

Level 2 Strategic Flood Risk Assessment

London Borough of Waltham Forest

Final Report

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Quality information

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1. Introduction

1.1 Terms of reference

- 1.1.1 AECOM has been commissioned by the London Borough of Waltham Forest to prepare a Level 2 Strategic Flood Risk Assessment (SFRA).

1.2 Project Background

- 1.2.1 The [National Planning Policy Framework](#)¹ (NPPF) and associated [Planning Practice Guidance](#) for Flood Risk and Coastal Change (PPG)² set out the active role Local Planning Authorities (LPAs) should take to ensure that flood risk is understood and managed effectively and sustainably throughout all stages of the planning process. The NPPF outlines that Local Plans should be supported by a Strategic Flood Risk Assessment (SFRA) and LPAs should use the findings to inform strategic land use planning. The overall approach of the NPPF to flood risk is broadly summarised Paragraph 103:

When determining planning applications, LPAs should ensure flood risk is not increased elsewhere and only consider development appropriate in areas at risk of flooding where, informed by a site-specific FRA following the Sequential Test, and if required the Exception Test, it can be demonstrated that:

- *within the site, the most vulnerable development is located in areas of lowest flood risk unless there are overriding reasons to prefer a different location, and*
- *development is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed, including by emergency planning; and it gives priority to the use of sustainable drainage systems.”*

1.3 Level 1 SFRA

- 1.3.1 A Level 1 SFRA report has been prepared for London Borough of Waltham Forest³. The purpose of the Level 1 SFRA is to collate and analyse the most up to date readily available flood risk information for all sources of flooding and provide an overview of flood risk issues across the study area.
- 1.3.2 The Level 1 SFRA provides guidance on:
- The application of the Sequential Test by the LPA when allocating future development sites to inform their Local Plan, as well as by developers promoting development on windfall sites.
 - Managing and mitigating flood risk, the application of sustainable drainage systems (SuDS), and the preparation of site-specific Flood Risk Assessments (FRAs).
 - Potential flood risk management objectives and policy considerations which may be developed and adopted by the London Borough of Waltham Forest as formal policies within their developing Local Plans.
- 1.3.3 Using the strategic flood risk information presented within the Level 1 SFRA, London Borough of Waltham Forest were provided with guidance on how to undertake the Sequential Test and document the process whereby future development is steered towards areas of lowest flood risk.

¹ Department for Communities and Local Government. 2012. *National Planning Policy Framework*. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

² Department for Communities and Local Government. 2014. *Planning Practice Guidance: Flood Risk and Coastal Change*. Available at: <http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/>

³ AECOM, October 2018, London Borough of Waltham Forest Level 1 Strategic Flood Risk Assessment.

1.4 Exception Test

1.4.1 Where it is not possible to accommodate potential development sites outside those areas identified to be at risk of flooding, the Exception Test may be required, as set out in Table 1-1. The purpose of the Exception Test is to ensure that where it may be necessary to locate development in areas at risk of flooding, new development is only permitted in Flood Zone 2 and Flood Zone 3 where the flood risk is clearly outweighed by other sustainability factors and where the development will be safe during its lifetime, considering climate change.

1.4.2 The NPPF states that for the Exception Test to be passed:

- Part 1 - “It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by the SFRA where one has been prepared; and
- Part 2 - A site-specific Flood Risk Assessment must demonstrate that 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.”

1.4.3 Both elements of the test will have to be passed for development to be allocated or permitted.

1.4.4 In order to determine Part 1 of the Exception Test, applicants should assess their scheme against the objectives set out in the LPA’s Sustainability Appraisal⁴. In order to demonstrate satisfaction of Part 2 of the Exception Test, relevant flood risk management and mitigation measures should be applied and demonstrated within a site-specific flood risk assessment (FRA). Chapter 5 ‘Managing and Mitigating Flood Risk through Spatial Planning and Development Control’ and Chapter 6 ‘Guidance for Developers’ within the Level 1 SFRA should be referred to in order to support Part 2 of the Exception Test.

