

**DARTFORD LOCAL PLAN**

**Flood Risk Sequential  
Approach Paper**

**September 2021**

**DARTFORD**  
BOROUGH COUNCIL

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# 1 INTRODUCTION AND CONTEXT

## Purpose of Report

- 1.1 This report sets out the justification for including residential sites at risk of flooding as allocated sites and potential areas of future development in the Publication Local Plan and deliverable/ developable for development in the Strategic Housing Land Availability Assessment.
- 1.2 Section 2 outlines relevant national planning policy in respect of flood risk, including the sequential approach, the exception test, information on different flood zones and vulnerability classifications, as well as the suitability of different types of development (depending on their vulnerability) in the various flood zones. The Council has had a new level 1 and level 2 Strategic Flood Risk Assessment produced. Section 3 sets out the objectives of this and the sites that were subject to level 2 assessment. Section 4 outlines the approach taken in the Publication Local Plan. It provides justification in terms of the sequential and exceptions tests for the sites and areas identified for development in the Local Plan and the Strategic Land Availability Assessment.

## 2 NATIONAL PLANNING POLICY

- 2.1 The key messages from the National Planning Policy Framework 2021 are:
- Strategic policies should be informed by a strategic flood risk assessment and take account of advice from the Environment Agency (para 160)
  - Plans should apply a sequential, risk-based approach to the location of development to avoid, where possible, flood risk to people and property (para 161). The aim is to steer new development to areas with the lowest risk of flooding (para 162)
  - If it is not possible for development to be located in zones with a lower risk of flooding, the exception test may have to be applied, depending on the vulnerability of the site and of the development proposed (para 163)
  - The application of the exception test should be informed by a strategic or site specific flood risk assessment, depending on whether it is being applied during the plan production or at the application stage. For the exception test to be passed it should be demonstrated that:
    - a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and
    - b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall (para 164).
- 2.2 The different flood zones are as follows:
- Flood Zone 1: land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%)
  - Flood Zone 2: land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% - 0.1%) or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% - 0.1%) in any year
  - Flood Zone 3: land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year
- 2.3 The national planning practice guidance sets out flood risk vulnerability classifications for different types of uses. The classifications include the following uses:
- Highly vulnerable: basement dwellings, caravans, mobile homes
  - More vulnerable: residential care homes, dwellings
  - Less vulnerable: general industry, storage and distribution
- 2.4 The national planning practice guidance includes a table showing flood risk vulnerability and flood zone compatibility – see the relevant part of this below.

<b>Flood Zone</b>	<b>Highly vulnerable</b>	<b>More vulnerable</b>	<b>Less vulnerable</b>
1	✓	✓	✓
2	Exception test required	✓	✓
3a	x	Exception test required	✓
3b	x	x	x

✓ Development is appropriate

x Development should not be permitted

### 3 EVIDENCE

#### Strategic Flood Risk Assessment

- 3.1 A new level 1 and level 2 Strategic Flood Risk Assessment (SFRA) for the Borough has been produced and is part of the evidence available to support the Publication Local Plan. The SFRA meets the requirements of the Planning Practice Guidance which sets out the following for the two levels of assessment:
- Level 1: where flooding is not a major issue and where development pressures are low. The assessment should be sufficiently detailed to allow application of the Sequential Test.
  - Level 2: where land outside Flood Zones 2 and 3 cannot appropriately accommodate all the necessary development creating the need to apply the National Planning Policy Framework's Exception Test. In these circumstances the assessment should consider the detailed nature of the flood characteristics within a Flood Zone and assessment of other sources of flooding.
- 3.2 The objectives of the SFRA are:
- To provide a robust evidence base to support the Council's emerging Local Plan and inform the assessment of sites in the final Strategic Housing Land Availability Assessment.
  - To provide the basis for the application of the Sequential, and if necessary, Exception Tests for developers and planners.
  - To provide up to date information and guidance on flood risk in Dartford Borough, taking into account the latest flood risk information (including the probable impacts of climate change), the current state of national planning policy and legislation and relevant studies.
  - To identify requirements for site specific flood risk assessments and be suitable to inform the preparation of site specific FRAs.
- 3.3 The SFRA identifies the areas of Dartford Borough at high risk of flooding from tidal, surface water (pluvial) and fluvial sources. It states that proposed development sites at locations at risk of flooding will be required to satisfy the Sequential and, where necessary, Exception Tests in accordance with the NPPF. It further states that Dartford Borough Council will use the information in the SFRA when deciding which development sites to take forward in the emerging Local Plan.
- 3.4 Having carried out the initial level 1 assessment, the following potential sites/development areas were screened for level 2 assessment on the basis of including land which is subject to flood risk. The SFRA does not include the sequential test of the sites that were screened.

