

Mixed-use Development Capacity at Lower Lea Industrial Sites Blackwall Trading Estate and Blackwall Depot

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2. Blackwall Trading Estate Capacity Study

Introduction

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- Appraisal summary
- Opportunities & Constraints

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- Principles & Summary of all tests
- Option 1
- Option 2
- Option 3
- Option 4

Relevant precedents

3. Blackwall Depot Capacity Study

Introduction

- Brief
- Existing Site
- Constraints
- Opportunities
- Design Principles of Depot
- Summary of all tests

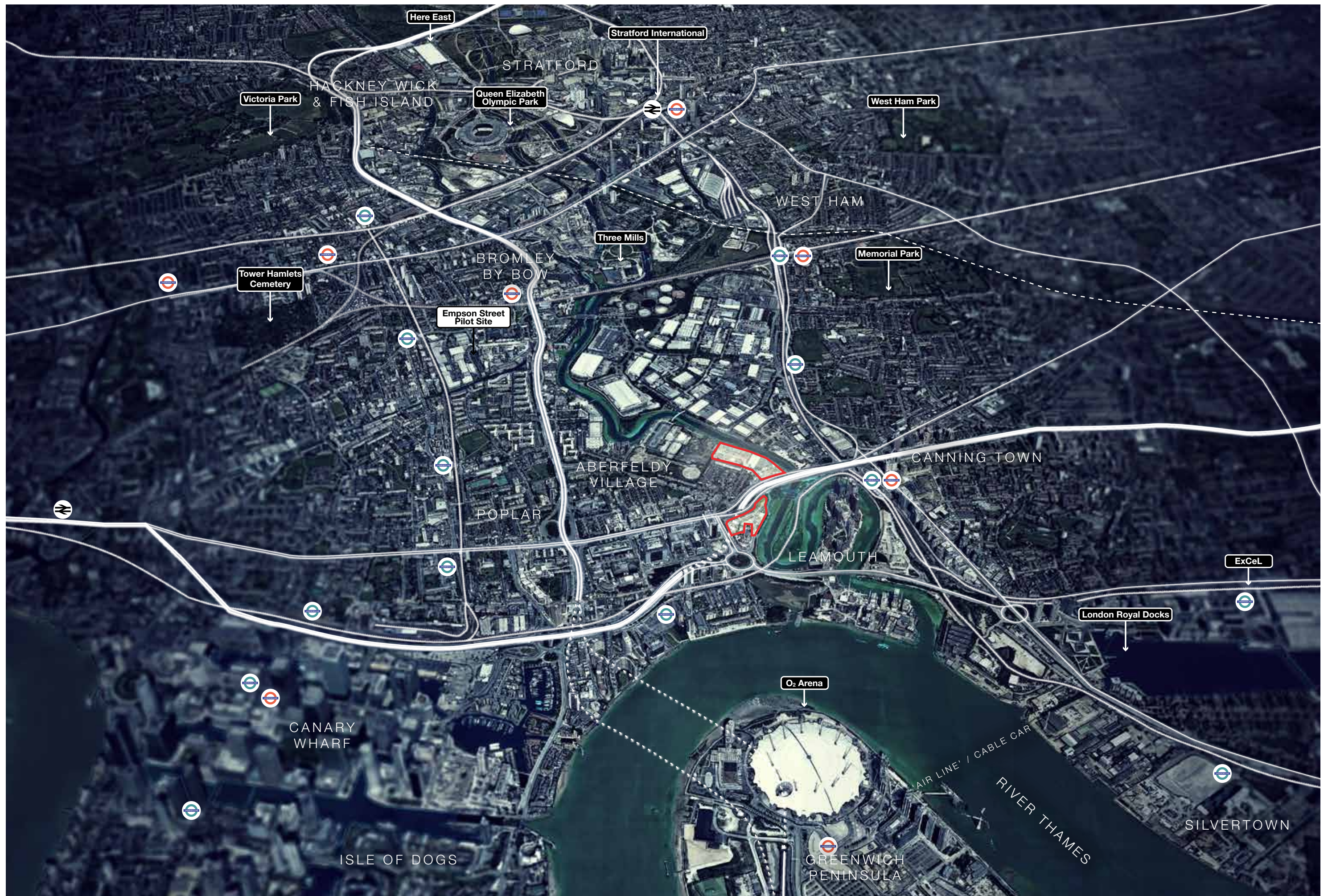
Design Options

- Option 1
- Option 2
- Option 3
- Option 4

Relevant precedents

1. Introduction

- Context of this report
- Strategic Context



1

Introduction

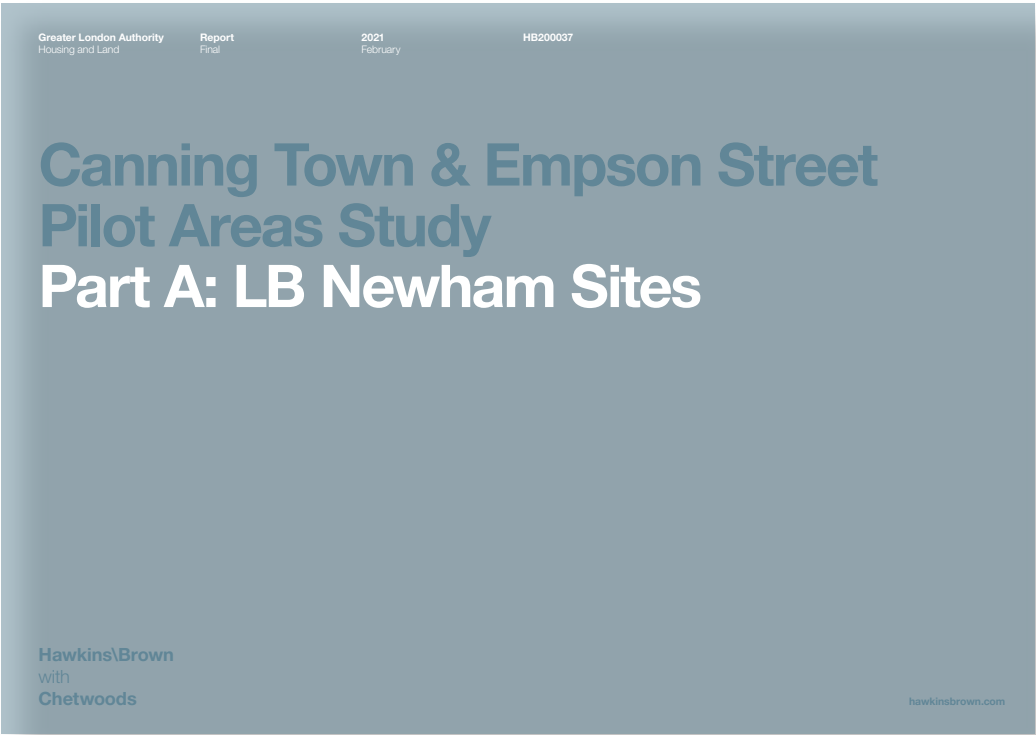
1.1

Context of this report

This report is in support of the development of an Area Action Plan, where the LB Tower Hamlets wishes to assess the potential development capacity at Blackwall Trading Estate and Blackwall Depot sites.

This report compiles part of the work previously produced by Hawkins\Brown and Chetwoods for the Canning Town & Empson Street Pilot Areas Study, commissioned by the GLA, which comprised multiple other industrial sites in the Lower Lea area, between LB Newham and LB Tower Hamlets.

The Canning Town Empson Street Pilot Areas Study (CTES) report included a high level viability appraisal for all tested sites which was prepared by Avison Young. This high level appraisal was used as a guide to define each preferred option for each site. Blackwall Depot site was not part of the original brief by the GLA, therefore it was not included in most of the early site analysis and early testing; however was later introduced as a site to study in more detail.