Table 1-1 Flood risk vulnerability and Flood Zone ‘compatibility’ (PPG, 2014)

Flood Risk Vulnerability Classification	Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable	
Flood Zone	1	✓	✓	✓	✓	
	2	✓	✓	Exception Test Required	✓	
	3a	Exception Test Required	✓	✗	Exception Test Required	✓
	3b	Exception Test Required	✓	✗	✗	✗

✓ - Development is appropriate ✗ - Development should not be permitted

⁴ London Borough of Waltham Forest, March 2020, Sustainability Appraisal Scoping Report. https://www.walthamforest.gov.uk/sites/default/files/C0232_Waltham%20Forest%20Site%20Allocations%20SA%20Scoping%20Report_2_0.pdf

2. Level 2 SFRA

2.1 Datasets

2.1.1 This report comprises the Level 2 SFRA for the London Borough of Waltham Forest. The scope of the Level 2 SFRA is to consider the detailed nature of the flood characteristics within a flood zone including, where appropriate and the data is available:

- flood probability
- flood depth
- flood velocity
- rate of onset of flooding, and
- duration of flood.

2.1.2 For the Waltham Forest study area, the following sources of information have been obtained.

River Lee Modelling

2.1.3 Modelling of the River Lee was supplied by the Environment Agency from the River Lee 2D Modelling and Mapping Study, August 2014⁵. Outputs from the study included flood extents, maximum flood depths and hazard rating information for a range of annual exceedance probability (AEP) events. Within this study, climate change was considered for the 1% AEP event by increasing peak flows in the hydrological boundaries by 20% in accordance with the Environment Agency guidance 2011 and UKCIP09.

2.1.4 In February 2016, (after completion of the River Lee modelling in 2014), climate change guidance was published⁶, which outlined that within the Thames river basin district, climate change allowances of +25%, +35% and +70% should be considered when planning for future development.

2.1.5 As part of an Environment Agency led project (WEM Lot 3 HNL Dagenham Brook Flood Alleviation Scheme), the modelling of the River Lee was updated. Models M03 and M04 from the original River Lee modelling were combined and re-run for the project, including model simulations for the 1% AEP event including +25%, +35% and +70% allowances for climate change⁷. The baseline model outputs from this project have been used to inform this Level 2 SFRA.

2.1.6 **Since the preparation of the draft version of this Level 2 SFRA, the climate change allowances that should be used in flood risk assessments were revised again, in July 2021⁸. The Waltham Forest study area is within the London Management Catchment, within which the climate change allowances have been reduced and are as follows:**

- 2080s 'Central' allowance +17% (previously +25%)
- 2080s 'Higher central' allowance +27% (previously +35%)
- 2080s 'Upper End' allowance +54% (previously +70%)

2.1.7 **The guidance states that the central (+17%) and higher central (+27%) allowances should be used in SFRAs. The assessments provided in this SFRA for the River Lee are therefore conservative in their assessment of the future risk of river flooding (as they refer to the former higher central +35% and upper end +70%). Site specific FRAs for individual development sites should make reference to the most up to date climate change allowances (available at <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>) depending on the Flood Zone in which the site is located and vulnerability classification of the proposed development.**

⁵ CH2MHill for the Environment Agency, August 2014, River Lee 2D Modelling and Mapping Technical Report.

⁶ Flood risk assessments: climate change allowances, February 2016 <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

⁷ AECOM, March 2017, WEM Lot 3 HNL Dagenham Brook Flood Alleviation Scheme. Technical Note: Update of Environment Agency Dagenham Brook Hydraulic Model.

⁸ Flood risk assessments: climate change allowances, July 2021 <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

- 2.1.8 Maps showing the maximum flood depths and hazard ratings for the 1% AEP including +35% allowance for climate change are included in the site proformas where required. The 1% AEP flood extent including +70% allowance for climate change has also been reviewed during the preparation of the site proformas, to determine where sites may be at particular increased risk during this scenario. It is noted that information on the rate of onset of flooding and the duration of flooding has not been made available from this dataset.
- 2.1.9 Flood 'hazard' categorises the danger to people for different combinations of flood water depth and velocity. The derivation of these categories is based on the methodology set out by Defra in Flood Risks Assessment Guidance for New Development FD2320/TR2⁹ using the following equation:

$$\text{Flood Hazard Rating} = ((v+0.5)*D) + DF \text{ Where } v = \text{velocity (m/s), } D = \text{depth (m), } DF = \text{debris factor}$$