Potential Site/ Development Area	Note
Prospect Place	<ul style="list-style-type: none"> <li>Not being taken forward at present as the SHLAA found this unavailable for residential development</li> </ul>
Priory Shopping Centre	<ul style="list-style-type: none"> <li>Priory Centre Local Plan Allocation (see paragraph 4.4 below)</li> <li>SHLAA found the site to be deliverable/ developable for residential development</li> </ul>
Town Centre North East	<ul style="list-style-type: none"> <li>Within the Station Surrounds/ River Darent area of potential future development (see paragraph 4.4 below)</li> <li>Contains a number of SHLAA sites which are currently unavailable for residential development</li> </ul>
The Vicarage, Overy Liberty	<ul style="list-style-type: none"> <li>Not supported for residential development as the SHLAA found this unsuitable for residential development, including on grounds of flood risk (see paragraph 4.8 below)</li> </ul>
Glentworth Club	<ul style="list-style-type: none"> <li>Within the East of Lowfield Street Local Plan Allocation (see paragraph 4.4 below)</li> <li>SHLAA found the site to deliverable/ developable for residential development</li> </ul>
Burnham Trading Estate	<ul style="list-style-type: none"> <li>Not being taken forward as the SHLAA found this unavailable for residential development</li> </ul>
Lower Hythe Street and Central Road	<ul style="list-style-type: none"> <li>Within the Station Surrounds/ River Darent area of potential future development (see paragraph 4.4 below)</li> <li>Contains a number of sites which the SHLAA found to be deliverable/ developable for residential development</li> </ul>
Ebbsfleet Central	<ul style="list-style-type: none"> <li>Ebbsfleet Central Local Plan Allocation (see paragraph 4.10 below)</li> <li>SHLAA found the site to be deliverable/ developable for residential development</li> </ul>
Swanscombe Peninsula	<ul style="list-style-type: none"> <li>Part of the area is within the North of London Road Area, Swanscombe, area of potential future development (see paragraph 4.11 below)</li> <li>The SHLAA found this unavailable for residential development</li> </ul>
Former Littlebrook Power Station	<ul style="list-style-type: none"> <li>Not being taken forward as an allocation but much of the site has planning permission for business use and is now included in an Identified Employment Area</li> </ul>
South of Steele Avenue	<ul style="list-style-type: none"> <li>SHLAA found the site to be deliverable/ developable for residential development (see paragraph 4.14 below)</li> </ul>

3.5 Paragraph 8.5.2 of the SFRA refers to developments in Dartford Town Centre affected by potential future flood events. It outlines that developments in the affected areas will mitigate the potential impacts by locating more vulnerable uses above climate change



level with freeboard allowance, ensuring that water is not displaced or flow routes blocked, and that proposals will be developed in consultation with the Environment Agency.

## 4 PUBLICATION LOCAL PLAN APPROACH

### Overall Approach

- 4.1 Criterion 4 of strategic policy S3 (Climate Change Strategy) requires development to be sequentially located in areas at lower risk of flooding unless the development demonstrably provides specific wider sustainability benefits and will be safe for its lifetime. It also requires development in flood risk areas to fully mitigate flood risk impacts. Criterion 5 of policy S3 requires development to deliver/ maintain existing and future strategic flood defences and major development to provide sustainable drainage systems.
- 4.2 Policy M4 sets out the more detailed development management policy in relation to Flood Risk and Riverside Design. Criterion 3 seeks to ensure that development is safe from all types of flooding, both now and for the lifetime of the development, and does not materially displace flood water or worsen flood risk elsewhere. Where development is within an area at risk of flooding, criterion 4 seeks to direct development to the area of lowest flood risk, require measures to reduce the overall level of flood risk, provide a safe means of access and egress, and incorporate flood protection and resilience measures.

### Central Dartford

- 4.3 The Publication Local Plan sets out a strong policy approach towards Central Dartford. This area is defined as comprising the town centre and area policy boundaries shown in Diagrams 4 and 9 of the Plan. Objective 11, Policy S1 (Borough Spatial Strategy) and section 3 of the Publication Local Plan make clear that Central Dartford is a priority area for development in the Borough. This is part of continuing the regeneration in the urban areas in the north of the Borough.
- 4.4 The following sites in Central Dartford are allocated for development in the Publication Local Plan:
- Westgate (policy D4)
  - East of Lowfield Street (policy D5)
  - Priory Centre (policy D6)
- The Plan also identifies Station Surrounds/ River Darent (policy D7) as a potential area for future development. The SFRA identifies all of these as being at risk of flooding.
- 4.5 The Strategic Housing Land Availability Assessment (SHLAA) lists the sites which have been found to be deliverable/ developable for residential development. There is a reasonable expectation that they would come forward in the plan period to meet the Borough's housing needs. Some of the SHLAA sites within Central Dartford are within an allocated site and some are within an area identified for potential future development. The table below indicates the deliverable/ developable sites within Central Dartford which are within an area at risk of flooding. It also indicates whether the area was subject to level 2 SFRA and the applicable policy, where relevant.

