Chapter 16: Likely Significant Effects

INTRODUCTION

- 16.1 This chapter of the Environmental Statement (ES) presents a summary of the likely significant residual effects pertaining to the Proposed Development during the demolition and construction works, and once completed and operational.
- 16.2 It should be noted, that for all topics apart from Wind Microclimate (see below), residual effects that are identified as 'moderate' or 'major' in scale are considered to be a likely significant effect (with effects that are 'negligible' or 'minor' in scale being 'not significant'). It should be noted that professional judgement in addition to published assessment guidance is used in concluding whether a residual effect is significant.
- 16.3 For the wind microclimate assessment, as explained within ES Volume 1, Chapter 13: Wind Microclimate, adverse effects that are minor, moderate and major in scale are considered a 'significant' effect; and beneficial effects (at all scales) are considered 'not significant'. It is pertinent to note that the wind microclimate results presented in this chapter are those associated with the assessment of the maximum parameters of the outline element of the Proposed Development without any proposed mitigation or landscaping in place. The effects arising from the assessment of the Outline Proposals are not considered representative of the likely significant effects that will come forward as a result of the completed and operational Proposed Development, which will be subject to further detailed design (and wind assessment) at the reserved matters stage.
- 16.4 The wind assessment of the Illustrative Scheme, with the proposed mitigation and landscaping (as presented in ES Volume 1, Chapter 13: Wind Microclimate) is considered to provide a more realistic representation of the likely wind microclimate effects as a result of the complete and operational Proposed Development. Almost all adverse effects have been mitigated and addressed through the assessment of the Illustrative Scheme. For context, the results of the Illustrative Scheme testing have also been included within this chapter. The Applicant is committed to further wind tunnel testing as the detailed design of the scheme comes forward and is committed to resolving all significant wind microclimate effects during subsequent RMA stage(s).
- The purpose of this chapter is to not re-present the residual effects associated with each of the technical topic assessments. All residual effects, including their associated nature and scale, are presented and summarised as relevant within each technical chapter of the ES, and reference should be made to ES Volume 1, Chapters: 6 to 14 and ES Volume 2. Instead, this chapter focuses on the *likely significant effects* that are expected to arise as a result of the Proposed Development, in line with the EIA Regulations¹. Significant adverse effects are shaded in 'orange' and significant beneficial effects are shaded in 'green'.

LIKELY SIGNIFICANT EFFECTS

Demolition and Construction

- **16.6** Error! Reference source not found. summarises the likely significant effects arising as a result of the Proposed Development during demolition and construction.
- 16.7 No significant demolition and construction effects arising as a result of the Proposed Development have been identified in respect of the following environmental topic areas which have been the subject of this EIA or any additional effects identified within the standalone HIA document accompanying the planning application:
 - Socio-Economics;
 - Traffic and Transport;
 - Air Quality
 - Wind Microclimate:
 - Daylight ,Sunlight Overshadowing, Solar Glare and Light Pollution
 - Health
 - Water Resources and Flood Risk
 - Townscape, Heritage and Visual Impact Assessment;

¹ Her Majesty's Stationery Office (HMSO) 2017. The Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (amended in 2018 and 2020).

- **16.8** Significant demolition and construction effects arising as a result of the Proposed Development have been identified in respect of the following environmental topic areas which have been the subject of this EIA and are discussed further in Error! Reference source not found.:
 - Noise and Vibration
 - Climate Change; and
 - Townscape Visual Impact Assessment.

