



**'Shaping the Borough' - Waltham Forest Local
Plan (LP1) Examination**

**RESPONSE TO FURTHER MATTERS, ISSUES AND
QUESTIONS**

**MATTER 5: THE ENVIRONMENT, CLIMATE
CHANGE, FLOOD RISK, POLLUTION AND WASTE
MANAGEMENT**

January 2023

MATTER 5: THE ENVIRONMENT, CLIMATE CHANGE, FLOOD RISK, POLLUTION AND WASTE MANAGEMENT

Flood Risk and the Sequential Test

Note - The Sequential Test Statement (LPE34) concludes that the Plan's housing requirement of 27,000 new homes cannot be achieved entirely in areas with a low risk of flooding (Flood Zone 1 – low probability of flooding) and therefore development within Flood Zones 2 and 3 (medium and high probability of flooding) would be required for this level of growth.

The Sustainability Report Addendum (LPE36.1) states that approximately 50% of the new homes could be delivered in Flood Zone 1 and 50% would need to be in Flood Zones 2 and 3.

5.1 Is the Sequential Test Statement (LPE34) robust and consistent with national policy?

The Sequential Test Statement (LPE34) is robust and has been prepared with full regard to national policy and guidance. This is supported by the Environment Agency (EA) who have reviewed the document and concluded that it “demonstrates how the Local Plan is consistent with national flood risk policy, and correctly applies the Sequential Test to site selection”.

The sequential approach is a decision-making tool designed to ensure that sites at little or no risk of flooding are developed in preference to sites at higher risk. As supported by the EA, the method behind the Sequential Test Statement (LPE34) enables the severity and variation in flood risk across all sites which have been included as part of the developable housing land supply to be assessed and compared.

The modelling of flood risk in the document is based on established data sources: Flood Zones, mapping of Main Rivers and Ordinary Watercourses, Risk of Flooding from Surface Water Mapping and Modelled Groundwater Flooding Probability Mapping. The Sequential Test Statement (LPE34) takes a

conservative approach to modelling future risk. Since the preparation of the Level 1 Strategic Flood Risk Assessment (SFRA) (EB9.1), the standard climate change allowances within the London Management Catchment, of which the Waltham Forest study area is part, have been reduced. The reduction of these climate change allowances means that when calculating the ranking of flood risk, a larger extent than would be returned by use of the current allowances has been used in modelling the area covered. As a relative measure, it is considered to be a robust and cautious approach.

Through application of the sequential approach to the location of development, the number of homes which would be located in Flood Zones 2 and 3 is reduced as far as possible. This is achieved firstly by directing development to sites which are located in areas of lower flood risk, and then by applying a sequential approach to layout within development sites, in order to ensure that the most vulnerable uses proposed are located in the lowest risk parts of the site.

For clarity, the statement that approximately 50% of new homes would need to be in Flood Zones 2 and 3 relates only to "planned homes", i.e. those that don't yet have planning permission, and needs to be understood in the full context of sequential approach. The Sustainability Appraisal Report Addendum (LPE36) outlines the capacity which has been identified in Flood Zone 1 of c.14,000 homes. Further to this, c.11,000 homes are identified across 10 large sites which overlap with Flood Zone 2, and in a few cases Flood Zone 3. Across the total area of these sites the coverage of Flood Zone 2 is 38%. The coverage of Flood Zone 3 is 2.4%. Therefore, it is expected that only a small proportion of the new homes planned would actually be built in Flood Zone 2, with fewer still (if any) in Flood Zone 3.

5.2 Have all reasonably available options in Flood Zones 1 and 2 been exhausted before the suitability of sites in Flood Zone 3 has been considered?

As outlined in the National Planning Policy Framework (NPPF), paragraph 162, the aim of the Sequential Test is to steer new development to areas with the lowest risk of flooding from any source. The Sequential Test Statement (LPE34) provides a robust basis, as set out in response to question 5.1, to identify the variation in flood risk across the Borough and provide a full picture of the estimated capacity and number of sites which are considered to be suitable for development when compared to flood risk, including the groupings of Flood Zones 1, 2 and 3.