Ref	Name	Flood Zone	Level 2 SFRA	Relevant Policy
4	Rear of Two Brewers, 33 Lowfield Street <sup>^</sup>	2		
10	Steam Crane Wharf	3	Yes	D7*
14	East of Lowfield Street <sup>^</sup>	2		D5 <sup>1</sup>
19	Glentworth Club	2	Yes	D5 <sup>1</sup>
20	Former Co-op, 20-54 Hythe Street and Westgate Car Park <sup>^</sup>	2 and 3		D4 <sup>^</sup>
22	Former Vauxhall Farm, East of 110-114 Lowfield Street <sup>^</sup>	2		D5 <sup>1</sup>
25	Car Park west of Two Brewers, 33 Lowfield Street <sup>^</sup>	2		
30	Vineyard Church Centre, 14-18 Lowfield Street and 24 Market Street <sup>^</sup>	2		
32	52 Spital Street <sup>^</sup>	2		
33	22-26 Spital Street	2		
49	59-69 High Street	2		
77	Gas Holder Site, Victoria Road	3	Yes	D7 <sup>2</sup>
84	46-58 Lowfield Street	2		D5 <sup>1</sup>
91	8-10 High Street	3		
93	27-31 High Street <sup>^</sup>	2		
120	47-49 High Street	2		
131	Abbott Murex Site, Lower Hythe Street <sup>^</sup>	3		D7 <sup>2</sup>
137	104 Lower Hythe Street <sup>^</sup>	3	Yes	D7 <sup>2</sup>
167	Orchards Shopping Centre	2 and 3		D7 <sup>2</sup>
171	Instone House <sup>^</sup>	2		
197	Land at Lower Hythe Street	3	Yes	D7 <sup>2</sup>
209	26-28 Westgate Road <sup>^</sup>	3		
212	Priory Shopping Centre	2	Yes	D6 <sup>1</sup>
226	6-12 Lowfield Street and 11 Market Street	2		
248	1-6 Market Place, 1 Market Street and 37 High Street	2		
256	Block F Oldfield Place, Mill Pond Road, Dartford <sup>^</sup>	3		D7 <sup>2</sup>
261	Milestone Garage, North of Victoria Road	3	Yes	D7 <sup>2</sup>
262	Milestone Garage, South of Victoria Road	3	Yes	D7 <sup>2</sup>
269	Block E Oldfield Place, Mill Pond Road	3		D7 <sup>2</sup>
270	114-130 Lower Hythe Street	3	Yes	D7 <sup>2</sup>
274	26 Lowfield Street	2		D5 <sup>1</sup>

<sup>^</sup> Site has extant planning permission or resolution to grant planning permission (N.B. Most but not all of the Lowfield Street has extant permission or resolution to grant)

<sup>1</sup> Allocated site

<sup>2</sup> Area with potential for future development

- 4.6 It is considered that the Central Dartford site allocations and potential future areas for development identified in the Publication Local Plan (policies D4-D7), and the sites identified as deliverable/ developable for future development in the SHLAA, are

justified in terms of national planning policy on flood risk (see paragraph 2.1 above). Some of the sites are within flood zone 2 and others are within flood zone 3. The identified sites and areas for regeneration in Central Dartford are largely underused or vacant brownfield sites, and the continued regeneration of Central Dartford is a fundamental element of the Local Plan strategy. The Council considers that there are no sequentially preferable sites for residential development and that development in the area would provide wider sustainability benefits to the community that outweigh the flood risk.

- 4.7 In terms of those sites and development areas of Central Dartford within flood zone 3, a number of sites already have planning permission or a resolution to grant planning permission (as indicated in the table in paragraph 4.5). This means that design and technical solutions have already been found to ensure that development will be safe for its lifetime, without increasing flood risk elsewhere, in accordance with the second part of the national exception test (see paragraph 2.1 above). Appendix M of the SFRA sets out requirements for site specific flood risk assessments for a number of the other sites in Central Dartford, including guidance for site design and making development safe. Both these and paragraph 8.5.2 of the SFRA (see paragraph 3.5 above) make clear that there are technical solutions to ensure that development can come forward in a way which meets the second part of the national exception test.
- 4.8 The exception to this is The Vicarage site which is located directly adjacent to the River Darent within flood zone 3. Although this was subject to level 2 assessment, paragraph 14.4 of the SFRA makes clear that there is significant fluvial and tidal flood risk at the site both during the present day and future scenarios. Whilst it is within Central Dartford, it is located away from the heart of the town, set back from the road with a narrow access onto the Overy Liberty/ East Hill junction. As such, it would not provide wider sustainability benefits to the community that outweigh the flood risk. Furthermore, the SFRA specifies that there were no measures identified which could make the site safe for its lifetime and provide safe access and egress. As such, it fails to meet both parts of the exception test.