1 Introduction

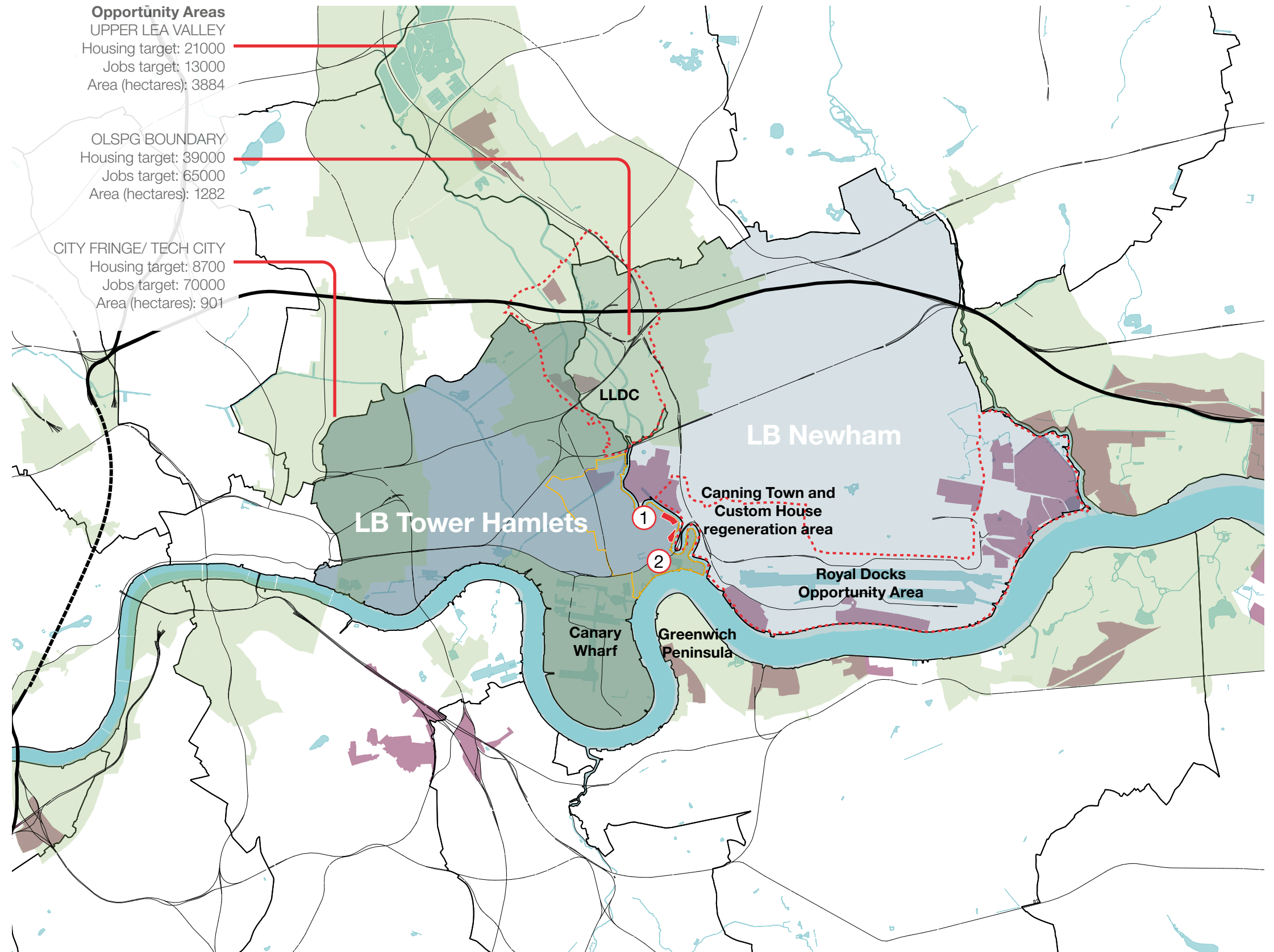
1.2 Strategic context

The sites investigated in this document, Blackwall Trading Estate (1) and Blackwall Depot (2), are both located on the eastern end of the London Borough of Tower Hamlets. Both sites sit adjacent to the River Lea, which also defines the boundary with the London Borough of Newham.

Strategically situated in close proximity and with good access to key road infrastructure, both sites currently sit in isolation of the adjoining neighbourhoods due to heavy physical barriers (the A13 road) and natural barriers (River Lea) bordering its edges.

Both sites are within the Poplar Riverside Housing Zone. The Blackwall Depot site is within the Isle of Dogs & South Poplar Opportunity Area, and the Blackwall Trading Estate is adjacent to it. Other regeneration areas like the Canning Town and Custom House Regeneration Area (LB Newham) and Upper Lea Valley Opportunity Area (LLDC) are in close proximity to the site.