Tables 4 and Table 5 (page 8-17) of the Sequential Test Statement (LPE34) detail the sites in Flood Zone 1 which have been included in the Council's developable supply, based on the evidence base provided by the Growth Capacity Study (GCS) (LPE44) (also in evidence at EB6.2) and the suite of Masterplans, Feasibility Studies and Area Frameworks, and collated in the Updated Housing Trajectory (LPE32). This analysis shows a potential housing capacity of 13,870 new homes in Flood Zone 1.

Additional sites in Flood Zone 1 were assessed through the GCS and subsequent work but found not to be suitable for inclusion in the Council's developable supply. Appendices I and II of the Sequential Test Statement (LPE34) outline the sites falling within Flood Zone 1 which were assessed as part of the GCS and other work, but which were rejected through the stocktaking process, as policy constraints or other factors were unable to be overcome as part of the Plan-making process.

The Sequential Test Statement (LPE34) therefore concludes that, in order to go as far as possible to meet housing need, sites within Flood Zone 2 and 3 should be considered to ensure the most efficient use of previously developed land and deliver wider benefits of planned growth. Tables 6 and 7 of the Sequential Test Statement (LPE34) identify the variation in flood risk

between the developable land supply which is located in Flood Zones 2 and 3. These are all reasonably available sites which have been identified through the Council's work to identify all available land for development.

Of the approximately 11,000 additional new homes which are identified in Table 6, roughly 5,800 units have some part of the development site falling within Flood Zone 2 (but not Flood Zone 3).

Taking into account wider sustainability considerations, only after considering the likely developable capacity on sites falling in Flood Zones 1 and 2, has development on sites falling within Flood Zone 3 been considered in order to close the gap between housing need and supply.

5.3 Has the Exception Test been carried out, where relevant?

a. If it has not been carried out, should it have been?

b. If it has been carried out, was it passed; and have the findings informed the Sustainability Appraisal process and informed the selection of the Plan's Strategic Locations/Site Opportunity Locations and their capacity for housing growth?

The Plan does not contain site allocations, so a finalised Exception Test detailing how allocations are able to demonstrate that both parts of the test are passed is not required.

The Exception Test is part of the sequential approach to locating development in areas of least high flood risk. The Exception Test requires two additional elements to be satisfied (as set out in paragraph 164 of the National Planning Policy Framework) before allowing development to be allocated or permitted in situations where suitable sites at lower risk of flooding are not available, following application of the Sequential Test.

To pass the exception test it should be demonstrated that: a) the development would provide wider sustainability benefits to the community that outweigh the flood risk, 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 (NPPF, paragraph 164).

However, as noted in the Inspectors' Post Hearings Letter of 5 May 2022, and in question 5.4 below, Policies 4 to 11 of the Plan set the strategic direction and, with Figure 4.1, identify the Strategic Locations and the focused Site Opportunity Locations where the substantial proportion of the Borough's planned growth would be directed. As such, the Council considers that proportionate evidence in support of the strategic policies contained in the Plan ought to demonstrate clearly that both parts of the Exception Test are able to be met, and therefore that the scale and distribution of growth proposed in the Plan's policies are sound.

The first limb of the Exception Test is to balance whether, on a site-by-site basis, development would provide wider sustainability benefits to the community that would outweigh flood risk. This is considered at the strategic level in the Sustainability Appraisal Report Addendum (LPE36), where the significant positive effect on SA1 (Meet local housing needs through the provision of a range of tenures and sizes of new dwellings) is considered to outweigh any potentially uncertain or negative effects on SA11 (Reduce the risk of flooding and improve resilience to climate change).

The SFRA Level 2 (EB9.2-9.6) provides the evidence for consideration of the second limb of the Exception Test (that 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). This more detailed application of the approach to managing flood risk on the sites identified demonstrates that, through the incorporation of site-specific recommendations, the requirements of the Exception Test can be satisfied. These recommendations are made in line with the measures presented within Chapter 5 of the SFRA Level 1 (EB9.1).