Flood Hazard		Description
Low	HR < 0.75	Caution – Flood zone with shallow flowing water or deep standing water
Moderate	0.75 ≥ HR ≤ 1.25	Dangerous for some (i.e. children) – Danger: flood zone with deep or fast flowing water
Significant	1.25 > HR ≤ 2.0	Dangerous for most people – Danger: flood zone with deep fast flowing water
Extreme	HR > 2.0	Dangerous for all – Extreme danger: flood zone with deep fast flowing water

Ching Brook Modelling

- 2.1.10 Modelling of the Ching Brook was included within the modelling of the River Lee that was supplied by the Environment Agency from the River Lee 2D Modelling and Mapping Study, August 2014⁵. The Ching Brook is model reference M13. The model only included one climate change scenario, which was the 1% AEP event including 20% increase in peak river flow.
- 2.1.11 AECOM, on behalf of London Borough of Waltham Forest, re-ran the Ching Brook model for additional climate change allowances. As the work was initiated prior to the release of the 2021 climate change allowances, the +25%, +35% and +70% allowances were applied to the 1% AEP event and re-run. The +35% CC scenario (referred to as the design flood at that time) is the primary output that has been mapped and referenced within the Level 2 SFRA site assessments.
- 2.1.12 Some alterations were required to the model build to run the +70% scenario. AECOM have prepared a short technical note detailing the steps undertaken to rerun the model which has been sent to the Environment Agency for reference. This is included in Appendix C.
- 2.1.13 **Consultation with the Environment Agency with respect to the Ching Brook model throughout the preparation of this Level 2 SFRA has identified that in order for the Ching Brook model to better represent flood risk in the catchment, updated hydrology is required for the model as well as updated channel survey and LiDAR topographic survey of the floodplain. The Ching Brook modelling is scheduled to be updated as part of the Environment Agency's Lee 2100 modelling project, however outputs are not expected until mid/late 2022 and the modelling is only intended to be used at a strategy-level, rather than for site specific flood risk assessments.**
- 2.1.14 **In order to progress the SFRA, it has been agreed with the Environment Agency that the existing Ching Brook modelling can be considered acceptable for use provided it overestimates the flood risk during the 1% AEP, plus an allowance for climate change, flood event, but it is also noted that a more site-specific and detailed assessment of flood risk from the Ching Brook may be required for future individual planning applications.**
- 2.1.15 **Since the preparation of the draft version of this Level 2 SFRA, the climate change allowances that should be used in flood risk assessments were revised again, in July 2021⁸. The Waltham Forest study area is within the London Management Catchment, within which the climate change allowances have been reduced and are as follows:**
- 2080s 'Central' allowance +17% (previously +25%)
 - 2080s 'Higher central' allowance +27% (previously +35%)
 - 2080s 'Upper End' allowance +54% (previously +70%)

⁹ Defra and Environment Agency (2005) FD2320/TR2 Flood Risk Assessment Guidance for New Development.

- 2.1.16 **The guidance states that the central (+17%) and higher central (+27%) allowances should be used in SFRA. The assessments made for the Ching Brook and provided in this SFRA are therefore conservative in their assessment of the future risk of river flooding (as they refer to the former higher central +35% and upper end +70%). Site specific FRAs for individual development sites should refer to the most up to date climate change allowances (available at <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>) depending on the Flood Zone in which the site is located and vulnerability classification of the proposed development.**
- 2.1.17 Maps showing the maximum flood depths and hazard ratings for the 1% AEP including +35% allowance for climate change are included in the site proformas where required. The 1% AEP flood extent including +70% allowance for climate change has also been reviewed during the preparation of the site proformas, to determine where sites may be at particular increased risk during this scenario.
- 2.1.18 It is noted that information on the rate of onset of flooding and the duration of flooding has not been made available from the Ching Brook dataset.