The sites play an important sub-regional industrial, warehousing and waste management role, serving not just the borough but other parts of Central London.



Planning Context

Key

London Plan Opportunity Areas

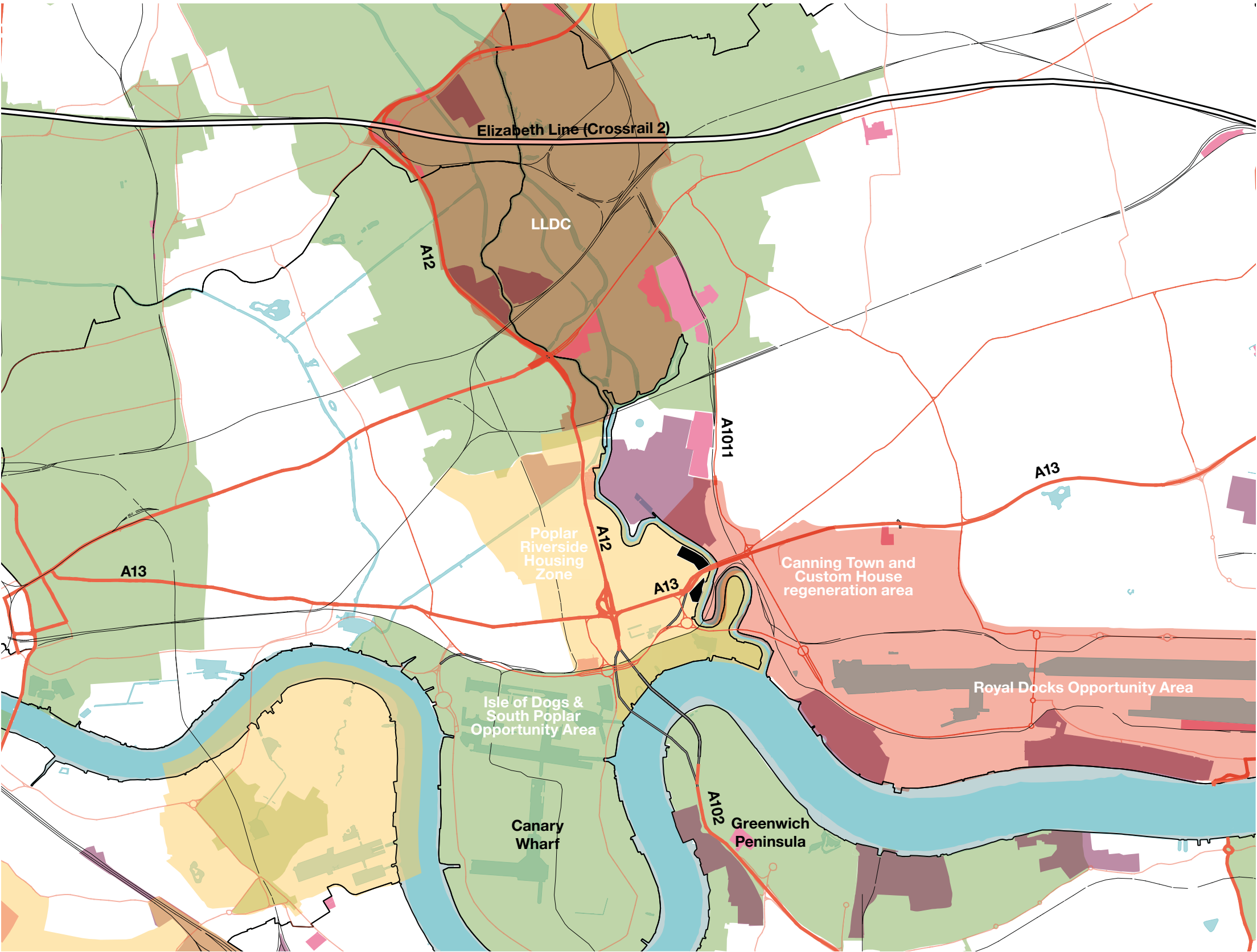
Housing Zones

Nearby Regeneration Areas

Locally Significant Industrial Land (LSIS)

Strategic Industrial Locations (SIL)

Study Sites



1 Introduction

1.4 Study areas

1. Blackwall Trading Estate (LB Tower Hamlets)

The Blackwall Trading Estate is located on the western bank of the River Lea, in the London Borough of Tower Hamlets. It is designated as a Local Industrial Location (LIL) site, protected to support the long term needs of the LBTH through the retention of SILs and LILs to secure the long term provision of industrial space.