Once a sequential approach is applied at the site level (applying a sequential approach to layout within development site), the only sites which are considered to engage the Exception Test are those in Appendix A of the SFRA Level 2 (EB9.3), amounting to eight sites. These are:

- Peacocks Close/Folly Lane
- Low Hall Depot
- Lea Bridge Site 1, 2 and 3
- Lea Bridge Gasholders
- Hare and Hounds Football Ground/ Former Wingate Stadium
- Dog Track Carpark and Sainsburys
- Cork Tree Retail Park¹

¹ Exception Test is not engaged in relation to Cork Tree if development is limited to change of use given proposed SIL designation.

- Bus station, Leyton (LLDC)

Of these eight sites, three (Lea Bridge Site 1, 2, and 3, Lea Bridge Gasholders and Peacocks Close/Folly Lane) already benefit from a grant of planning permission. As part of the planning application process, these sites needed to demonstrate that they were able to be made safe for the lifetime of development and that there would not be an increased flood risk elsewhere. With regards to site-specific assessment of flood risk, appropriate measures to manage and mitigate flood risk will be implemented on these approved sites, providing confidence that such measures are reasonable and can be implemented to sufficiently address physical flood risk concerns elsewhere too.

The assumed contribution of the remaining five sites amounts to 1,830 net additional dwellings. Set in the context of the Plan's housing target of 27,000 new homes over 15 years, and the total potential supply of 30,676 homes² for the same period, the capacity of 1,830 homes that remain subject to the Exception Test is considered reasonable and justified. In order for these remaining sites to be made formal allocations through Local Plan 2 (LP2) site-specific Flood Risk Assessments will be prepared and an evidenced and reasoned justification will be set out on a site-by-site basis in the form of a Sustainability Appraisal or a stand-alone Exception Test Statement.

The Council proposes to modify Policy 93 to make this approach explicit, with the inclusion of the following text at clause A: "Ensuring that all site allocations pass the Sequential Test, and where necessary the Exception Test, steering new development to areas with the lowest risk of flooding from all sources." For further detail of proposed modifications to Policy 93, please see the response to question 5.5 below.

² Sum of cells G10:U10 in LPE31 – Updated Housing Trajectory.

5.4 While the Council's position throughout has been that this Plan does not include site allocations, the Strategic Locations and the focused Site Opportunity Locations provide a clear steer on the location and amount of development expected within their boundaries.

On this basis is it justified, and would it be effective at the strategic level, to defer flood risk considerations, including the Exception Test where necessary, to future consideration of site allocations and/or planning applications and site-level Flood Risk Assessments?

As set out above in response to question 5.3, meaningful and proportionate consideration of flood risk has been carried out in support of Local Plan 1 (LP1). The application of the Flood Risk Management Hierarchy and Strategic Flood Risk Assessment throughout the Plan-making process provides sufficient evidence to support the policies in the plan.

As outlined in response to question 5.4, having undertaken the Sequential Test, and discounting sites where planning permission has already been granted subject to site-specific Exception Tests, the total capacity which is potentially subject to further site-specific justification through the Exception Test is c.1,800 new homes. The remaining capacity (c.28,800 homes) has, (with reference to the process outlined in Planning Policy Guidance³) passed the relevant tests and can be considered for allocation or permission.

It is therefore justified and effective, at a strategic level, to defer site specific Exception Tests for the five remaining sites (Low Hall Depot; Hare and Hounds Football Ground/ Former Wingate Stadium; Dog Track Car Park and Sainsburys; Bus station, Leyton (LLDC); and Cork Tree Retail Park⁴) which provide this c.1800 home capacity to either preparation of LP2 and the potential formal allocation of these sites, or through site specific Exception Tests on any planning applications submitted for these sites (should they come forward before LP2 is adopted, or not be allocated). The contribution of

³ Diagram 2: Application of the Sequential Test for plan preparation (Paragraph: 026 Reference ID: 7-026-20220825) and Diagram 3: Application of the Exception Test to plan preparation (Paragraph: 033 Reference ID: 7-033-20220825)

⁴ Exception Test is not engaged in relation to Cork Tree if development is limited to change of use given proposed SIL designation.

these sites to the assumed housing trajectory (see LPE31) doesn't begin until 2029/30, and in some cases (Bus station, Leyton) 2036/37 right at the end of the Plan period.