Risk of Flooding from Surface Water

Flood Extents

- 2.1.19 The outputs of the Environment Agency's Risk of Flooding from Surface Water (RoFSW) mapping include GIS layers showing the extent of flooding from surface water that could result from a flood with a 3.33%, 1% and 0.1% chance of happening in any given year.
- 2.1.20 It is noted that the Risk of Flooding from Surface Water is not to be used at property level. Because of the way they have been produced and the fact that they are indicative, the maps are not appropriate to act as the sole evidence for any specific planning or regulatory decision or assessment of risk in relation to flooding at any scale without further supporting studies or evidence. However, the mapping provides a useful source of information to identify the risk of surface water flooding to the wider area in which a site is located, and the general patterns of surface water flow and ponding.

Critical Drainage Areas

- 2.1.21 Critical Drainage Areas (CDAs) are defined in the Waltham Forest Surface Water Management Plan¹³ and Level 1 SFRA³ as 'a discrete geographic area (usually within an urban setting) where there may be multiple and interlinked sources of flood risk and where severe weather is known to cause flooding of the area thereby affecting people, property or local infrastructure'. The CDAs for the London Borough of Waltham Forest are not restricted to Flood Zone 1.

Groundwater Flooding

Areas Susceptible to Groundwater Flooding

- 2.1.22 Areas Susceptible to Groundwater Flooding (AStGWF) is an Environment Agency dataset included within the Level 1 SFRA³. It is a strategic scale map showing where groundwater flooding could occur. It shows the proportion of each 1km grid square where geological and hydrogeological conditions show that groundwater flooding could occur.
- 2.1.23 The susceptible areas are represented by one of four categories showing the proportion of each 1km square that is susceptible to groundwater emergence. It does not show the likelihood of groundwater flooding occurring.
- <25%
 - >=25%<50%
 - >=50%<75%
 - >=75%
- 2.1.24 The absence of values for any grid square means that no part of that square is identified as being susceptible to groundwater emergence.

- 2.1.25 The map identifies areas where further investigation is needed to assess whether groundwater flooding may affect property or infrastructure.

Suitability for Infiltration SuDS

- 2.1.26 The Suitability for Infiltration SuDS dataset has been obtained from the British Geological Survey (BGS)¹⁰. This dataset gives a preliminary indication of the suitability of the ground for infiltration SuDS. These are drainage systems that allow surface water to infiltrate to the ground, such as soakaways, infiltration basins, infiltration trenches and permeable pavements. The selection and design of an appropriate system depends on the properties of the ground and in particular the following four factors:

- the presence of severe constraints that must be considered prior to planning infiltration
- the drainage potential of the ground
- the potential for ground instability when water is infiltrated
- the protection of groundwater quality

- 2.1.27 The BGS Infiltration SuDS map is based on 15 nationally derived subsurface property datasets, some of which are a result of direct observations, whilst others rely on modelled data.

Reservoir Flooding

- 2.1.28 The Environment Agency Long Term Flood Risk Map¹¹ identifies those areas that could flood in the unlikely event that a reservoir failed.

- 2.1.29 The likelihood of reservoir flooding is much lower than other forms of flooding. Current reservoir regulation, which has been further enhanced by the Flood and Water Management Act, aims to make sure that all reservoirs are properly maintained and monitored in order to detect and repair any problem¹².

¹⁰ <https://www.bgs.ac.uk/datasets/infiltration-suds-map/>

¹¹ <https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

¹² <https://www.gov.uk/government/news/reservoir-flood-maps-published>

2.2 Site Proformas

2.2.1 The Level 2 SFRA provides a detailed assessment of the following development sites. These sites have been identified by Waltham Forest Council for future redevelopment and have been identified as requiring further assessment in relation to the level of flood risk.

- GypsyPitch01 Peacocks Close/Folly Lane
- SA01 Low Hall Depot
- SA02 Lea Bridge Site 1, 2 and 3
- SA03 Lea Bridge Gasholders
- SA04 Hare and Hounds Football Ground/ Former Wingate Stadium Site, Lea Bridge Road
- SA05 Estate Way
- SA06 New Spitalfields Market
- SA07 Bywaters, Leyton
- SA10 Leyton Mills Retail Park (South and North)
- SA50 Dog Track Carpark and Sainsburys
- SA51 Morrisons Supermarket and Car Park
- SA52 Cork Tree Retail Park
- SA58 Motorpoint, Sewardstone Road
- WND03 Uplands
- WND04 Rigg Approach
- WND07 Bus station, Leyton (LLDC)
- WND15 Lammas Road (SIL)
- WND17 Golden Business Park (SIL7)
- WND18 Costco and Land at Harbet Road
- WND19 Waltham Park Way (BEA)
- WND20 Trinity Way and Avenue Business Park (BEA)
- WND21 Deacon Trading Estate (BEA)

2.2.2 A proforma has been prepared for each of the sites to assess the risk of flooding from all sources and provide recommendations for how development could be delivered on the site that would satisfy the requirements of the Exception Test. Table 2-1 provides an overview of the datasets that have been used to populate the proformas.