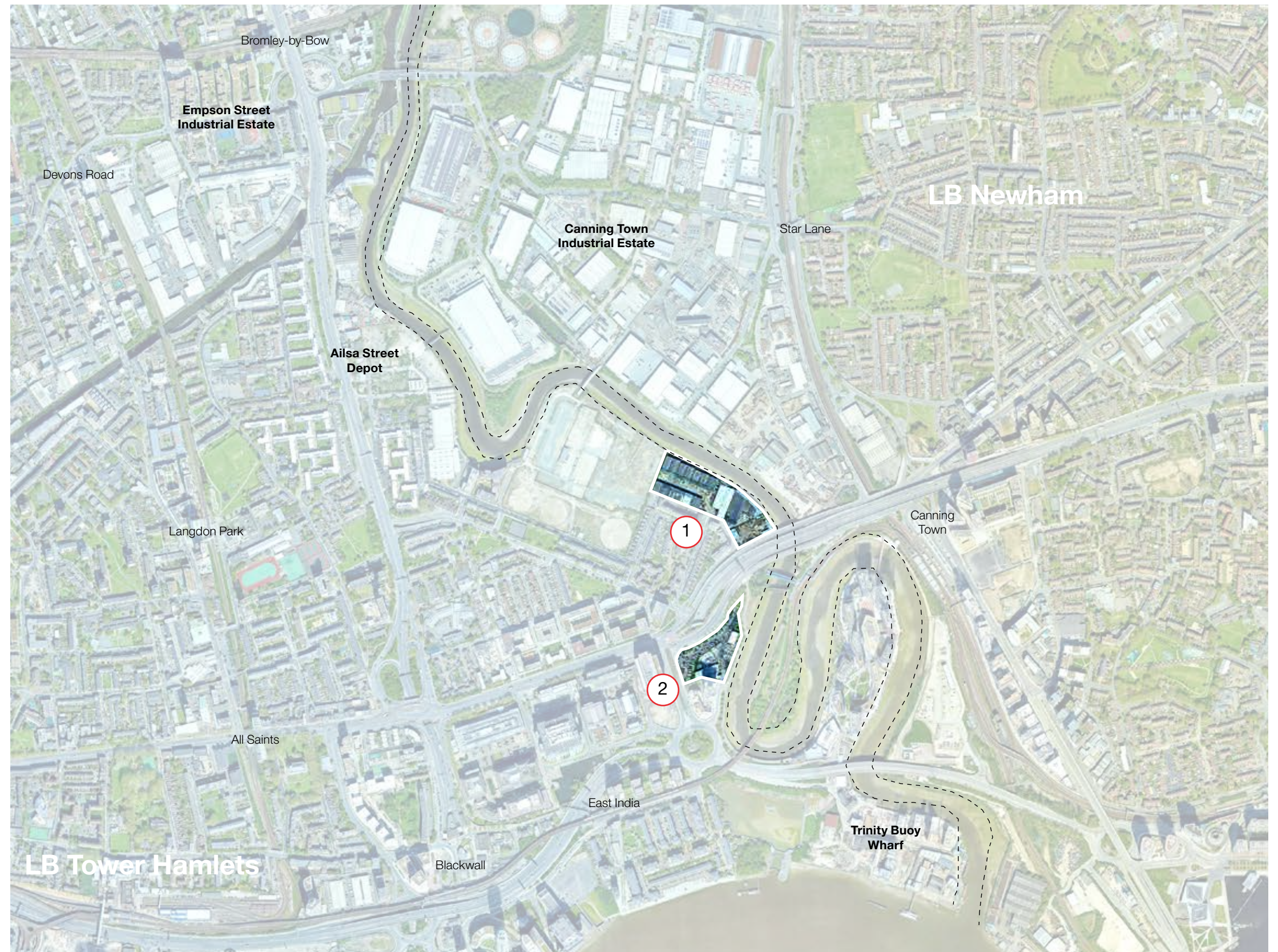
It is located in close proximity to a medium-rise residential neighbourhood, and adjacent to residential development sites along the North-West boundary of the site.

A pedestrian green path is planned along River Lea which will include a new bridge on the North-Western side of the site, connecting to Canning Town industrial estate, which is located across the river on the eastern bank.

2. Blackwall Depot

It is a council owned site, currently used as a depot providing some office spaces, vehicle repair and storage spaces, as well as other material storage space and services.

North of the site and across the A13 road are Blackwall Trading Estate and Canning Town Industrial Estate. East of the site high-rise residential modern towers are growing around the Leamouth Peninsula and Canning Town station. Commercial uses dominate the West of the site around Blackwall, and towards the South residential uses.