The Council considers that the relatively modest potential contribution of the sites which still need to pass the Exception Test, set against the total deliverable and developable housing supply identified, it is justified to set the housing target at 27,000 new homes for the Plan period, and to identify the indicative locations for the delivery of these homes on the basis of the Council's best estimate of how much capacity is likely to come forward in each Strategic Location.

5.5 Will reliance on Policy 93 adequately deal with flood risk at the strategic level, including for consideration of sites in the Strategic Locations?

Policy 93 provides a framework for management of flood risk which is aligned to national policy and will ensure that development will be safe for its lifetime and directed away from areas at highest risk of flooding.

In considering the Inspectors' questions regarding the application of the Sequential and Exception Tests, it is the Council's view that further clarification would aid interpretation of the Policy. The Council therefore considers that modifications to Policy 93 are necessary for the soundness of the Local Plan in accordance with paragraph 16.d of the NPPF, which states that "Plans should contain policies that are clearly written and unambiguous, so it is evident how a decision maker should react to development proposals". These modifications continue to address those requested by the EA as agreed in the Statement of Common Ground dated July 2021 (LPE3).

As modified, Policy 93 explains with greater clarity the application of the Sequential Test and Exception Test to site allocations and planning applications and elaborates the requirements of site-specific flood risk assessments.

The modified Policy 93 – Managing Flood Risk should read as follows:

Policy 93 - Managing Flood Risk

Flood risk will be managed by:

- A. Ensuring that all site allocations pass the Sequential Test, and where necessary the Exception Test, steering new development to areas with the lowest risk of flooding from all sources.**

B. Requiring a site-specific Flood Risk Assessment (FRA) for all development proposals which are situated in Flood Zone 2 or 3, and for proposals which are situated in Flood Zone 1, which:

- i) Are 1 hectare or greater in extent, or**
- ii) Involve a change of use to a more vulnerable class¹, or**
- iii) Are within an area identified as having critical drainage problems**

C. Requiring site-specific FRAs to provide sufficient detail to assess the risk of flooding to, and arising from, development proposals from all sources, considering flood risk now and in the future.

D. As part of the site-specific FRA, development proposals must:

- (i) carry out a Sequential Test, unless:**
 - a. there is an adopted site allocation and the development proposal is consistent with the proposed use and there have been no significant changes to the known level of flood risk to the site; or,**
 - b. the application is for development which is exempt from the Sequential Test²**
- ii) carry out an Exception Test to ensure the proposed development will provide wider sustainability benefits to the community that outweigh flood risk, and that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall; and**
- (iii) demonstrate a sequential approach to layout within the development site, in order to ensure that the most**

vulnerable uses within a development are located in the lowest risk parts of the site.

E. The site-specific FRA should be proportionate to the anticipated degree of flood risk and must demonstrate how flood risk will be managed and mitigated to ensure the development is safe from flooding and the impacts of climate change for its lifetime. This must include appropriate flood-resistant design and construction, incorporation of Sustainable Drainage Systems (SuDS), safe management of residual risk, and appropriate emergency planning.

F. Development proposals should incorporate SuDS unless there is clear evidence that this would be inappropriate. These must aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible.

G. Where greenfield run-off rates cannot be achieved, a payment in lieu will be secured to mitigate flood risk.

Replacement Supporting Text

18.15 Site Specific Flood Risk Assessments are required for all development proposals situated in Flood Zone 2 or 3 or in Zone 1 on sites that are greater than 1ha, that involve a change to a more vulnerable use class or are situated in an area identified as having critical drainage problems. The objectives of a site-specific flood risk assessment are to establish:

- whether a proposed development is likely to be affected by current or future flooding from any source;
- whether it will increase flood risk elsewhere;
- whether the measures proposed to deal with these effects and risks are appropriate;
- the evidence for the local planning authority to apply (if necessary) the Sequential Test, and;

- whether the development will be safe and pass the Exception Test, if applicable.

