

Crawley Borough Local Plan 2023-2024 Strategic Policy EP1: Development and Flood Risk Extract

CBC proposed further Modifications following the Environment Agency's Main Modifications Representation: shown in **Green Highlight** below. These proposed amendments follow the same format and are added to the existing Main Modifications, shown as marked-up text (**bold, blue underline** = new text; ~~red strike-through~~ = deleted text) below.

Development and Flooding

- 16.8 Crawley borough falls entirely within the upper reaches of the River Mole catchment, with a number of areas at risk of flooding from fluvial sources, and the northward flow of the Upper Mole towards the Thames also having flood implications for Gatwick Airport and neighbouring authorities. River flooding is not the only source of flood risk; Crawley is at the highest risk of surface water flooding in West Sussex, whilst flood risk from groundwater and sewer sources must also be considered.
- 16.9 Development must be planned sustainably with flood risk from all sources in mind to ensure the well-being of its future users over the lifetime of development, whilst ensuring that it does not increase flood risk elsewhere. The NPPF and PPG: *Flood Risk and Coastal Change* categorise different development types according to their vulnerability to flood risk, and considers the extent to which these uses are compatible or otherwise with the level of flood risk at a given site. Through applying the sequential test, development should be directed to the areas of lowest flood risk.

Policy EP1: Development and Flood Risk

Development must avoid areas which are exposed to an unacceptable risk from flooding, and must not increase the risk of flooding elsewhere. To achieve this, development will:

- i. be directed to areas of lowest flood risk having regard to its compatibility with the proposed location in flood risk terms, and, where required, demonstrating that first the sequential test and, if needed, the exception test are satisfied;
- ii. where located in Flood Zones 2 or 3, and for all major development in Flood Zone 1 or where otherwise required by the NPPF, demonstrate through a Flood Risk Assessment how appropriate mitigation measures will be implemented to ensure that over the lifetime of the development and taking climate change into account, that flood risk is acceptable on site, and is not increased elsewhere as a result of the development;
- iii. demonstrate that peak surface water run-off rates and annual volumes of run-off will be reduced through the effective implementation, use and maintenance of SuDS, unless it can be demonstrated that these are not technically feasible or financially viable;
- iv. make appropriate provision for surface water drainage to **the** ground, water courses or surface water sewers, **having regard to surface water flow paths**. Surface water will not be allowed to drain to the foul sewer. **Opportunities to maximise water re-use within a development should also be considered where feasible. For major development, planning applications should be accompanied by a site-specific drainage strategy;**
- v. not be permitted to take place within 8 metres from the **edge of bank of** ~~top of~~ any Main River or ~~12 metres from any~~ Ordinary Watercourse, nor within 3 metres of any sewer system without prior consent from the appropriate authority. **Where development is located in the vicinity of any Main River, opportunities for ecological enhancements should be explored, and development should not**

prejudice delivery of mitigation measures contained within the Environment Agency's Catchment Planning System;

- vi. post construction, provide to the council certification of the drainage works from a third party professional. This should not be the consultant who designed the drainage features. This will be to ensure that the drainage details and design submitted for planning application has been constructed in line with the submitted documents.