----- Borough Boundary



1

Introduction

1.5

Development context

Development context around the Lower Lea area

- 1. Manor Road
- 2. Hallsville Quarter
- 3. City Island
- 4. Caxton Works
- 5. Poplar Gas Works
- 6. Castle Wharf

Key

- Future development sites
- Recent and/or emerging development



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2. Blackwall Trading Estate

Capacity Study

Introduction

- Brief
- Existing Site
- Opportunities & Constraints

Design Options

- Option 1
- Option 2
- Option 3
- Option 4
- Intensification & Co-Location principles
- Precedents

2 Blackwall Trading Estate

2.1 Site overview



View 01



View 02



View 03



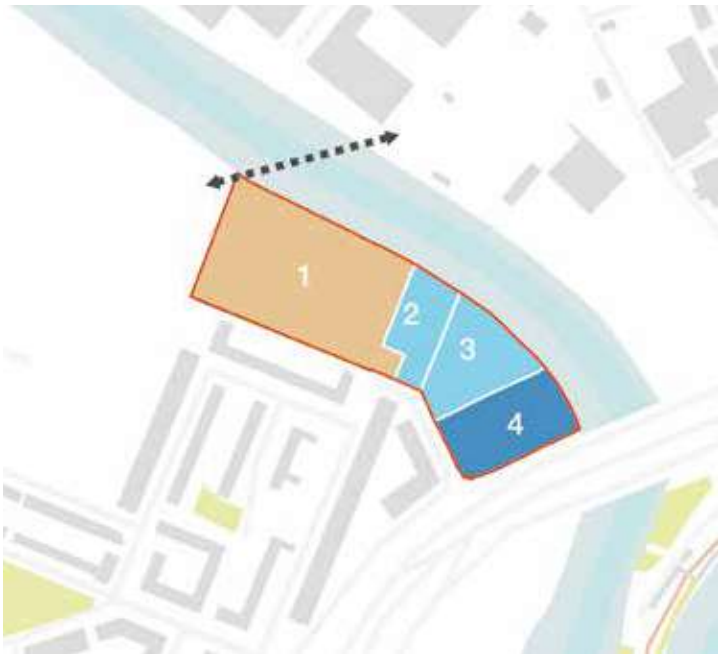
2

2.2

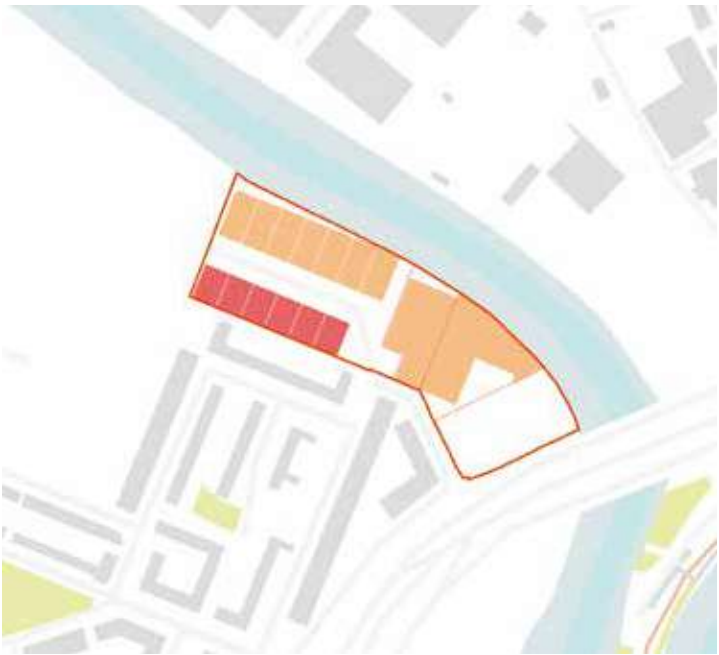
Blackwall Trading Estate

Appraisal summary

The summary information of the below diagrams has been obtained from the *Canning Town & Empson Street Pilot Study* report; the categorisation criteria follows the methodology presented in that report.



- Site types**
- Industrial Estate (terraces)
 - Dense Industrial
 - Open Industrial Land



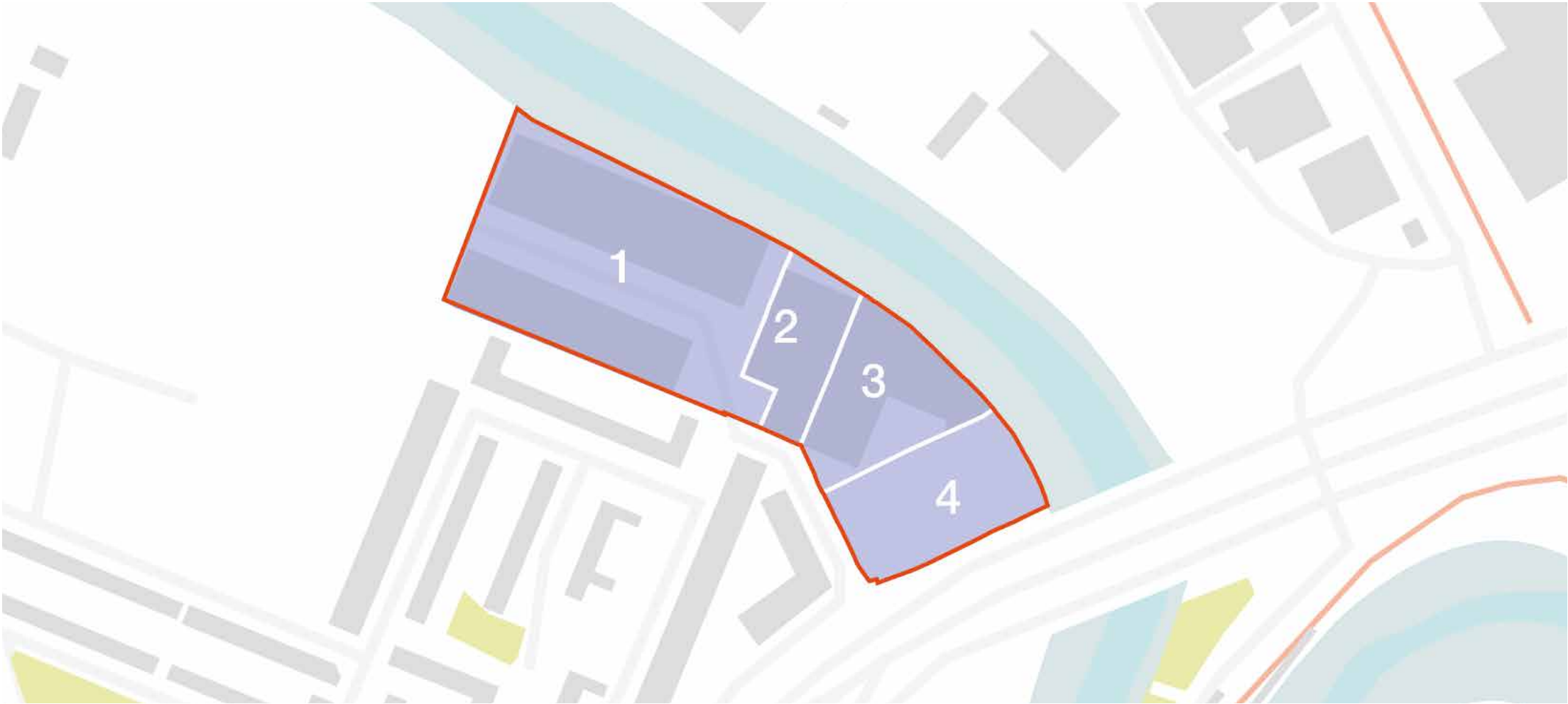
- Building Type**
- Small industrial units (< 500m²)
 - Large industrial units (> 500m²)