As outlined in part E of the policy, site specific FRAs should be proportionate to the anticipated degree of flood risk. When preparing FRAs, regard should be had to the guidance set out on page 36-40, Strategic Flood Risk Assessment 1 - which outlines the information that should the Council expects to be contained at three levels of the site specific FRA. These are;

Level 1 Screening: to identify whether there are any flooding or surface water management issues related to a development site that may warrant further consideration.

Level 2 Scoping: to be undertaken if the Level 1 FRA indicates that the site may lie within an area that is at risk of flooding, or the site may increase flood risk due to increased runoff.

Level 3 Detailed Study: to be undertaken if a Level 2 FRA concludes that further quantitative analysis is required to assess flood risk issues related to the development site.

The information provided in Table 6-2 indicates the information requirements in relation to demonstrating aspects of the FRA.

SUDS

Sustainable Drainage Systems (SuDS) mimic natural drainage processes to reduce the effect on the quality and quantity of run-off from developments and provide amenity and biodiversity benefits. When specifying SuDS, early consideration of potential benefits and opportunities will help deliver the best results.

SuDS measures generally operate through infiltration, where possible, and attenuation combined with slow conveyance. SuDS are designed to both manage the flood and pollution risks resulting from urban runoff and to

contribute wherever possible to environmental enhancement and place making.

Greenfield Runoff

On sites that were previously developed, the peak runoff rate from the development to any drain, sewer or surface water body for the 1 in 1 year rainfall event and the 1 in 100 year rainfall event must be as close as reasonably practicable to the greenfield runoff rate (as specified by the Rainfall Runoff Management for Developments Report¹) from the development for the same rainfall event, but should never exceed the rate of discharge from the development prior to redevelopment for that event.

Footnote 1) Rainfall runoff management for developments Report – SC030219, EA/DEFRA, 2013.

Available at:

https://assets.publishing.service.gov.uk/media/602e7158d3bf7f7220fe109d/Rainfall_Runoff_Management_for_Developments_-_Revision_E.pdf

5.6 The Sustainability Report Addendum (LPE36.1) identifies that the effect of the Plan's scale of growth (SA Option 1 in LPE36.1) on the flood risk objective is "uncertain" and that the effect of the level of growth as set out in the London Plan (SA Option 2 in LPE36.1) is "minor positive". It also identifies that the majority of growth in Option 2 could be delivered on sites in Flood Zones 1 and 2.

a. Is the Plan's spatial strategy for housing justified and consistent with national policy in relying on sites in Flood Zones 2 and 3 for around 50% of planned housing growth?

The spatial strategy for housing is justified and consistent with national policy in its reliance on sites in Flood Zones 2 and 3, as it has been identified that insufficient land exists in Flood Zone 1 to go as far as possible to meet the borough's housing need. The Council is confident that development on sites in Flood Zones 2 and 3 would be safe and that it would not worsen existing flood risk in surrounding areas. Policy 93, Managing Flood Risk, establishes the measures through which this will be achieved.

For clarity, the statement that approximately 50% of new homes would need to be in Flood Zones 2 and 3 relates only to "planned homes", i.e. those that don't yet have planning permission, and needs to be understood in the full context of sequential approach. The Sustainability Appraisal Report Addendum (LPE36) outlines the capacity which has been identified in Flood Zone 1 of c.14,000 homes. Further to this, c.11,000 homes are identified across 10 large sites which overlap with Flood Zone 2, and in a few cases Flood Zone 3. Across the total area of these sites the coverage of Flood Zone 2 is 38%. The coverage of Flood Zone 3 is 2.4%. Therefore, it is expected that only a small proportion of the new homes planned would actually be built in Flood Zone 2, with fewer still (if any) in Flood Zone 3.

The Strategic Locations of Blackhorse Lane, Lea Bridge, and Leyton are all found in the Lee Valley Opportunity Area. The Lee Valley Opportunity Area is London's largest Opportunity Area, occupying a strategic position in the London-Stansted Cambridge-Peterborough growth corridor. The London Plan 2021 (paragraph 2.1.29) identifies that it provides a range of development

opportunities for higher density development (including specifically at Blackhorse Lane and Lea Bridge and Leyton) and expects Local Planning Authorities to seek to fully capture the benefits of the improved transport interventions, stimulus for regeneration and broader employment opportunities it presents. As such, the Council has sought to direct an appropriately ambitious scale of planned growth to the Strategic Locations in the Opportunity Area across the Plan period.

