London Borough of Lewisham Strategic Flood Risk Assessment Stage 2 Assessment Addendum

February 2023

Strategic Planning Team

Contents

1. Introduction

1.1. In December 2020, Lewisham Council commissioned AECOM to produce a Level 2 Strategic Flood Risk Assessment (SFRA) to inform the Regulation 18 Local Plan: Main Issues and Preferred Approaches document.

1.2. The scope of the Level 2 SFRA was to consider the nature of the following flooding risks within the assessment sites:

- Fluvial Flood
- Breach Hazard
- Surface Water
- Ground Water
- Reservoir Flooding
- Sewer Flooding
- The SuDs suitability of the site
- Historical fluvial or pluvial

1.3. Since the Regulation 18 Draft Local Plan was published in January 2021, four new site allocations have been added to the next iteration of the Draft Local Plan – Proposed Submission Document, Regulation 19 Stage. These new site allocations include the following:

- South Circular
- Thurston Road Bus Station
- Bemondsey Dive Under
- and Silwood Street.

1.4. This addendum has therefore been prepared to ensure these above sites are also informed by a Strategic Flood Assessment Stage 2 Assessment applying the same datasets from the previous 2020 study prepared by AECOM. The assessments are set out below.

2. Assessments

Site Name: South Circular	**Site Area:** 0.42ha	**Proposed use:** Infrastructure (re-routing of the A205 South Circular)

FLOOD RISK VULNERABILITY	Essential Infrastructure	Vulnerability assessment has been undertaken as per Table 2 of the Planning Practice Guidance to the National Planning Policy Framework.
FLOOD ZONE CLASSIFICATION	Flood Zone 3a	The majority of this is located within flood zone Flood Zone 3a. A site-specific FRA is required. Infrastructure should be designed and constructed to remain operational and safe in times of flood.
FLOOD ZONE COMPATIBILITY	Exception test required.	The proposed site usage is classed as "Essential Infrastructure" and because some the site is situated in Flood Zone 3a development must be carefully considered and an exception test is required. This is in accordance with Table 3 of the Planning Practice Guidance to the National Planning Policy Framework.
PROXIMITY TO MAIN RIVER	Site within Riparian Zone.	There is a main river adjacent to the site. Infrastructure should be setback from the river in accordance with the River Corridor Improvement Plan and recommendations of the Level 1 SFRA.
BREACH HAZARD CATEGORY	Not Identified at Risk.	The site is not affected by a potential breach of the River Thames defences.
SURFACE WATER FLOOD RISK	High risk of flooding within site. Within Critical Drainage Area 6034.	Mitigation measures will be required to reduce or manage the risk of flooding from surface water to the proposed development; consideration should be given to the impact of the development and any mitigation measures on the risk of flooding in the surrounding area. A flood risk assessment and drainage strategy are required for all development. The drainage strategy must aim to reduce runoff from the site

		to as close to the greenfield rate as possible to help reduce surface water flood risk in the CDA.
SUDS SUITABILITY	Very significant constraints are indicated	Geological data suggests that the implementation of infiltration SuDS is severely constrained in the area; alternative SuDS methods should be considered. SuDS selection and design should be in accordance with the sustainable drainage hierarchy and provide sufficient capacity to cater for up to the 1 in 100 year rainfall event, incorporating the latest guidance regarding climate change. Proposals for infiltration SuDS should be supported by site-specific permeability testing.
GROUNDWATER FLOOD RISK	Potential for groundwater flooding to occur at surface.	There is potential for groundwater flooding to occur at surface. Ground conditions should be confirmed through site investigation, and dewatering of excavations and basement waterproofing implemented where required. Adjustments to finished floor levels and site grading should be made where required.
RESERVOIR FLOOD RISK	Not to be predicted to be at risk.	The site is not identified at risk of flooding following a reservoir failure. The impact of local, above-ground water storage features should be considered.
SEWER FLOODING INCIDENTS WITHIN POSTCODE AREA	2 Flooding Incidents	The risk of flooding from any nearby sewer should be considered as part of any site specific FRA however in the last 10 years a limited number of flooding incidents from sewers has been reported in the area of the site.
HISTORIC FLUVIAL OR PLUVIAL FLOODING	A flooding incident has been recorded on or near the site.	The site is in the vicinity of a recorded flood event; the London Borough of Lewisham should be contacted for further information.