- Plot Ratio**
- 0 - 0.10
 - 0.51-0.60
 - 0.71-0.80
 - 0.81-0.90



- PTAL**
- TfL's Public Transport Accessibility Level is a reflection of current state of the area. Emerging development and enhancements around the River Lea will lead to an improved scenario.



Overview

Total area: 22,654 m²

Total built (GEA): 11,320 m²

Plot Ratio: 0.50

Approximate built area per industrial space type (GEA)

– Office/studio: n/a

– Light industrial: 3,440 m²

– Industrial: 6,150 m²

– Storage/distribution: 1,730 m²

Plots and Businesses

<div><div>1. Blackwall Trading Estate</div><div>Address: Lanrick Road, E14 0JP</div><div>Occupier: Multiple occupiers</div><div>Typology: Small & medium sized terraced industrial-units</div><div>Plot area: 11,695m² Age: Mid-life</div><div>Buildings on site: 2 Built footprint: 6,780 m²</div><div>Plot Ratio: 0.58</div><div>Yard space: 4,908m² approx.</div><div>Max Height: 6.90m approx.</div></div>	<div><div>2. IP House</div><div>Address: 20 Lanrick Road</div><div>Occupier: IP House - London Data Centre</div><div>Typology: Large industrial</div><div>Plot area: 2,530m² Age: Mid-life</div><div>Buildings on site: 1 Built footprint: 1,620 m²</div><div>Plot Ratio: 0.64</div><div>Yard space: 444m² approx. (most covered under canopy)</div><div>Max Height: 7,70m approx.</div></div>	<div><div>3. Tripleseal</div><div>Address: 20 Lanrick Road</div><div>Occupier: Tripleseal IG</div><div>Typology: Large industrial</div><div>Plot area: 3,965m² Age: Mid-life</div><div>Buildings on site: 1 Built footprint: 2,920 m²</div><div>Plot Ratio: 0.9</div><div>Yard space: 1,045m² approx.</div><div>Max Height: 9,50m approx.</div></div>	<div><div>4. East London Pallets</div><div>Address: 17 Lanrick Road</div><div>Occupier: East London Pallets</div><div>Typology: Open air storage yard</div><div>Plot area: 4,455m² Age:</div><div>Buildings on site: 0 Built footprint: 0 m²</div><div>Plot Ratio: 0</div><div>Yard space: 4,458m² approx.</div><div>Max Height: 0m</div></div>
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Note: Data and areas are approximate and obtained from the Canning Town & Empson Street Pilot Areas study.