Table 16.1 Likely Significant Effects – Demolition and Construction

	Classification of Residual Effect					t
Receptor	Description of Residual Effect	Scale and Nature	+ve -ve	D I	P T	St Mt Lt
Residential Receptors	Demolition and Construction noise and vibration on residential receptors immediately adjacent to activities (short term).	Negligible to Major Adverse	-ve	D	Т	St
Climate System	Greenhouse gas emissions during construction	Minor Adverse	-ve	D	Т	Lt
Townscape Character Areas and Views*	Changes to the townscape setting and visual impact	(Negligible to) Minor,) Moderate and Major Adverse	-ve	D	Т	St/Mt
	Residential Receptors Climate System Townscape Character Areas and Views*	Residential Receptors Residential Receptors Demolition and Construction noise and vibration on residential receptors immediately adjacent to activities (short term). Climate System Greenhouse gas emissions during construction Townscape Character Areas and Views* Changes to the townscape setting and visual impact	Residential Receptors Demolition and Construction noise and vibration on residential receptors immediately adjacent to activities (short term). Climate System Greenhouse gas emissions during construction Townscape Character Areas and Views* Changes to the townscape setting and visual impact Regligible to Major Adverse (Negligible to) Minor,) Moderate and Major Adverse	Residential Receptors Demolition and Construction noise and vibration on residential receptors immediately adjacent to activities (short term). Climate System Changes to the townscape Areas and Views* Demolition and Construction Negligible to Major Adverse -ve Negligible to Major Adverse -ve (Negligible to) Minor,) Moderate and Major Adverse	Residential Receptors Demolition and Construction noise and vibration on residential receptors immediately adjacent to activities (short term). Climate System Greenhouse gas emissions during construction Areas and Views* Changes to the townscape setting and visual impact Scale and +ve -ve D Negligible to Major Adverse -ve D (Negligible to) Minor Adverse -ve D	Residential Receptors Demolition and Construction noise and vibration on residential receptors immediately adjacent to activities (short term). Climate System Demolition and Construction noise and vibration on residential receptors immediately adjacent to activities (short term). Climate System Greenhouse gas emissions during construction Minor Adverse -ve D T (Negligible to) Minor,) Moderate and Vee D T

*Due to the complexity of accurately predicting the full range of potential visual effect resulting from the construction process, and due to the temporary status of all works, the assessment of demolition and construction effects on Townscape Character Areas and Views has been undertaken qualitatively and on a general basis for all receptor locations, rather than detailed assessment for each receptor.

Noise and Vibration

- 16.9 The noise and vibration effects will be experienced by residential receptors immediately adjacent to the demolition and construction works. These effects will be temporary by nature, lasting only the time it takes to complete these works on Site. The effects will range from minor adverse (not significant), to major adverse (significant). These effects are only experienced during specific demolition and construction activities and are classed as short-term significant effects. It should be noted that the predicted noise levels are based on reasonable worst-case assumptions and there will be additional mitigation options available to the contractor to reduce noise associated with demolition and construction activities.
- **16.10** During the detailed working up of the construction programme and preparation of the Construction Environmental Management Plan (CEMP), the best practice measures to mitigate potential noise and vibration impacts on nearby noise sensitive premises will be defined and agreed with the London Borough of Tower Hamlets (LBTH).
- 16.11 To reduce potential vibration impacts due to piling, the contractor shall use a piling technique that is least likely to cause adverse vibration impacts (e.g. auger piling), to ensure that the likely effect of vibration is reduced or avoided at nearby receptors. Vibration limits will be set in accordance with BS5228-2 to minimise the risk of complaints or building damage. These limits will be controlled through implementation of the CEMP and vibration monitoring. During detailed construction programme stage and preparation of the CEMP, measures to mitigate potential noise and vibration effects on nearby noise sensitive premises will be defined and agreed with LBTH.

Climate Change

16.12 The effects on climate change during the demolition and construction works are a result of the greenhouse gas emissions associated with the construction works. Although this effect has been assessed as **Minor Adverse** in the ES chapter (**ES Volume 1, Chapter 9: Climate Change**), any greenhouse gas emissions are considered



16.1

a significant effect on the climate system. Whilst significant, the emissions will be emitted during the short-term, whilst the demolition and construction works are carried out.

Townscape and Visual Impact Assessment

16.13 The townscape and visual impact effects will be temporary in nature, lasting only for the time it takes to complete these works on Site. The effects range from Negligible (not significant) to Minor Adverse (not significant), Moderate Adverse (significant) and Major Adverse (significant). Other than the use of hoarding where appropriate during construction, no further mitigation is recommended as the visual effects of construction activity are unavoidable, commonplace in urban areas, and temporary.