### Ebbsfleet Garden City

- 4.9 The Publication Local Plan identifies Ebbsfleet Central, and Alkerden and Ashmere, as allocated sites within Ebbsfleet Garden City (policies E4 and E5 respectively). It also identifies a potential area for development, Land North of London Road Area, Swanscombe (policy E6) which the SFRA identifies as being at risk of flooding.
- 4.10 Only a very small part of the Ebbsfleet Central allocation (policy E4) is affected by flood risk (see Site Summary Map within Appendix N of the SFRA). This is largely along areas close to the River Ebbsfleet which is also a Local Wildlife site. The policy and supporting Diagram 10 shows this area as a new park/ strategic green area. The size of the site is such that more vulnerable development can be planned to avoid the areas at greatest risk of flooding in accordance with the sequential approach to development outlined in paragraphs 161 and 162 of the NPPF (see paragraph 2.1 above).
- 4.11 As the Site Summary Map within Appendix N of the SFRA shows, most of the land in the policy E6 area is affected by flood risk. Policy E6 defines this as an area with potential for future development subject to criteria, rather than an allocation. The policy makes clear that any development should be focussed on brownfield land and take

flood risk into account. Ebbsfleet Garden City has long identified large scale potential for significant development for a range of uses involving the re-use of land. After the area was designated by the government as a Garden City, the Ebbsfleet Development Corporation was formed to co-ordinate, facilitate and oversee its implementation. For this reason, it is considered that potential development in this location would meet the first part of the exception test in terms of providing wider sustainability benefits to the community that outweigh the flood risk. In terms of the second part of the exception test, the site summary table for Swanscombe Peninsula in Appendix M of the SFRA sets out requirements for a site specific flood risk assessment, including guidance for site design and making development safe. On this basis, it is considered that the second part of the exception test would be met.

## Other Areas

- 4.12 Whilst no other sites are identified in the Publication Local Plan, the Strategic Housing Land Availability Assessment (SHLAA) lists the sites which have been found to be deliverable/ developable for residential development. There is a reasonable expectation that they would come forward in the plan period to meet the Borough's housing needs. The following SHLAA sites are within areas at risk of flooding.

Ref	Name	Flood Zone
44	Adjacent Old Rectory, St Mary's Road, Stone <sup>^</sup>	3
53	East of Greenbanks, Powder Mill Lane, Wilmington <sup>^</sup>	2 and 3
117	South of Steele Avenue, Greenhithe	2 and 3
170	North of St Mary's Road, Stone <sup>^</sup>	3
236	Adjacent 33 St Mary's Road, Stone <sup>^</sup>	3
271	Eastern End of St Mary's Road, Stone	3

<sup>^</sup> Site has an extant planning permission

- 4.13 A number of these already have planning permission so have been demonstrated to pass the sequential or exceptions tests.
- 4.14 In terms of the site South of Steele Avenue, Greenhithe, the northernmost part of the site is within flood zone 3 while the rest of the site is within flood zone 2. It is considered that more vulnerable residential development could be located in the area at lower risk of flooding in accordance with the sequential approach to development outlined in paragraphs 161 and 162 of the NPPF (see paragraph 2.1 above).
- 4.15 The site at the Eastern End of St Mary's Road, Stone, is within an area where a significant amount of residential development has already taken place and further residential development has planning permission. As such, it is considered that bringing forward this site for residential use would lead to a completion of development in this area to provide wider sustainability benefits to the community that outweigh the flood risk. It would thus meet the first part of the exception test. The site was not considered within the level 2 SFRA. Given that technical solutions have been found for making residential developments in this area safe for their lifetime and not increasing flood risk elsewhere, it is assumed that technical and design solutions are available to ensure that development would meet the second part of the exception test.

## 5 CONCLUSIONS

- 5.1 National planning policy requires local authorities to apply a sequential or exception test approach for development sites within areas at flood risk, depending on the vulnerability of the use and the extent to which the site is at risk of flooding.
- 5.2 A number of sites identified for residential development within the Publication Local Plan and the Strategic Housing Land Availability Assessment have been identified by the Strategic Flood Risk Assessment (SFRA) as being partly or wholly within flood zones 2 or 3. Most of these are within Central Dartford which is an area of regeneration. The inclusion of the sites within the flood zones has been justified against the sequential or exception tests. Some of these already have planning permission or a resolution to grant planning permission.
- 5.3 The level 2 SFRA has set out the requirements for site specific flood risk assessments for a number of identified sites which do not already have planning permission, including guidance for site design and making development safe. The Council is satisfied that there is sufficient justification for the identification of sites for residential development within flood risk areas and that they can be made safe for their lifetime without increasing flood risk elsewhere.