2

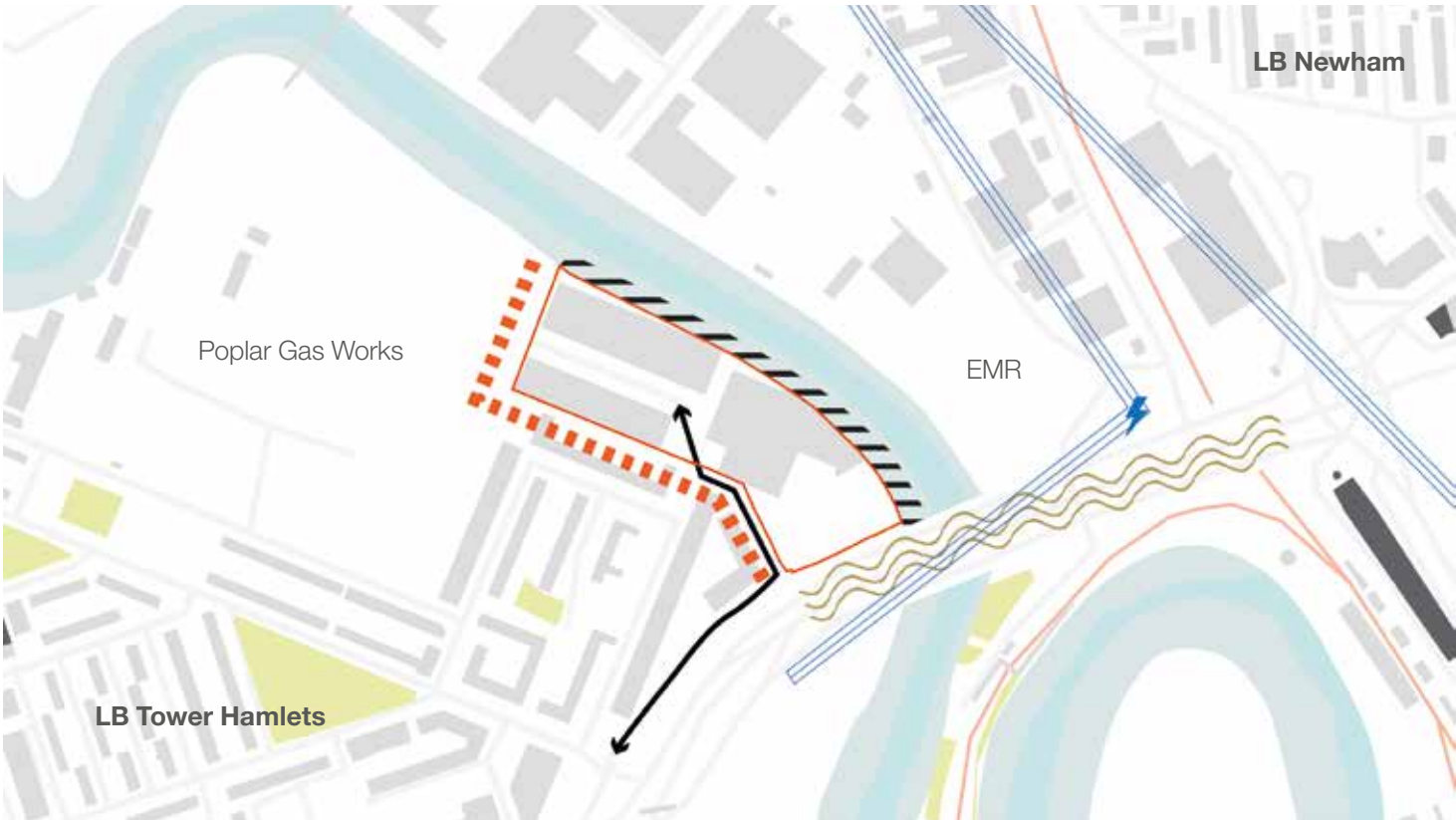
Blackwall Trading Estate

2.3

Opportunities & Constraints

Constraints

- Road accessibility to the site is through a residential neighbourhood
 - Homes are facing onto the servicing roads and some of the industrial yards. Industrial uses are creating nuisances
 - Site is currently inaccessible from the river side on the north-eastern edge, and constrained by the A13 from the south.
- The A13 creates nuisances like noise, dust and vibrations
 - Building stock is medium age in the Blackwall Estate, whereas the south-eastern side is older and less quality



Key

- ■

Sensitive Boundary: Residential Frontages
- ⋯

A13 road nuisances: noise, dust & vibration
- ↔

Main servicing access
- ≡

Restricted site boundary
- ≡

High voltage overhead electric power lines
- Site boundary

Opportunities

- Improve access and separate from residential routes
 - Reduce nuisances to neighbours
 - Introduce new open space and green route promenades along River Lea
 - Create a bridge across River Lea
 - Improve site permeability with new internal connections
- Increase pedestrian access
 - Renovate old building stock on under-utilised plots presents intensification opportunity.



Key

- ↔

Adopted highways/strategic TfL network
- ↔

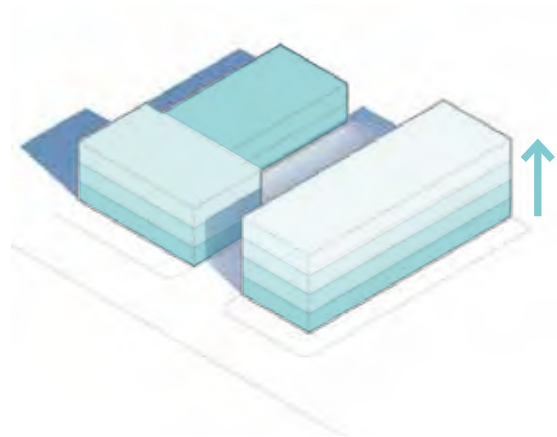
New Links/Increased site permeability
- Old Building Stock
- Under utilised site
- Extended cycle network