It is however the case that a significant proportion of the potential development sites in these Lee Valley Opportunity Area Strategic Locations fall within Flood Zones 2 and 3. The Plan's spatial and growth strategy identifies capacity for 5,800 new homes in these areas. Through the Sequential Test Statement (LPE34) and in line with the robust approach to mitigating flood-risk set out in national policy and the London Plan, and strengthened through proposed modifications to Policy 93 of LP1, the housing capacity identified on these sites is considered sound, in conformity with National Policy and the London Plan and to represent the best, most efficient use of previously developed land.

In short, the Council considers the benefits derived from planned growth in the Lee Valley Opportunity Area to outweigh flood risk and is confident that, through detailed design for planning applications on relevant sites, flood risk can be successfully managed and mitigated for the lifetime of the development.

In review of alternative growth options, the Sustainability Report Addendum (LPE36.1) concluded that Option 2 (20,224 dwellings) would not deliver the housing that the borough needs and therefore identified a potential significant negative effect for SA1 (Meet local housing needs through the provision of a range of tenures and sizes of new dwellings). The SA suggests that this option could be delivered on sites within Flood Zones 1 & 2 within the parameters of Policy 93 and thus result in an overall minor positive effect against SA11 (Reduce the risk of flooding and improve resilience to climate

change). However, this would fail to take full advantage of the designation of the Lee Valley Opportunity Area, as required by the London Plan and the capacity for 5,800 homes LP1 identifies here. In contrast, Option 1 (27,000 dwellings) seeks to use the justified, robust and precautionary approach to flood risk mitigation set out in national, London and Local Plan policy to go as far as possible to meet local housing need, including the capacity for 5,800 new homes in the Lee Valley Opportunity Area. The significant positive effects that Option 1 would bring to the borough, through the Plan's spatial and growth strategy, outweigh increased vulnerability to flood risk in certain areas, which – as shown above - can be managed and mitigated.

b. Does the Sustainability Report Addendum (LPE36.1) strike a reasonable balance between Sustainability Appraisal objectives SA1 (meeting local housing needs) and SA11 (reducing flood risk and improving resilience to climate change)?

The Council have sought the professional opinion of Clearlead Consulting (part of SLR) to inform this response.

As Table 5 in the Sustainability Report Addendum (LPE36) demonstrates, the SA findings of the two growth options show a similar performance for the majority of SA Objectives. The key differences are in relation to housing delivery and flood risk. By going as far as possible to meet the identified housing needs for the Borough, Option 1 is predicted to result in a potential significant positive effect with regards to the housing SA objective (SA1), whereas Option 2 would not deliver the identified housing needs of the Borough and therefore a potential significant negative effect is identified.

SA Option 1 sets out a scale of growth across the Borough and includes a minimum net increase of housing to be planned for and provided of 27,000 additional homes (Policy 2, Scale of Growth), in accordance with the Strategic Housing Market Assessment (SHMA, 2019) (EB4.1). This scale of growth and related policy supports the achievement of Objective SA1 (Meet local housing needs through the provision of a range of tenures and sizes of new dwellings) and addresses key sustainability issues relating to Objective SA1. It is therefore considered to have a potential significant positive effect.

SA Option 2 would deliver a scale of growth equal to the London Plan requirement for the borough, which is 12,640 or 1,264 dwellings per year. Maintaining this level of housing delivery over the plan period (2023/24 – 2037/38) would deliver a total of 18,960 new homes. However, the Council's evidence base identifies that the Council's Objectively Assessed Need (OAN) for homes is 1,810 dwellings per annum, which over the 15 year Plan period equates to approximately 27,000 new homes. Option 2 would fall short of the housing need for the borough over the Plan period by circa 8,000 homes. A significant negative effect is therefore identified as this option would not meet the local housing need and, as this works against Objective SA1 (Meet local housing needs through the provision of a range of tenures and sizes of new dwellings), it could exacerbate key sustainability issues.