Completed Development

- **16.14** Error! Reference source not found. summarises the likely significant effects arising as a result of the Proposed Development once completed and operational.
- 16.15 No significant effects have been identified as being likely as a result of the completed and operational Proposed Development in respect of the following environmental topic areas which have been the subject of this EIA:
 - Health;
 - Water Resources and Flood Risk;
 - Vibration;
 - Solar Glare; and
 - Archaeology (Buried Heritage).
- **16.16** Significant effects have been identified as being likely as a result of the completed and operational Proposed Development in respect of the following topic areas, and are therefore discussed further:
 - Socio-Economics:
 - Traffic and Transport;
 - Noise
 - Townscape, Heritage and Visual Impact Assessment;
 - Wind Microclimate;
 - Daylight;
 - Sunlight;
 - Overshadowing; and
 - Climate Change.

Table 16.2 Likely Significant Effects – Completed and Operational

ES Chapter			Classification of Residual Effect					
	Receptor	Description of Residual Effect	Scale and Nature	+ve -ve	D I	P T	St Mt Lt	
SOCIO- ECONOMICS	Contribution to housing targets	The delivery of new homes to support housing need at the LIA and LBTH levels as set out within the New London Plan	Moderate to Major Beneficial	+ve	D	Р	Lt	
	Deprivation	Improvements to the public realm, increased labour market participation, and	Moderate Beneficial	+ve	D	Р	Lt	

			(Classificatio	n of Residu	al Effect	
ES Chapter	Receptor	Description of Residual Effect	Scale and Nature	+ve -ve	D I	P T	St Mt Lt
		the delivery of new affordable units					
		Improvements to pedestrian and cyclist severance	Major Beneficial	+ve	D	Р	Lt
TRAFFIC AND	Pedestrians and Road Users	Improvements to pedestrian and cyclist amenity, fear and intimidation	Major Beneficial	+ve	D	Р	Lt
TRANSPORT	(Cyclists, Motorists)	Improvements to pedestrian and cyclist accidents and safety	Moderate Beneficial	+ve	D	Р	Lt
		Improvements to bus passenger severance	Moderate Beneficial	+ve	D	Р	Lt
		Overheating	Minor Adverse for 2030s, 2060s and 2090s	-ve	D	Р	Lt
	Future site users	Flooding	Negligible for 2030s and 2060s, Minor Adverse for 2090s	-ve	D	Р	Lt
CLIMATE CHANGE		Water Shortages	Negligible for 2030s 2060s, and 2090s	-ve	D	Р	Lt
	Landscaping	Landscaping failure	Negligible for 2030s, Minor Adverse for 2060s and 2090s	-ve	D	Р	Lt
		Operational Energy Emissions	Moderate Adverse	-ve	D	Р	Lt
	Climate System	Operational Transport Emissions	Negligible to Minor Beneficial	+ve	D	Р	Lt
	On-site - Thoroughfares	Conditions one category windier than intended use at probe locations 158, 177, 274, 275, 277, 284 and 305.	Minor Adverse	-ve	D	Р	Lt
WIND MICROCLIMATE	Bus Stop	Conditions one category windier than intended use at probe location 105.	Minor Adverse	-ve	D	Р	Lt
	On-site - Ground Level Amenity (seating)	Conditions one category windier than intended use at probe locations 312 and 316.	Minor Adverse	-ve	D	Р	Lt
	(5559)	Conditions two categories windier than intended use	Moderate Adverse	-ve	D	Р	Lt