Reasoned Justification

- 16.10 *Flooding is a natural process that can happen at any time in a wide variety of locations, potentially posing a risk to life, property and livelihoods. The risk of flooding posed to properties within Crawley arises from a number of sources including river flooding, localised runoff and sewer flooding.*
- 16.11 *Development has the potential to increase the likelihood of flood risk if it is not carefully planned and managed. There are areas which are particularly at risk from fluvial flooding as Crawley is crossed by a number of designated main river watercourses that form part of the River Mole catchment. Climate change, and the predicted alterations to weather patterns this will bring, place additional need to ensure development can be considered as safe for its lifetime. Therefore, to ensure that people and places are not exposed to unacceptable flood risk, it is essential that planning decisions are informed by, and take due consideration of, the flood risk posed to (and by) development.*
- 16.12 *Flash flooding from surface water run-off is frequently an issue across the borough following heavy localised rainfall events. It is a specific issue in Crawley as the underlying clay soil and density of urban development reduces permeability and increases the levels and speed of surface water run-off. This can result in localised surface flooding, and can lead to rivers exceeding their storage capacity more quickly, often resulting in 'flash flooding'. It is the responsibility of the developer to make proper provision for surface water drainage to ground, water courses or surface water sewers. It must not be allowed to drain to the foul sewer, as this is the major contributor to sewer flooding.*
- 16.13 *The NPPF requires local planning authorities to take a pro-active approach to managing impacts associated with climate change, including flood risk. The risk of a flood event is a function of both the probability that the flood will occur and the consequence to the community as a direct result of the flood. To minimise risks to property, development should be avoided in areas which are at greatest risk of flooding, and directed to sequentially preferable areas of lowest risk. Where, having applied the sequential test, it is not possible for development to be located in areas of lower flood risk, then the NPPF exceptions test should be applied and satisfied. The Exception Test is not a tool to justify development in flood risk areas when the Sequential Test has already shown that there are reasonably available, lower risk sites, appropriate for the proposed development.*
- 16.14 *To guide the location of development, Planning Practice Guidance: Flood Risk and Coastal Change (DLUHC, 2022) identifies the different levels of flood risk, ranging from land at the greatest probability of flooding (Flood Zone 3b functional floodplain)-to Flood Zone 1, the low probability.*
- 16.15 *To identify the extent to which land is at risk of flooding, applicants should refer to the Crawley Strategic Flood Risk Assessment. Based on the SFRA mapping, Crawley is delineated into the following fluvial Flood Zones:*
- **Flood Zone 1:** *Low probability: less than a 0.1% chance of river and sea flooding in any given year.*

- **Flood Zone 2:** Medium probability: between a 1% and 0.1% chance of river flooding in any given year or 0.5% and 0.1% chance of sea flooding in any given year.
- **Flood Zone 3a:** High probability: greater or equal to a 1% chance of river flooding in any given year or greater than a 0.5% chance of sea flooding in any given year. Excludes Flood Zone 3b.
- **Flood Zone 3b:** Functional Floodplain: land where water has to flow or be stored in times of flood. The identification of functional floodplain set out in the SFRA takes account of local circumstances and has been agreed with the Environment Agency. Only water compatible and essential infrastructure are permitted in this zone and should be designed to remain operational in times of flood, resulting in no loss of floodplain or blocking of water flow routes. Flood Zone 3b is defined as land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively, or land that is designed to flood (such as a flood attenuation scheme). [The 2023 SFRA applies a precautionary approach, as agreed with the Environment Agency, using the 2% AEP output to derive Flood Zone 3b.](#)

