Planning Application – Flood Risk Management and Sustainable Drainage Strategy Information

To ensure that the Local Planning Authority (LPA) can determine applications in a timely manner, and for the Lead Local Flood Authority (LLFA) to fulfil its role as a statutory consultee, it is necessary for sufficient surface water drainage and flood risk management information to be submitted in support of applications.

Different requirements apply depending on the type of application.

"Major development" is defined by the Town and Country Planning (Development Management Procedure) (England) Order 2015 (Article 2).

In relation to flood risk, developments are further classified as minor and non-major in the Planning Policy Guidance Flood Risk and Coastal Change.

Masterplanning Considerations

Where a masterplan is required or encouraged, flood risk management and surface water drainage should be considered at an early stage and used to inform the overall layout and form of development.

Masterplanning provides an opportunity to take a strategic, site-wide approach to flood risk and drainage, ensuring that development is directed away from areas of highest flood risk and that sufficient land is safeguarded for sustainable drainage, exceedance routing and green infrastructure.

At masterplan stage, a proportionate, preliminary assessment of flood risk should be undertaken, having regard to all relevant sources of flooding, including fluvial, surface water, groundwater, sewer and ordinary watercourses. This should draw on the Strategic Flood Risk Assessment, Environment Agency mapping and local data, and consider current and future flood risk, including climate change.

A preliminary drainage strategy should be prepared to demonstrate the feasibility of managing surface water within the site. This should identify the preferred drainage hierarchy, indicate sufficient SuDS measures and their broad locations, and show how drainage considerations have influenced site layout.

Where development is proposed in phases, the masterplan should demonstrate that flood risk and drainage can be managed effectively across the site and through each phase, without increasing flood risk elsewhere or constraining future development.

Information provided at masterplan stage does not replace the need for a site-specific Flood Risk Assessment and detailed drainage strategy at planning application stage but should establish clear principles to guide subsequent submissions. Early engagement with the Lead Local Flood Authority is strongly encouraged.

Sequential Test

A sequential test is required for developments as specified in NPPF and National flood risk standing advice.

Refer to Bracknell Forest advice note (Advice note relating to application of Flood Test Squential Test and Exception Test) for further guidance.

Flood Risk Assessment

A site-specific flood risk assessment is required to assess the flood risk to and from a development site and should accompany a planning application where prescribed in Environment Agency guidance.

Depending on the type of development and the risk of flooding, the EA may be consulted. For developments that should comply with the EA's standing advice, the LPA will consult the LLFA.

Planning Policy Guidance Flood risk and coastal change - GOV.UK provides guidance on what should be included in a flood risk assessment.

Hydraulic Modelling

Development or the cumulative impacts of development may result in an increase in flood risk elsewhere as a result of impacts such as the loss of floodplain storage, the deflection or constriction of flood flow routes or inadequate management of surface water. Site-specific flood risk assessments should assess these impacts and demonstrate how mitigation measures have addressed them.

Depending on the scale of the development, pre and post development hydraulic modeling may be required to demonstrate that the development does not increase the risk to itself or elsewhere.

Where a surface water hydraulic model is required, the Local Planning Authority may seek independent technical review of the model, including its assumptions, inputs and outputs, to assess constraints and verify the robustness of the supporting evidence. Any such independent review will be funded by the applicant, in accordance with Policy LP24 of the Bracknell Forest Local Plan.

Contact the EA for fluvial hydraulic modelling requirements and the LPA for advice on when pluvial hydraulic modelling is required.

Surface Water Drainage Strategy

Major Applications

National Planning Policy Framework states that "Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate."

Sustainable drainage systems should be designed in accordance with national, local and industry policies and standards.

Submission Requirements for Planning Stages

The table below, while not exhaustive is information that is required to be submitted at different planning stages. Additional information may be required depending on site-specific conditions, the complexity of the site or development proposals.

Table 1 – Requirements for planning application

Information Required	Outline	Full	Reserved Matters	Discharge of Condition	Verification Condition
Topographical survey					
Identification of discharge destination					
Development information including location plan, site layout, and drainage schematic					
Surface water drainage strategy report or statement					
Calculation assumptions and results including impermeable areas, infiltration rates, network calculations and models					
Existing and proposed drainage arrangements					
Existing and proposed discharge rates					
Ground investigation reports/survey and soakage testing results	1				
Maintenance programs and access arrangements					
As built drawings or tender construction drawings					
Exceedance plan including proposed levels, conveyance routes, volumes and depths					
Catchment plans					
Water quality index					
Watercourse condition and connectivity					
Proposed detailed drainage network plans and cross-sections including cover and invert levels, locations of flow controls (Critical Drainage Assets)					
Attenuation device details including cross-sections					
Landscape Plan					
Structural Integrity					

Pre-application enquiry to sewerage undertake for discharge into foul water sewer					
Discharge agreements, consents and/or evidence of third-party agreement for discharge to their system					
Phasing plan					
Identification or designation of maintaining authority/organisation					
Details of offsite work including third party approval					
Construction environment management plan including pollution prevention and temporary drainage					

Non-Major and Minor Applications

National standards require sustainable drainage for all developments with surface water drainage and in areas at risk of flooding such as flood zones 2 or 3, or at risk of surface water flooding - National flood risk standing advice for local planning authorities - GOV.UK

The LPA will also consult the LLFA if the development meets the following criteria:

- proposed surface water discharge into foul water sewer
- amendment of existing watercourse including culverting, diversion, re-alignment, etc
- inclusion of a proposed adoptable highway

Non-major developments will generally demonstrate the submission requirements for major developments with the level of information required proportionate to the scale of development.

For minor developments, sustainable drainage shall be proportionate to the scale of the development to include water butts, planters, permeable paving, green roofs, rain gardens or other systems that are systems that are compatible with the scale of the development.

Foul Water Drainage Strategy

A guidance note has been produced for developers to outline what measures should be undertaken to ensure that sufficient sewer capacity is available to enable delivery of their development in a timely manner, available on our website.

1 Where infiltration is proposed, in the absence of ground investigation, a back-up alternative strategy is required

Information Required

Require greater design detail than previous planning stage

Greatest amount of detail required

Strategies, Policies, Standards and Design Guidance

The following documents should be used to inform the production of sequential test, flood risk assessment and drainage strategy.

National Standards

- National Planning Policy Framework (NPPF)
- National Planning Policy Framework – Planning Practice Guidance
- Non-Statutory Technical Standards for Sustainable Drainage Systems
- Environment Agency Preparing a flood risk assessment: standing advice

Local Standards

- Bracknell Forest Local Plan
- Bracknell Forest Strategic Flood Risk Assessment
- Bracknell Forest Local Flood Risk Management Strategy
- Advice Note relating to application of Flood Risk Sequential Test and Exception Test within Bracknell Forest
- Guidance note on waste water drainage

Industry Design Standards

- Code of practice for surface water management for development sites BS 8585:2013
- Building Research Establishment, Soakaway Design – Digest 365 (BRE DG 365 (2016))
- The Building Regulations 2010 Drainage and Waste Disposal Approved Document H, HM Government, 2015 edition
- Non-Statutory Technical Standards for Sustainable Drainage Systems
- Sewers for Adoption 8th Edition, WRc plc, 2018
- SuDS Manual, C753, CIRIA, 2015
- Guidance on the Construction of SuDS, C768, CIRIA, 2017

Maps and Data

- Flood map for planning
- MAGIC Map Application]
- British Geological Maps Survey

Pre-Application Discussions

A pre-application advice service which includes consultation with the LLFA, is available via the LPA at Preparing for a pre-application | Bracknell Forest Council