				Classificatio	n of Residu	al Effect	
ES Chapter	Receptor	Description of Residual Effect	Scale and Nature	+ve -ve	D I	P T	St Mt Lt
		at probe location 265.					
	On-site - Ground Level Amenity (mixed-use)	Conditions one category windier than intended use at probe location 259.	Minor Adverse	-ve	D	Р	Lt
	On-site - Roof Terrace Amenity	Conditions one category windier than intended use at probe locations 416, 417, 426, 427 and 434.	Minor Adverse	-ve	D	Р	Lt
	On-site - Entrances	Conditions one category windier than intended use at probe locations 116, 139, 142, 145, 162, 195, 255, 276, 278 and 280.	Minor Adverse	-ve	D	Р	Lt
		Conditions two categories windier than intended use at probe locations 141, 313 and 339.	Moderate Adverse	-ve	D	Р	Lt
	Strong Winds	Instances of strong winds exceeding the safety threshold at probe locations 137, 140, 141, 143, 158, 177, 195, 265, 274, 277, 281, 286, 290, 305, 337, 338, 339, 340, 416, 426, 427 and 434	*Significant	-ve	D	Р	Lt
NOISE AND VIBRATION	Residential Properties	Improvements in road traffic flows along Abbot Road	Major Beneficial	+ve	D	Р	Lt
DAYLIGHT	177-195 Abbott Road Aberfeldy Estate Phase One Block C Aberfeldy Estate Phase Three Block J Aberfeldy Estate Phase Two Block D St. Nicholas Church Culloden Primary School	Daylight availability	Minor to Moderate Adverse	-ve	D	Р	Lt
	110-126 Leven Road	Daylight availability	Moderate Adverse	-ve	D	Р	Lt
	199-225 Abbott Road Lansbury Gardens 2-12	Daylight Availability	Moderate to Major Adverse	-ve	D	Р	Lt

				Classificatio	on of Residu	al Effect	
ES Chapter	Receptor	Description of Residual Effect	Scale and Nature	+ve -ve	D I	P T	St Mt Lt
	Loren Apartments Sherman House						
	Atelier Court Leven Road Phase Three	Daylight Availability	Major Adverse	-ve	D	Р	Lt
	Aberfeldy Estate Phase One Block C St. Nicholas Church	Sunlight availability	Minor to Moderate Adverse	-ve	D	Р	Lt
SUNLIGHT	Lansbury Gardens 2-12 Sherman House	Sunlight availability	Moderate Adverse	-ve	D	Р	Lt
	Leven Road Phase Three Loren Apartments 199-225 Abbott Road	Sunlight availability	Moderate to Major Adverse	-ve	D	Р	Lt
	Atelier Court	Sunlight availability	Major Adverse	-ve	D	Р	Lt
OVERSHADOWING	6 out of 14 open spaces at Bromley Hall School, identified in appendix as areas n. 72, 74, 75, 76, 77 and 78	Increases in overshadowing	Minor to Moderate Adverse	-ve	D	Р	Lt
	Private terraces at 3 and 4 Dee Street	Increases in overshadowing	Major Adverse	-ve	D	Р	Lt
	Townscape Character Areas	TCA 1: Poplar	Moderate to Major Beneficial	+ve	D	Р	Lt
	Character Areas	TCA 2: Poplar Riverside	Moderate Beneficial	+ve	D	Р	Lt
TOWNSCAPE, VISUAL IMPACT AND HERITAGE ASSESSMENT	Short, Medium and Long Distance Views: Road Users (Cyclists, Motorists)	View 1 South of East India Dock Road Principally experienced by a mix of local residents and workers, the majority in moving vehicles(and so not focussed on the view).	Moderate Beneficial	+ve	D	Р	Lt
	ResidentsPedestrians	View 3 Abbott Road / Ettrick Street Principally experienced by a mix of local residents and workers, some in their leisure time.	Moderate to Major Beneficial	+ve	D	Р	Lt