- 16.16 The SFRA mapping is based on the 2020 update of the Environment Agency River Mole modelling, though does inevitably represent a point in time. To ensure that the most up-to-date information is considered, applicants should refer, in addition to the SFRA, to the most recent Environment Agency Flood Map for Planning, and should consult with Environment Agency and Lead Local Flood Authority to understand if more recent data is available.
- 16.17 The NPPF seeks to avoid, so far as possible, development in current and future medium and high flood risk areas considering all sources of flooding including areas at risk of surface water flooding. Where it is not possible to locate development in low risk areas, the sequential test should compare reasonably available sites with medium risk areas. Only where there are no reasonably available sites in low or medium risk areas should high-risk areas be considered. As a 'more vulnerable' use, residential development should be steered to areas of low risk in the first instance, before areas of medium flood risk are considered, subject to demonstrating compliance with the sequential test and the acceptability of development through a site-specific Flood Risk Assessment. The Flood Risk Assessment will need to demonstrate how flood risk will be managed now and over the development's lifetime, taking climate change into account and with regard to the vulnerability of its users. Residential development on land falling within Flood Zone 3a will only be acceptable where it can be demonstrated through a site-specific Flood Risk Assessment, that firstly the requirements of the sequential test are met, and secondly that the exception test is satisfied.
- 16.18 All housing sites identified in Local Plan Policy H2 are considered to be appropriate locations in terms of flood risk. This assessment follows early engagement on the Local Plan with the Environment Agency and West Sussex County Council (WSCC). Of the sites allocated by the Local Plan for residential development, Land adjacent Desmond Anderson, Tilgate is partly affected by Flood Zones 3b/a and Flood Zone 2. Land West of Balcombe Road/Street Hill, Pound Hill South and Worth, identified as a housing, biodiversity and heritage site, is subject to a small area of Flood Zones 2 and 3. The principle of residential development at each of these sites is accepted, subject to applicants demonstrating, through a Flood Risk Assessment, that the proposed development has been carefully planned and is acceptable in terms of flood risk.
- 16.19 West Sussex County Council (WSCC) is the Lead Local Flood Authority (LLFA), meaning it is a statutory consultee on planning applications where flood risk is a consideration. In its capacity as LLFA, WSCC published West Sussex Lead Local Flood Authority Policy

for the Management of Surface Water (November 2018), which sets out the requirements for drainage strategies and surface water management provisions associated with applications for development. In responding to flood risk as part of the planning application process, applicants should meet the requirements set out by WSCC, demonstrating the extent, position, function and future management arrangements for the sustainable drainage system for a proposed site. This information will be required for all development, except for those development types identified within Local Plan Policy EP2 and at Paragraph 16.17, and should be submitted to the Local Planning Authority at the time that an application is made. Further guidance is provided in the SFRA (2020) and the Climate Change Supplementary Planning Document.

- 16.20 *The provision of buffer strips is important in preserving watercourse corridors, flood flow conveyance and for future watercourse maintenance and improvement. It also enables the avoidance of disturbing ecology and the structural integrity of riverbanks. The buffer distances set out in the Policy are to ensure the preservation of the watercourse corridor, wildlife habitat, flood flow conveyance and future watercourse maintenance or improvement. Where development is proposed within the buffers referred to at EP1 v.), for Main Rivers, prior consent should be obtained from the Environment Agency. For Ordinary Watercourses, prior consent should be obtained from Crawley Borough Council, and in relation to a sewer system, prior consent should be obtained from Thames Water as the sewerage undertaker.*
- 16.21 *Whilst individual development with appropriate site mitigation measures should not result in measurable local effects with respect to hydrology and flood risk, the cumulative effect of multiple development may be more severe at downstream locations in the catchment. Development should therefore incorporate Sustainable Drainage Systems (SuDS) to manage surface water, with the primary aim of reducing flood risk. SuDS represent the most effective approach to reducing flood risk for relatively high intensity, short and medium duration events, and are particularly important in mitigating potential increases in surface water flooding, sewer flooding and flooding from small and medium sized watercourses resulting from development. SuDS can deliver wider sustainability benefits, enabling surface water to be collected for use in homes and gardens, adaptation to climate change through recharge of the watercourse and underlying aquifers, and biodiversity and habitat enhancements. Use of SuDS can also support the management of diffuse pollution generated by urban areas through the sequential treatment of surface water, reducing the pollutants entering lakes and rivers, resulting in lower levels of water supply and wastewater treatment being required. This treatment of diffuse pollution at source can contribute to meeting Water Framework Directive water quality targets, as well as national objectives for sustainable development.*
- 16.22 *Scope may exist to incorporate natural flood management approaches to protect, restore and re-naturalise the function of catchments and rivers to reduce flood risk by emulating the natural regulating functions of catchments, rivers, and floodplains. A wide range of techniques can be used that aim to reduce flooding by working with natural features and processes in order to store or slow down flood waters, including offline storage areas, restoration of rivers or removal of redundant structures, re-meandering streams, targeted woodland planting, and reconnection and restoration of functional floodplains.*