should be in place to permit access and maintenance for the life of the development.

5. Sustainable Drainage Systems

All development proposals that could affect drainage on or around a site should incorporate Sustainable Drainage Systems (SuDS) to control runoff rates and volumes in a manner proportionate to the scale and nature of the proposal. SuDS should deliver multifunctional benefits wherever possible, including improvements to water quality, biodiversity and amenity.

In line with NPPF, SuDS should be designed in accordance with the National Standards for Sustainable Drainage Systems and have maintenance arrangements in place to ensure effective operation for the anticipated lifetime of the development.

6. Proposed Surface Water Discharge Rates

For all developments, post-development runoff rates for the 1 in 1 year and 1 in 100 year rainfall events should not exceed the corresponding greenfield runoff rates.

Where greenfield rates cannot reasonably be achieved on brownfield sites, discharge rates should be reduced as far as practicable and should not exceed five times the equivalent greenfield rate as defined by NSS.

7. Drainage and Waste Disposal

Where surface water drainage is to be constructed or altered that is not proposed to be adopted by either the Water and Sewerage Company or the County Council as highway authority, the system should be designed in accordance with The Building Regulations 2010 Approved Document H. Shared drainage systems may alternatively be designed in accordance with the DCG Sewerage Sector Guidance Appendix C.

8. Infiltration (Soakaways)

Much of Leicestershire is underlain by geology that is often unsuitable for infiltration drainage. Proposals relying on soakaways must therefore be supported by infiltration testing undertaken in accordance with recognised guidance, such as BRE Digest 365. Any resulting soakaway design should follow recognised industry guidance, such as CIRIA C753 and be compliant with Building Regulations Approved Document H.

The base of any infiltration feature must be at least 1 metre above the highest anticipated groundwater level.

9. Climate Change

Drainage calculations must include an appropriate allowance for climate change in accordance with the latest EA guidance.

The proposed discharge rate from the development should not increase beyond the pre-development discharge rate as a result of climate change.

10. Overland Flow

Overland flow routes, as shown on the 'Flood Map for Planning', should be considered such that buildings are not placed directly at risk of surface water flooding. Such flow routes should be utilised for roads and green infrastructure.

11. Exceedance Flow Routes

Exceedance flows during extreme rainfall events should be considered and managed in a way that minimises risk to properties. Exceedance flows should be directed away from properties and managed by roads and green infrastructure wherever possible.

12. External Surfaces

To prevent an increase in the discharge rate or volume due to development of external surfaces, permeable surface material should be promoted where possible, without an impermeable lining unless required to prevent mobilisation of contaminants or groundwater flooding.

13. Minor Works

If a proposed building/wall or other construction appears to sit astride an indicated surface water flow route as shown on the 'Flood Map for Planning', the new build may deflect floodwater onto another person's property or raise flood levels by a significant amount locally. Proposals should seek to maintain existing flow paths and not increase the risk of flooding elsewhere.

14. Emergency Access and Egress

Consideration should be given to emergency access and egress. Measures should be in place to ensure suitable access and egress from the development is available during times of flooding. Where safe access and egress cannot reasonably be achieved, a suitable internal refuge above the design flood level should be provided.

15. Ground Floor Levels

For development within Flood Zones 2 or 3, or areas of medium or high surface water flood risk, finished floor levels should be set at the greater of:

- 300mm above adjacent ground level; or
- 600mm above the Flood Zone 2 design flood level.

Basement rooms should provide direct internal access to higher levels. Where basements have external access, thresholds should comply with the minimum floor levels above.

Single-storey buildings, or ground-floor subdivisions with no access to higher levels, should provide access to a refuge above the 1 in 1000 annual probability flood level, including an allowance for climate change.

In the case of minor householder extensions, finished floor levels should be no lower than existing ground floor levels within the property.

16. Flood Resilient Construction

For household extensions located within fluvial Flood Zones 2 and 3, flood resilient construction should be considered to minimise the impact of a flooding event. Flood resilience measures should be designed in accordance with the CIRIA Property Flood Resilience Code of Practice.

Standards for materials and design approaches that will speed the recovery of buildings after flooding are available in British Standard 85500:2015.

Relevant Links

Refer to the following links for further supporting information, guidance & policy:

- Leicestershire County Council Flooding and Drainage
<https://www.leicestershire.gov.uk/environment-and-planning/flooding-and-drainage>
- Leicestershire County Council s.23 Land Drainage Consent
<https://www.leicestershire.gov.uk/environment-and-planning/flooding-and-drainage/lead-local-flood-authority/regulation-of-activities-on-watercourses>
- National Planning Policy Framework
<https://www.gov.uk/guidance/national-planning-policy-framework>
- National Standards for Sustainable Drainage Systems
<https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems>
- Environment Agency – When to Consult on Fluvial Flood Risk
<https://www.gov.uk/guidance/national-flood-risk-standing-advice-for-local-planning-authorities#when-to-consult-the-environment-agency-or-follow-standing-advice>

- Environment Agency Flood Risk Assessment for Planning Applications
<https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications>
- Environment Agency Flood Map for Planning and Main River Map
<https://flood-map-for-planning.service.gov.uk/map>
- Environment Agency Climate Change Advice
<https://www.gov.uk/guidance/climate-change>
- Environment Agency Preparing a flood risk assessment: standing advice
<https://www.gov.uk/guidance/preparing-a-flood-risk-assessment-standing-advice>
- Planning Practice Guidance - Flood Risk and Coastal Change
<https://www.gov.uk/guidance/flood-risk-and-coastal-change>
- Major Development Definition - The Town and Country Planning Order 2010
<https://www.legislation.gov.uk/ukxi/2010/2184/article/2/made>
- Building Regulations Approved Document H Drainage and Waste Disposal
<https://www.planningportal.co.uk/applications/building-control-applications/building-control/approved-documents/part-h-drainage-and-waste-disposal/approved-document-h>
- Sewage Sector Guidance Appendix C - Design and Construction Guidance
<https://www.water.org.uk/sewerage-sector-guidance-approved-documents>
- BRE Digest 365 Soakaway design
<https://bregroup.com/store/bookshop/soakaway-design-dg-365-2016-download>
- CIRIA C753 The SuDS Manual
https://www.ciria.org/CIRIA/CIRIA/Item_Detail.aspx?iProductCode=C753
- BS 85500:2015 Flood resistant and resilient construction
<https://knowledge.bsigroup.com/products/flood-resistant-and-resilient-construction-guide-to-improving-the-flood-performance-of-buildings>
- CIRIA C790F Code of practice for property flood resilience
<https://www.ciria.org/ItemDetail?iProductCode=C790F&Category=FREEPUBS>

Note: Provided by the Lead Local Flood Authority under the delegated authority of the Director of Growth, Environment and Transport.