With regards to Objective SA11 (Reduce the risk of flooding and improve resilience to climate change), an evidence-led approach to considering appropriate sites for development has been undertaken to steer development towards areas of lowest flood risk. A Sequential Test exercise (Sequential Test Statement (LPE34)) has been completed which examines the sites available for development within the borough and their anticipated capacity for residential development. The evaluation of sites within the Sequential Test has been based on Flood Risk criteria which take account of the risk posed to the site by tidal, fluvial and surface water sources as well as any sites which intersect an ordinary watercourse or has a history of flooding.

A reasonable balance will be achieved between compliance with LP1 Policy 93, Managing Flood Risk, and meeting housing targets. Sites will not be allocated in LP2, and development proposals will not be granted planning permission, if they cannot meet the requirements of Policy 93 (subject to proposed modifications as set out above). When development sites are further considered for allocation through LP2, or come forward as part of a planning application, site-specific Flood Risk Assessments will be made and evidence and reasoned justification will be set out on a site-by-site basis.

The strategic assessment made in the Sustainability Report Addendum (LPE36.1) provides a sufficient consideration of flood risk and wider sustainability considerations to support the strategic policies contained in LP1.

5.7 Is the degree of reliance on improvements in relation to surface water flooding justified and has an appropriate balance been struck between addressing this and the risk of flooding in the Borough from other sources?

London is at particular risk from surface water flooding, mainly due to the large extent of impermeable surfaces, and as such a focus on surface water flooding is warranted. However, as outlined in Planning Practice Guidance, site-specific Flood Risk Assessments need to be proportionate to the anticipated degree of flood risk⁵, and recognise the achievability of requirements. As such the requirement for *all* developments to provide surface water management and Sustainable Drainage Systems (SuDS) strategies, and integrate SuDS is not justified and would not be sufficiently flexible to accommodate situations where SuDS would not be appropriate, as envisioned by NPPF Paragraph 167c. Modifications are therefore proposed to Policy 93 in order to align with national policy and clarify the expectations for applicants and decision makers. The approach to sustainable drainage in the Plan is proposed to be amended to align to the approach taken in the London Plan (Policy SI 13) and considered by the Panel (London Plan Inspectors) to be a 'practical and effective approach'⁶.

It is proposed that the modified parts E-G as amended of Policy 93 – Managing Flood Risk should read as follows:

- E. The site-specific FRA should be proportionate to the anticipated degree of flood risk and must demonstrate how flood risk will be managed and mitigated to ensure the development is safe from flooding and the impacts of climate change for its lifetime. This must include appropriate flood-resistant design and construction, incorporation of Sustainable Drainage Systems (SuDS), safe**

⁵ Paragraph: 021 Reference ID: 7-021-20220825

⁶ Report of the Examination in Public of the London Plan 2019, Paragraph 522, page 109.

management of residual risk, and appropriate emergency planning.

- F. Development proposals should incorporate SuDS unless there is clear evidence that this would be inappropriate. These must aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible.**

- G. Where greenfield run-off rates cannot be achieved, a payment in lieu will be secured to mitigate flood risk.**

5.8 Overall, is the Plan positively prepared, justified, effective, consistent with national policy, and in general conformity with the London Plan in terms of flood risk?

Are any main modifications necessary for soundness?

Overall, the Plan is positively prepared, justified, effective, consistent with national policy, and in general conformity with the London Plan in terms of flood risk.

Modifications have been identified above in response to questions 5.5 and 5.7. These are considered necessary to ensure the soundness of the Plan, with the relevant justification contained within the body of the Council's response.

For purposes of clarity, the amended policies are set out below in whole and as they are now proposed, along with supporting test where necessary, including amendments that have previously been submitted to the Inspectors.