			,	al Effect			
ES Chapter	Receptor	Description of Residual Effect	Scale and Nature	+ve -ve	D I	P T	St Mt Lt
		View 5 LBTH borough designated view 6: View from East India Dock Road to Balfron Tower & Canary Wharf in the background Principally experienced by a mix of local residents and workers, the majority in moving vehicles (and so not focussed on the view).	Moderate Beneficial	+ve	D	Р	Lt
		View 6 A12, junction with Zetland Street Principally experienced by a mix of local residents and workers, the majority in moving vehicles (and so not focussed on the view).	Moderate Beneficial	+ve	D	Р	Lt
		View 7 Riverside footpath north of River Lea / Bow Creek Principally experienced by a mix of local workers, residents, and visitors, at least some in their leisure time.	Moderate Beneficial	+ve	D	Р	Lt
		View 8 Bow Creek / River Lea Bridge Principally experienced by a mix of local workers, residents, and visitors, at least some there in their leisure time.	Moderate to Major Beneficial	+ve	D	Р	Lt
		View 12 Uamvar Street Principally experienced by a mix of local residents and workers, the majority in moving vehicles heading northbound (and so	Moderate Beneficial	+ve	D	Р	Lt

			,	Classificatio	n of Residu	al Effect	
ES Chapter	Receptor	Description of Residual Effect	Scale and Nature	+ve -ve	D I	P T	St Mt Lt
		not focussed on the view).					
		View 13 LBTH borough designated view 5: View from Langdon Park to Balfron Tower & Canary Wharf in the background Principally experienced by residents of the surrounding area, making use of the park's facilities.	Moderate Beneficial	+ve	D	Р	Lt
		View 14 Jolly's Green Principally experienced by residents of the surrounding area, making use of the park's facilities.	Moderate to Major Beneficial	+ve	D	Р	Lt
		View 15 St Leonards Road Principally experienced by a mix of local residents and workers.	Moderate Beneficial	+ve	D	Р	Lt
		View 30 A12, junction with East India Dock Road, looking north Principally a mix of local residents and workers, the majority in moving vehicles (and so not focussed on the view).	Moderate Beneficial	+ve	D	Р	Lt
		View 31 Dee Street / Abbott Road Principally experienced by a mix of local residents and workers.	Moderate Beneficial	+ve	D	Р	Lt
		View 32 Dee Street, midway Principally experienced by a mix of local residents and workers. med as being significant	Moderate to Major Beneficial	+ve	D	Р	Lt

applicable to 'strong winds'



Completed Development

Socioeconomics

- 16.17 The London Plan 2021 sets LBTH a target of 34,730 new homes to be delivered by 2028/29. The Proposed Development would make a positive contribution towards these targets by delivering new homes, equating to approximately 4% of the London Plan target. The effect upon housing delivery would be direct, permanent, moderate to major beneficial (significant) at the Borough level.
- 16.18 The Site has good access to local parks, but the Proposed Development includes a range of new open spaces; some of these spaces are publicly accessible to all, and will include improvements to existing public spaces. This provision will improve open space within the area, the Proposed Development would also deliver new affordable housing and increased labour market participation leading to a reduction in deprivation. The effect of the Proposed Development on the provision of and access to open space is considered to be direct, permanent, moderate beneficial (significant) at the local level.

Transport

- **16.19** In terms of Traffic and Transport, the Proposed Development will significantly improve the permeability and connectivity to and through the Site through the provision of new pedestrian, vehicular and cycle connections. This will result in a **major beneficial** effect in relation to pedestrian and cyclist severance and 'Amenity, Fear and Intimidation'.
- 16.20 The Proposed Development will significantly improve the quality of road junction to and through the Site through the provision of cycle routes, bus gates and pedestrian route connections. This will result in a moderate beneficial effect in relation to pedestrian and cyclist accidents and safety and improvements to bus passenger severance.

Noise and Vibration

16.21 Due to the improvements in the road network that are proposed as part of the completed Proposed Development, traffic flows on Abbott Road will be greatly improved. As a result, some of the residential properties along Abbott Road will experience vast improvements to the noise and vibration levels from passing traffic that they currently experience. This effect will be direct, permanent and long term, classified as **major beneficial (significant)**.

