

Coventry City Council

Flood Risk Management & Drainage – Planning Standing Advice

Policy

Coventry City Council as Lead Local Flood Authority (LLFA) has the responsibility of managing local surface water and groundwater flood risk within its area. The LLFA is also a statutory consultee on planning applications within certain specific criteria, ensuring the delivery of sustainable development. The Council has produced a number of documents relating to flood risk and surface water management and contributed to the emerging Coventry Local Plan with the Strategic Flood Risk Assessment as a Supplementary Planning Document. The documents listed below can be found online at <http://www.coventry.gov.uk/watermanagementandflooding>.

- Preliminary Flood Risk Assessment (PFRA)
- Surface Water Management Plan (SWMP)
- Local Flood Risk Management Strategy (LFRMS)
- Strategic Flood Risk Assessment (SFRA)

Flood risk mapping

The Environment Agency's fluvial, pluvial and reservoir flood risk mapping for individual properties in England can be found at <https://www.gov.uk/check-flood-risk>.

Surface water discharge

In accordance with Building Regulations 2010, Part H, rainwater shall discharge to one of the following, in order of priority; (i) an adequate infiltration system; (ii) a watercourse or; (iii) a sewer. Where a development cannot infiltrate, runoff should be restricted to the Qbar greenfield discharge rate minus 20%, or 5l/s, whichever is greater.

Climate Change

The Environment Agency revised its climate change allowances in February 2016 and these can be located at <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>. Based on this data, the LLFA requires all development to apply a 40% climate change allowance to surface water drainage design, unless justification for a lower allowance can be made, strictly in accordance with the national criteria.

Adoption and maintenance

The adoption and maintenance of all drainage features are a key consideration to ensure the long term operation at the designed standards. Underground drainage infrastructure such as pipes and tanks will be considered for adoption by a Sewerage Undertaker. The Council will consider the adoption of open air sustainable drainage within areas of public open space, such as semi-dry detention basins, forming joint-use amenity space.

Open attenuation features must be accessible by appropriate maintenance vehicles and require a maintenance strip with a minimum width of 3 metres. The maintenance strip adjoining a watercourse should be a minimum width of 5 metres. However, these figures are only a minimum guide and wider strips may be required to suit the specific development.

Exceedance flows

Developers should demonstrate flood flow routes through a site in the event of design exceedance or blockage scenario, and where the site topography naturally channels through the site prior to development. Flood flows should be managed to be safe and not enter any buildings

or disrupt emergency access routes. Exceedance flows should not be routed through private residential plots. If flooding occurs, the hazard should be considered in line with the latest guidance from the Environment Agency.

Prevention of flows onto the Public Highway

Developers should ensure that surface water is managed to prevent flows onto the Public Highway. Private parking and hardstanding with a gradient falling towards the Public Highway should ensure that adequate private drainage is provided to intercept surface water flows.

Water quality

The Water Framework Directive (WFD) established a legal framework for the protection, improvement and sustainable use of water bodies such as rivers, brooks and groundwater. Developers are required to contribute to the aims of the WFD, which broadly involve:

- prevent deterioration in water body status;
- reduce water pollution;
- conserve aquatic ecosystem and habitats;
- reduce the effects of floods and droughts on water bodies;
- promote sustainable use of water as a natural resource; and
- removal of physical man-made modifications to watercourses, i.e. culverts.

Useful guidance and design standards

A range of drainage design guidance documents and British Standards are available. Some examples are listed below, but is not exhaustive:

The Building Regulations, Part H	Free download from Planning Portal
National Planning Policy Framework	Free to access at GOV.UK
Planning Practice Guidance	Free to access at GOV.UK
The SuDS Manual (C753)	Free download from CIRIA
Planning for SuDS – making it happen (C687)	Free download from CIRIA
Designing for exceedance in urban drainage – good practice (C635)	Free download from CIRIA
Assessing and managing flood risk in development – Code of Practice (BS 8533:2011)	Purchase from BSI
Drain and sewer systems outside buildings (BS EN 752:2008)	Purchase from BSI
Design Manual for Roads and Bridges: Volume 4 Geotechnics and Drainage	Free downloads available from Standards for Highways
Sewers for Adoption: A design and construction guide for developers (7 th Edition)	Purchase from WRC
BRE Digest 365 – Soakaway Design	Purchase from BRE

Detailed pre-application advice and meetings

More detailed and site-specific flood risk management and drainage advice can be sought by submitting a request for pre-application advice to the LLFA. Further details on the LLFA pre-application charging scheme can be found online. A summary of the costs for this service are as follows:

Category A – Small Scale Development	£60	
Category B – Small Scale Development	£120	
Category C – Medium Scale Development	£600	
Category D – Large Scale Development	£1200	
Category E – Major Scale Development	£1800	
Category F – Project/Major Work	£2400	(minimum)