Policy 93 - Managing Flood Risk

Flood risk will be managed by:

- A. Ensuring that all site allocations pass the Sequential Test, and where necessary the Exception Test, steering new development to areas with the lowest risk of flooding from all sources.
- B. Requiring a site-specific Flood Risk Assessment (FRA) for all development proposals which are situated in Flood Zone 2 or 3, and for proposals which are situated in Flood Zone 1, which:
 - i) Are 1 hectare or greater in extent, or
 - ii) Involve a change of use to a more vulnerable class¹, or
 - iii) Are within an area identified as having critical drainage problems
- C. Requiring site-specific FRAs to provide sufficient detail to assess the risk of flooding to, and arising from, development proposals from all sources, considering flood risk now and in the future.
- D. As part of the site-specific FRA, development proposals must:

- (ii) carry out a Sequential Test, unless:
 - a. there is an adopted site allocation, and the development proposal is consistent with the proposed use and there have been no significant changes to the known level of flood risk to the site; or,
 - b. the application is for development which is exempt from the Sequential Test²
 - ii) carry out an Exception Test to ensure the proposed development will provide wider sustainability benefits to the community that outweigh flood risk, and that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall; and
 - (iii) demonstrate a sequential approach to layout within the development site, in order to ensure that the most vulnerable uses within a development are located in the lowest risk parts of the site.
- E. The site-specific FRA should be proportionate to the anticipated degree of flood risk and must demonstrate how flood risk will be managed and mitigated to ensure the development is safe from flooding and the impacts of climate change for its lifetime. This must include appropriate flood-resistant design and construction, incorporation of Sustainable Drainage Systems (SuDS), safe management of residual risk, and appropriate emergency planning.
- F. Development proposals should incorporate SuDS unless there is clear evidence that this would be inappropriate. These must aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible.
- G. Where greenfield run-off rates cannot be achieved a payment in lieu will be secured to mitigate flood risk.

Supporting Text

Site Specific Flood Risk Assessments are required for all development proposals situated in Flood Zone 2 or 3 or in Zone 1 on sites that are greater than 1ha, that involve a change to a more vulnerable use class, or are situated in an area identified as having critical drainage problems. The objectives of a site-specific flood risk assessment are to establish:

- whether a proposed development is likely to be affected by current or future flooding from any source;
- whether it will increase flood risk elsewhere;
- whether the measures proposed to deal with these effects and risks are appropriate;

- the evidence for the local planning authority to apply (if necessary) the Sequential Test, and;
- whether the development will be safe and pass the Exception Test, if applicable.

As outlined in part E of the policy, site specific FRAs should be proportionate to the anticipated degree of flood risk. When preparing FRAs, regard should be had to the guidance set out on page 36, Strategic Flood Risk Assessment 1 - which outlines the information that should the Council expects to be contained at three levels of the site specific FRA. These are;

Level 1 Screening: to identify whether there are any flooding or surface water management issues related to a development site that may warrant further consideration.

Level 2 Scoping: to be undertaken if the Level 1 FRA indicates that the site may lie within an area that is at risk of flooding, or the site may increase flood risk due to increased runoff.

Level 3 Detailed Study: to be undertaken if a Level 2 FRA concludes that further quantitative analysis is required to assess flood risk issues related to the development site.

The information provided in Table 6-2 indicates the information requirements in relation to demonstrating aspects of the FRA.

SUDS

The incorporation of Sustainable drainage systems (SuDS) mimic natural drainage processes to reduce the effect on the quality and quantity of run-off from developments and provide amenity and biodiversity benefits. When specifying SuDS, early consideration of potential benefits and opportunities will help deliver the best results.

SuDS measures generally operate through infiltration where possible and attenuation combined with slow conveyance. SuDS are designed to both manage the flood and pollution risks resulting from urban runoff and to contribute wherever possible to environmental enhancement and place making.

Greenfield Runoff

On sites that were previously developed, the peak runoff rate from the development to any drain, sewer or surface water body for the 1 in 1 year rainfall event and the 1 in 100 year rainfall event must be as close as reasonably practicable to the greenfield runoff rate (as specified by the Rainfall Runoff Management for Developments Report) from the development for the same rainfall event, but should never exceed the rate of discharge from the development prior to redevelopment for that event.