Site Name: Thurston Road Bus Station	**Site Area:** 0.35 ha	**Proposed use:** Infrastructure (temporary work site)

FLOOD RISK VULNERABILITY	Essential Infrastructure	Vulnerability assessment has been undertaken as per Table 2 of the Planning Practice Guidance to the National Planning Policy Framework.
FLOOD ZONE CLASSIFICATION	Flood Zone 3a	The majority of this is located within flood zone Flood Zone 3a. A site-specific FRA is required. Infrastructure should be designed and constructed to remain operational and safe in times of flood.
FLOOD ZONE COMPATIBILITY	Exception test required.	The proposed site usage is classed as "Essential Infrastructure" and because some the site is situated in Flood Zone 3a development must be carefully considered and an exception test is required. This is in accordance with Table 3 of the Planning Practice Guidance to the National Planning Policy Framework.
PROXIMITY TO MAIN RIVER	Site outside of Riparian Zone	No main rivers are within or adjacent to the site.
BREACH HAZARD CATEGORY	Not Identified at Risk	The site is not affected by a potential breach of the River Thames defences.
SURFACE WATER FLOOD RISK	High risk of flooding Within site Within Critical Drainage Area 6034	Mitigation measures will be required to reduce or manage the risk of flooding from surface water to the proposed development; consideration should be given to the impact of the development and any mitigation measures on the risk of flooding in the surrounding area. A flood risk assessment and drainage strategy are required for all development. The drainage strategy must aim to reduce runoff from the site

		to as close to the greenfield rate as possible to help reduce surface water flood risk in the CDA.
SUDS SUITABILITY	Very significant constraints are indicated	Geological data suggests that the implementation of infiltration SuDS is severely constrained in the area; alternative SuDS methods should be considered. SuDS selection and design should be in accordance with the sustainable drainage hierarchy and provid e sufficient capacity to cater for up to the 1 in 100 year rainfall event, incorporating the latest guidance regarding climate change. Proposals for infiltration SuDS should be supported by site-specific permeability testing.
GROUNDWATER FLOOD RISK	Potential for groundwater flooding to occur at surface	There is potential for groundwater flooding to occur at surface. Ground conditions should be confirmed through site investigation, and dewatering of excavations and basement waterproofing implemented where required. Adjustments to finished floor levels and site grading should be made where required.
RESERVOIR FLOOD RISK	Residual Flood Risk	Reservoir breaches are unlikely; however a site specific FRA should consider this as a residual risk and liaise with the London Borough of Lewisham Emergency Planning team to identify suitable mitigation measures.
SEWER FLOODING INCIDENTS WITHIN POSTCODE AREA	0 Flooding Incidents	The risk of flooding from any nearby sewer should be considered as part of any site specific FRA however in the last 10 years a limited number of flooding incidents from sewers has been reported in the area of the site.
HISTORIC FLUVIAL OR PLUVIAL FLOODING	A flooding incident has been recorded on or near the site	The site is in the vicinity of a recorded flood event; the London Borough of Lewisham should be contacted for further information.

Site Name: Bermondsey Dive Under	**Site Area:** 1.88 ha	**Proposed use:** Industrial and Commercial

FLOOD RISK VULNERABILITY	Less vulnerable	Vulnerability assessment has been undertaken as per Table 2 of the Planning Practice Guidance to the National Planning Policy Framework. Commercial and industrial development is classed as ‘’Less Vulnerable"
FLOOD ZONE CLASSIFICATION	The site falls wholly within Flood Zone 3a.	The whole site located in flood zone 3a, benefiting from flood defences.
FLOOD ZONE COMPATIBILITY	Site passes the sequential test.	The site is situated in Flood Zone 3a however the proposed usage is classed ‘’Less Vulnerable’’ and therefore the proposed uses are acceptable within this flood zone. This is in accordance with Table 3 of the Planning Practice Guidance to the National Planning Policy Framework.
PROXIMITY TO MAIN RIVER	Site outside of Riparian Zone.	No main rivers are within or adjacent to the site.
BREACH HAZARD CATEGORY	Dangerous to most people.	In the event of a breach of the River Thames defences, the site will be affected by deep, fast flowing water. Advice from the SFRA should be followed when planning the development.
SURFACE WATER FLOOD RISK	High risk of flooding within site Outside of Critical Drainage Area	Mitigation measures will be required to reduce or manage the risk of flooding from surface water to the proposed development; consideration should be given to the impact of the development and any mitigation measures on the risk of flooding in the surrounding area.
SUDS SUITABILITY	Opportunities for bespoke infiltration	Geological data suggests that the site has