Townscape Visual Impact

- **16.22** Once the Proposed Development is complete there will be a number of significant beneficial effects in relation to townscape and views. The Proposed Development would result in a **moderate to major beneficial** effect to TCA 1: Poplar and a **moderate beneficial** effect to TCA 2: Poplar Riverside.
- 16.23 7 views will experience a moderate beneficial effect whilst 4 will experience a moderate to major beneficial effect. The Proposed Development would contribute to the improvement of each view experience for a mix of local residents and workers, moving vehicles and those during their leisure time and, together with existing buildings to the south of the Site. This would contribute to an overall improvement to each view and create cohesion over short, medium and long-distance views.

Wind Microclimate

16.24 In terms of Wind Microclimate, a number of receptor locations (presented within Table 16.2) experience strong winds which are minor to moderate adverse effects. However, further potential mitigation measures to reduce wind speeds and provide acceptable wind conditions at these locations have been discussed with ES Volume 1, Chapter 13: Wind Microclimate and the wind mitigation strategy for the Outline Proposals will be developed in detail (through further wind testing) for the final proposals which will be sought for approval during the reserved matters application stages.

Daylight and Sunlight

16.25 With regards to daylight, of the 42 buildings surrounding the site assessed, 6 of these buildings will experience a minor to moderate adverse impact, 1 of these buildings will experience a moderate adverse impact, 4 of these buildings will experience a moderate to major adverse impact, and 2 will experience a major adverse impact on daylight. The properties are summarised in 0 and more information about the daylight assessment can be found in ES Volume 1, Chapter 14: Daylight Sunlight, Overshadowing, Light Pollution and Solar Glare.

16.26 With regards to sunlight, of the 42 buildings surrounding the site assessed, 2 buildings will experience a minor to moderate adverse impact, 2 of these buildings will experience a moderate adverse impact, 3 of these buildings will experience a moderate to major adverse impact, and 1 will experience a major adverse (significant) impact on sunlight. The properties are summarised in 0 and more information about the sunlight assessment can be found in ES Volume 1, Chapter 14: Daylight Sunlight, Overshadowing, Light Pollution and Solar Glare.

Climate Change

- **16.27** Significant effects were identified in the climate change assessment. Future site users will experience overheating, flooding and water shortages as a result of the impacts of climate change on the Proposed Development. The overheating effects are considered **minor adverse** for 2030s, 2060s and 2090s, the flooding effects are considered **negligible** for the 2030s and 2060s, and **minor adverse** for the 2090s, whilst the water shortages effects are considered **negligible** for the 2030s, 2060s and 2090s.
- **16.28** The Proposed Development's landscaping has been assessed as likely to experience significant effects due to landscaping failure as a result of the impact of climate change on the Proposed Development. This effect has been assessed as **negligible** for the 2030s and **minor adverse** for the 2060s and 2090s.
- **16.29** The effect of the Proposed Development on the global climate system has been assessed for the operational emissions as well as the transport associated emissions. The operational energy emissions have been assessed as a **moderate adverse** effect on the global climate system. Due to the traffic mitigation measures implemented into the Proposed Development, the impact on the climate system has been assessed as a **negligible** to **minor beneficial** effect.

Cumulative Effects

- **16.30** The EIA process has identified some additional likely significant cumulative effects which, are additional effects that are considered 'Likely' to arise as a result of the Proposed Development coming forward in conjunction with the other surrounding development schemes.
- **16.31** Note that only those significant effects that have *increased* as a result of the Cumulative Effects Assessment have been reported on below. Technical topics and cumulative effects that have not significantly increased are not reported in this summary of the Likely Significant Cumulative Effects. The significant cumulative effects are detailed in the following sections.