Table 2-1 Datasets and information used for Level 2 Site Proformas

Proforma Field	Dataset / information used
Site Description	
Site Name	As provided by London Borough of Waltham Forest (Excel sheet and GIS layer of sites).
Site ID	As provided by London Borough of Waltham Forest (Excel sheet and GIS layer of sites).
Area (ha)	The area of the site (hectares).
Proposed use	As provided by London Borough of Waltham Forest. Where this was not specified, mixed-use including residential has been assumed to provide a conservative assessment of the site.
Vulnerability classification	Defined in accordance with PPG Flood Risk and Coastal Change Table 1.
Flood Zone and Historic Flooding	
Proportion within each Flood Zone and Areas Benefitting from Defences	Flood Map for Planning (Rivers and Sea) Flood Zone 2; Flood Map for Planning (Rivers and Sea) Flood Zone 3; Flood Map for Planning (Rivers and Sea) Areas Benefitting from Defences; Level 1 SFRA Flood Zone 3b Functional Floodplain outline.
Flood Warning Area	Environment Agency Flood Warning Areas.
Flood Records within 500m of the site	As provided by London Borough of Waltham Forest.
River Flooding	
Maximum Flood Depth Map for the River Lee or Ching Brook for the 1% AEP event including +35% climate change	River Lee Modelling, (AECOM for the Environment Agency, March 2017, WEM Lot 3 HNL Dagenham Brook Flood Alleviation Scheme). Maximum flood depth mapping for the 1% AEP event including +35% allowance for climate change. Ching Brook Climate Change Modelling, (AECOM on behalf of London Borough of Waltham Forest, August 2020). Maximum flood depth mapping for the 1% AEP event including +35% allowance for climate change.
Maximum Flood Hazard Map for the River Lee or Ching Brook for the 1% AEP event including +35% climate change	River Lee Modelling, (AECOM for the Environment Agency, March 2017, WEM Lot 3 HNL Dagenham Brook Flood Alleviation Scheme). Maximum flood hazard mapping for the 1% AEP event including +35% allowance for climate change. Ching Brook Climate Change Modelling, (AECOM on behalf of London Borough of Waltham Forest, August 2020). Maximum flood hazard mapping for the 1% AEP event including +35% allowance for climate change.
Surface Water Flooding	
Risk of Flooding from Surface Water Map	Environment Agency dataset. Obtained June 2020.
Critical Drainage Area	As defined in the Surface Water Management Plan ¹³ and Level 1 SFRA for London Borough of Waltham Forest ³ . Defined as 'a discrete geographic area (usually within an urban setting) where there may be multiple and interlinked sources of flood risk and where severe weather is known to cause flooding of the area thereby affecting people, property or local infrastructure'. The CDAs for the London Borough of Waltham Forest are not restricted to Flood Zone 1.
Groundwater Flooding	
Bedrock Geology	Bedrock geology underlying the site, based on BGS mapping.
Superficial Geology	Superficial geology underlying the site, based on BGS mapping.
Areas Susceptible to Groundwater Flooding	The susceptible areas are represented by one of four categories showing the proportion of each 1km square that is susceptible to groundwater emergence. It does not show the likelihood of groundwater flooding occurring.
BGS Suitability for Infiltration SuDS	A BGS dataset ¹⁰ which gives a preliminary indication of the suitability of the ground for infiltration SuDS. The selection and design of an appropriate system depends on the properties of the ground and in particular the following four factors: <ul style="list-style-type: none"> the presence of severe constraints that must be considered prior to planning infiltration the drainage potential of the ground the potential for ground instability when water is infiltrated the protection of groundwater quality
Other sources	
Flooding from reservoirs	As identified on the Environment Agency Long Term Flood Risk Map ¹¹ .
Summary	
An overview of the risk of flooding to the site now and in the future (as a result of the impacts of climate change) based on the information within the proforma.	