	SuDS.	Opportunities for bespoke infiltration SuDS which should be prioritised where possible. SuDS selection and design should be in accordance with the sustainable drainage hierarchy and provide sufficient capacity to cater for up to the 1 in 100 year rainfall event, incorporating the latest guidance regarding climate change. Proposals for infiltration SuDS should be supported by site-specific permeability testing.
GROUNDWATER FLOOD RISK	Potential for groundwater flooding of property situated below ground level	There is potential for groundwater flooding to occur for property situated below ground level. Ground conditions should be confirmed through site investigation, and dewatering of excavations and basement waterproofing implemented where required.
RESERVOIR FLOOD RISK	Not predicted to be at risk.	The site not identified at risk of flooding following reservoir failure. The impact of local, above-ground water storage features should be considered.
SEWER FLOODING INCIDENTS WITHIN POSTCODE AREA	1 Flooding Incident	The risk of flooding from any nearby sewer should be considered as part of any site specific FRA however in the last 10 years a limited number of flooding incidents from sewers has been reported in the area of the site.
HISTORIC FLUVIAL OR PLUVIAL FLOODING	No known history of flooding	The site has no known history of flooding. However, this does not necessarily indicate that the site has not experienced flooding.

Site Name: Silwood Street	**Site Area:** 0.25 ha	**Proposed use:** Residential and commercial

FLOOD RISK VULNERABILITY	More vulnerable and less vulnerable	Vulnerability assessment has been undertaken as per Table 2 of the Planning Practice Guidance to the National Planning Policy Framework. Residential development is classed as "More Vulnerable" whilst other site uses could be defined as "Less Vulnerable". This is in accordance with Table 3 of the Planning Practice Guidance to the National Planning Policy Framework.
FLOOD ZONE CLASSIFICATION	Flood Zone 3	The site is located within Flood Zone 3a, benefitting from flood defences. A site specific FRA is required. More vulnerable development should be sequentially allocated to areas of the sites at lower relative risk of flooding, with more compatible development (such as parking or open space) located in areas at the highest risk.
FLOOD ZONE COMPATIBILITY	Exception Test Required	The proposed site usage is classed as "More Vulnerable" and because the site is situated in Flood Zone 3 an exception test is required. This is in accordance with Table 3 of the Planning Practice Guidance to the National Planning Policy Framework.
PROXIMITY TO MAIN RIVER	Site outside of Riparian Zone	No main rivers are within or adjacent to the site.
BREACH HAZARD CATEGORY	Dangerous to most people	The site is not affected by a potential breach of the River Thames defences.

SURFACE WATER FLOOD RISK	High risk of flooding within site Outside of Critical Drainage Area	Mitigation measures will be required to reduce or manage the risk of flooding from surface water to the proposed development; consideration should be given to the impact of the development and any mitigation measures on the risk of flooding in the surrounding area.
SUDS SUITABILITY	Opportunities for bespoke infiltration SuDS	Geological data suggests that the site has Opportunities for bespoke infiltration SuDS which should be prioritised where possible. SuDS selection and design should be in accordance with the sustainable drainage hierarchy and provide sufficient capacity to cater for up to the 1 in 100 year rainfall event, incorporating the latest guidance regarding climate change. Proposals for infiltration SuDS should be supported by site-specific permeability testing.
GROUNDWATER FLOOD RISK	Potential for groundwater flooding of property situated below ground level	There is potential for groundwater flooding to occur for property situated below ground level. Ground conditions should be confirmed through site investigation, and dewatering of excavations and basement waterproofing implemented where required.
RESERVOIR FLOOD RISK	Residual Flood Risk	Reservoir breaches are unlikely; however a site specific FRA should consider this as a residual risk and liaise with the London Borough of Lewisham Emergency Planning team to identify suitable mitigation measures.

SEWER FLOODING INCIDENTS WITHIN POSTCODE AREA	1 Flooding Incident	The risk of flooding from any nearby sewer should be considered as part of any site specific FRA however in the last 10 years a limited number of flooding incidents from sewers has been reported in the area of the site.
HISTORIC FLUVIAL OR PLUVIAL FLOODING	No known history of flooding	The site has no known history of flooding. However, this does not necessarily indicate that the site has not experienced flooding.