Socio-Economics

- **16.32** The Cumulative Schemes in combination with the Proposed Development will lead to an increase in the overall number of residents and employees within the local area. Cumulatively, these developments are anticipated to deliver:
 - Over 222,700m² of flexible retail floorspace (E(a) to E(c) uses);
 - Over 355,000m² of flexible workspace floorspace (E(g) uses);
 - Over 32,500m² of flexible community, education and leisure floorspace;
 - 1,200 beds in hotel use;
 - Over 50,00m² of student accommodation; and
 - A little over 17,200 new residential units.
- 16.33 The approximately 17,200 new residential units that are anticipated to come forward as a result of the Proposed Development and Cumulative Schemes represent a significant impact on the contribution to housing targets within the LBTH. The cumulative impact on contribution to housing targets has been assessed as a major beneficial effect at the borough (LBTH) level.
- 16.34 In regard to population and labour market, the 17,200 new residential units have been estimated to provide approximately 40,500 additional residents, as a result of the Proposed Development and Cumulative Schemes. Within the local area, the effect of the additional residents on the population and labour market has been assessed as major beneficial, and at the borough (LBTH) level the effect has been assessed as moderate beneficial.
- **16.35** Collectively, the Proposed Development and Cumulative Schemes have the potential to support around 40,00 to 43,000 (gross) Full Time Equivalent (FTE) jobs on-Site. This has been assessed to have a high impact on



- on-Site employment in the local area, with the effect assessed as being **major beneficial**. At the borough level (LBTH), the effect has been assessed as **moderate beneficial**.
- 16.36 The additional residential units that are anticipated to come forward as a result of the Proposed Development and Cumulative Schemes have been estimated to generate an annual expenditure totalling around £411million. A proportion of this expenditure will likely be captured by businesses located within the borough (LBTH). The level of this effect on the local economy through increased local expenditure has been assessed as major beneficial within the LBTH.
- 16.37 The increase in on-Site employment delivered as part of the Proposed Development and Cumulative Schemes will help to grow the local economy and London's recovery following the impact of the COVID-19 pandemic. The Proposed Development and Cumulative Schemes considered has potential to add up to 40,000-43,000 gross FTE jobs, with the potential to generate around £5b in Gross Value Added (GVA). The effect on the local economy through the GVA from the Proposed Development and Cumulative Schemes at the borough level (LBTH) has been assessed as being major beneficial. At the regional level (London), the effect has been assessed as moderate beneficial.
- 16.38 The Proposed Development and Cumulative Schemes will continue to contribute towards improving the LBTH's performance against several of the domains within the Index of Multiple Deprivation where it currently underperforms. As a result, the effect on overall deprivation within the LBTH has been assessed as moderate/major beneficial.
- **16.39** Improvements to the public realm and living environment enabled by the Proposed Development and Cumulative Schemes will promote a secure environment, encourage crime reduction and improve social cohesion. These improvements have been assessed to have a **moderate beneficial** effect on the LBTH in regard to crime and social cohesion.

Daylight, Sunlight and Overshadowing

16.40 Due to the nature of daylight, sunlight and overshadowing effects, only those Cumulative Schemes that were in close proximity to the Proposed Development were considered in the Cumulative Effects Assessment. From the list of cumulative schemes (see ES Volume 1, Chapter 2: EIA Methodology); Former Poplar Bus Depot (PA/19/02148/A1) and Islay Wharf (PA/19/01760) where considered to result in potential daylight, sunlight and overshadowing cumulative effects. All other Cumulative Schemes were considered too far from the Proposed Development to cause cumulative effects for daylight, sunlight and overshadowing.

Daylight

- **16.41** For 110-126 Leven Road, a total of 24 additional windows would experience impacts ranging from Minor to Major Adverse for the Vertical Skyline Component (VSC) assessment. Therefore the cumulative effect is considered to increase to **moderate to major adverse**.
- **16.42** For Ailsa Wharf Block A, a total of 23 additional windows would experience impacts ranging from minor to major adverse for VSC and nine additional major adverse No Sky Line impacts would occur. Therefore, the effect is considered to increase to **moderate to major adverse**.
- **16.43** For Ailsa Wharf Block D, a total of 23 additional windows would experience impacts ranging from minor to major adverse for VSC and nine additional major adverse NSL impacts would occur. Therefore, the effect is considered **moderate to major adverse**.
- **16.44** For Ailsa Wharf Blocks K and L, a total of 10 additional windows would experience of major adverse significance for VSC and seven additional minor to moderate adverse NSL impacts would occur. Therefore, the effect is considered to increase to **minor to moderate adverse**.
- **16.45** For Bromley Hall, a total of 16 addition windows would see VSC impacts ranging from minor to major adverse and three additional rooms would see minor or major adverse NSL impacts. Therefore, the effect is considered to increase to **moderate adverse**.
- **16.46** For Culloden Primary School, a total of 57 additional windows would see VSC impacts ranging from minor to major adverse and three additional rooms would see major adverse NSL impacts. Therefore, the effect is considered to increase to **moderate to major adverse**.
- **16.47** For Devon's Wharf, a total of 64 additional windows would see VSC impacts ranging from minor to major adverse and 22 additional rooms would see minor to major adverse NSL impacts. Therefore, the effect is considered to increase to **moderate to major adverse**.