¹³ Capita Symonds Scott Wilson, 2011, London Borough of Waltham Forest Surface Water Management Plan.

Site Specific Recommendations

Recommendations for how development could be delivered on the site to meet the requirements of part 2 of the Exception Test (where required) i.e. that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall.

Recommendations are made in line with the development management measures presented within the Level 1 SFRA³ (Chapter 5) and typically address the following:

- Applying **sequential approach** within development site
- **Setting back development** from the edge of watercourses
- **Finished floor levels.** Note: *The site assessments consider the flood level for the 1% AEP including 35% climate change allowance as an initial indication. The design flood levels should be selected as set out in the latest guidance (available at <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>) which are currently the central allowance (17%) or higher central (27%) depending upon the combination of Flood Zone and vulnerability classification of the proposed development.*
- **Floodplain compensation storage.** Note: *The site assessments consider the flood level for the 1% AEP including 35% climate change allowance as an initial indication. The latest guidance (available at <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>) states that the central allowance (17%) should be used for most cases and the higher central allowance (27%) when the affected area contains essential infrastructure.*
- **Access and egress arrangements.** Note: *The site assessments refer to the flood level for the 1% AEP including 35% climate change allowance as an initial indication. The design flood levels should be selected as set out in the latest guidance (available at <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>) which are currently the central allowance (17%) or higher central (27%) depending upon the combination of Flood Zone and vulnerability classification of the proposed development.*
- **Flood Warning and Evacuation** procedures
- **Surface water management**
- Further investigation of **groundwater** levels.

2.2.3 The sites in **Appendix A** require application of the Exception Test in accordance with the NPPF (Table 1-1). For these sites, recommendations have been provided to indicate how development may meet the requirements of part 2) of the Exception Test, i.e. may be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, may reduce flood risk overall.

2.2.4 The sites in **Appendix B** are those sites where the combination of Flood Zone and development vulnerability do not trigger the need for the Exception Test in accordance with the NPPF (Table 1-1). However, these sites have been included for assessment as they may be at risk of river flooding in the future as a result of climate change. Where this is shown to be the case, recommendations have been provided to indicate how development may be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, may reduce flood risk overall.

2.3 Future Updates to the SFRA

2.3.1 SFRA's are intended to be living documents, that are kept up to date as information on flood risk management changes. The Environment Agency [SFRA guidance](#) available online¹⁴ states that in order to remain up to date, it is necessary to update a SFRA to incorporate any changes to:

- the predicted impacts of climate change on flood risk
- detailed flood modelling - such as from the Environment Agency or lead local flood authority
- the local plan, spatial development strategy or relevant local development documents
- local flood management schemes
- flood risk management plans
- shoreline management plans
- local flood risk management strategies
- national planning policy or guidance.

¹⁴ <https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment>

Appendix A Exception Test Sites

GypsyPitch01	Peacocks Close/Folly Lane
SA01	Low Hall Depot
SA02	Lea Bridge Site 1, 2 and 3
SA03	Lea Bridge Gasholders
SA04	Hare and Hounds Football Ground/ Former Wingate Stadium Site, Lea Bridge Road
SA50	Dog Track Carpark and Sainsburys
SA52	Cork Tree Retail Park
WND07	Bus station, Leyton (LLDC)

Appendix B Other Sites

SA05	Estate Way
SA06	New Spitalfields Market
SA07	Bywaters, Leyton
SA10	Leyton Mills Retail Park (South and North)
SA51	Morrisons Supermarket and Car Park
SA58	Motorpoint, Sewardstone Road
WND03	Uplands
WND04	Rigg Approach
WND15	Lammas Road (SIL)
WND17	Golden Business Park (SIL7)
WND18	Costco and Land at Harbet Road
WND19	Waltham Park Way (BEA)
WND20	Trinity Way and Avenue Business Park (BEA)
WND21	Deacon Trading Estate (BEA)

Appendix C Ching Brook Climate Change Modelling Technical Note