16.48 For Leven Road Phase 3, a total of 18 additional windows would see VSC impacts ranging from minor to major adverse and seven additional rooms would see minor to major adverse NSL impacts. Therefore, the effect is considered to increase to **major adverse**.

Sunlight

- **16.49** For Ailsa Wharf Block A, a total of 19 additional windows would experience major adverse Annual Probable Sunlight Hours (APSH) impacts and 13 additional windows would experience major adverse Winter Probable Sunlight Hours (WPSH) impacts as a result of the Cumulative Schemes coming forward. Therefore, the effect is considered to increase to **moderate to major adverse**.
- **16.50** For Ailsa Wharf Block D, a total of 16 additional windows would experience moderate to major adverse APSH impacts and 12 additional windows would experience major adverse WPSH impacts as a result of the Cumulative Schemes coming forward. Therefore, the effect is considered to increase to **moderate to major adverse**.

Overshadowing

16.51 For Bromley Hall school, in the cumulative scenario, 7 open spaces would remain BRE compliant. The 6 open spaces affected in the Proposed Development scenario would still be affected, one of which would have a reduction of 34% which is considered a moderate adverse effect whilst the other 5 would all see reductions ranging from 46% to 100% which is considered a major adverse effect. Overall, in considering the 7 open spaces of this building it is considered that the former Bromley Hall School building would see a moderate adverse effect upon implementation of the Proposed Development and Cumulative Schemes.

Climate Change

16.52 Overall, the Proposed Development contributes a small amount to greenhouse gas (GHG) emissions and will employ commensurate mitigation measures to ensure policy compliance and minimise its contribution to climate change where possible to ensure that likely significant effects associated with the Proposed Development itself are avoided. The IEMA guidance is clear that any GHG emissions might be considered significant, but it is important to acknowledge that significant effects from climate change relate to cumulative global GHG emissions from all sources driving up atmospheric temperatures and do not relate to a direct effect resulting from a small additional GHG contribution associated with the Proposed Development.

CONCLUSIONS

- **16.53** The Proposed Development offers the opportunity to redevelop a site with several planning designations, including Ailsa Street Site Allocation, as designated under the new Local Plan 2031, Site: LS-A within the Draft Leaside Area Action Plan (2021), the Poplar Riverside Opportunity area, and the Lower Lea Valley Opportunity Area. The Site will provide significant regeneration to the surrounding area.
- **16.54** The Proposed Development will provide significant beneficial effects in terms of contribution to housing targets and overall deprivation, as well as several significant beneficial effects on pedestrians, cyclists, road users and residential properties. The Proposed Development will also lead to significant beneficial townscape and visual effects.
- 16.55 Whilst significant adverse effects will be experienced once the Proposed Development is complete and operational, they are limited to wind microclimate (which can be mitigated through the detailed design and reserved matters process), sunlight and daylight and climate change. In the case of daylight and sunlight, significant alterations of the magnitude identified in the assessment are an expected consequence of an intensification of the urban area. In accordance with the UK planning policy, where applications are for housing, local authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site. These adverse effects need to be considered in the context of the wider regeneration to the Site and surrounding area and its associated regeneration benefits.