Blackwall Trading Estate
Option testing

2 Blackwall Trading Estate

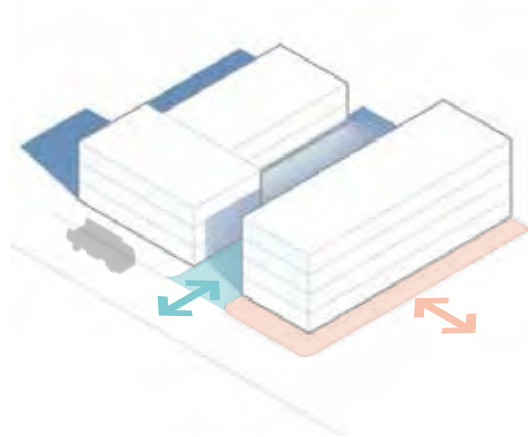
2.4 Option testing

2.4.1 Intensification principles: Industrial Intensification & Industrial + Residential Co-Location



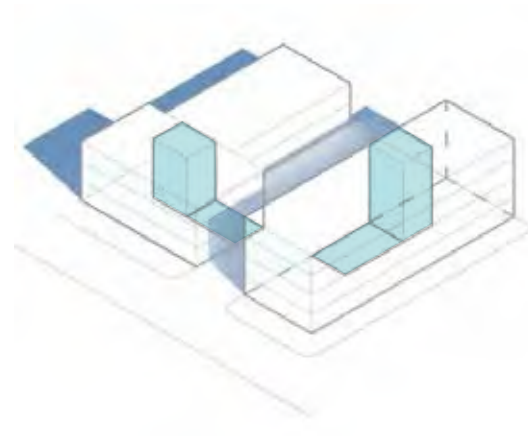
Wide range of accommodation types

Industrial areas are home to wide ranges of businesses that often can't meet the spatial requirements for their activity. Providing a wide range of accommodation types can help better respond to the demands as well as optimising the way space is used. Encourage stacking smaller activities above larger ones, to help respond to requirements.



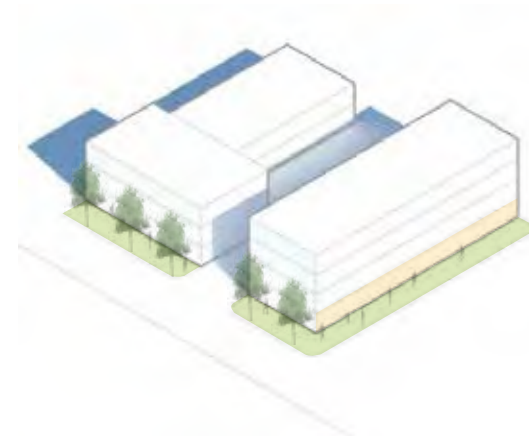
Separate access for different uses & users

Consolidate servicing areas to allow dedicated pedestrian and cycle access from the street. Providing multiple access points can radically improve accessibility and the desirability of an industrial estate.



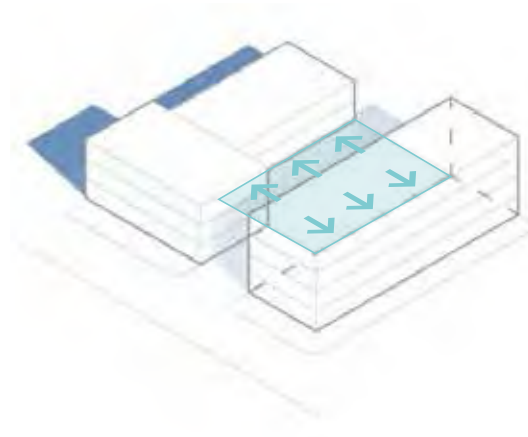
Shared spaces and other facilities

Sharing of facilities can create more efficient, intensive use of space. Facilities for loading, storage, goods lifts, gantry cranes, meeting space can be pooled and booked as required, allowing these facilities to be of a much higher quality and be more intensively used throughout the day.



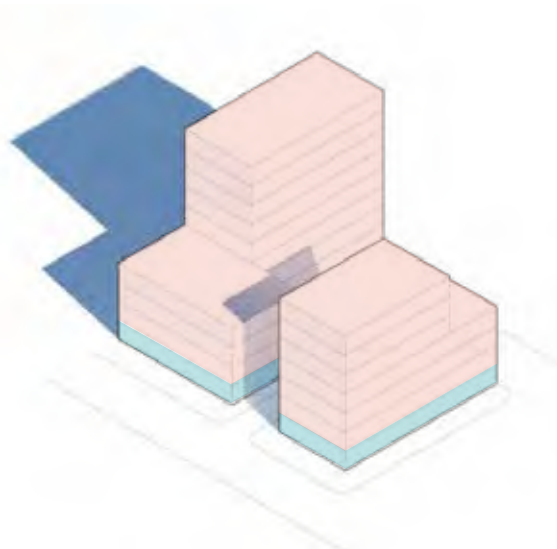
Provide positive frontages and support place-making

Attracting new occupiers will require strategies to improve the quality of the urban environment, such as improving the setting of existing heritage assets, creating positive street frontages and exploiting open spaces. This will also ensure a positive relationship with adjacent neighbours.



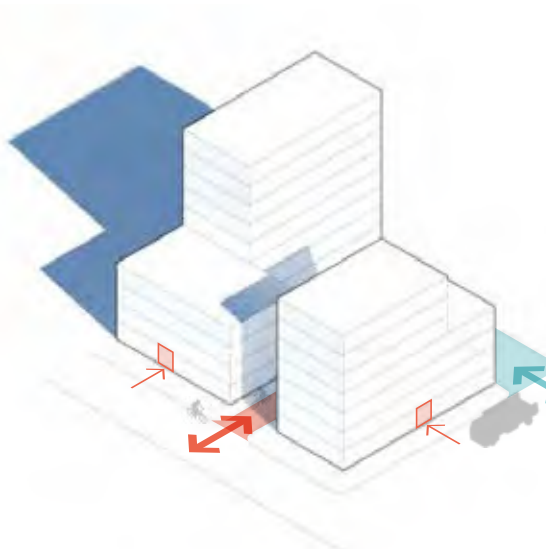
Provide service yards, catered to the types of occupiers

Incorporate sufficient space for HGVs to turn (where appropriate). Where occasional HGV access is required, consider shared parking.



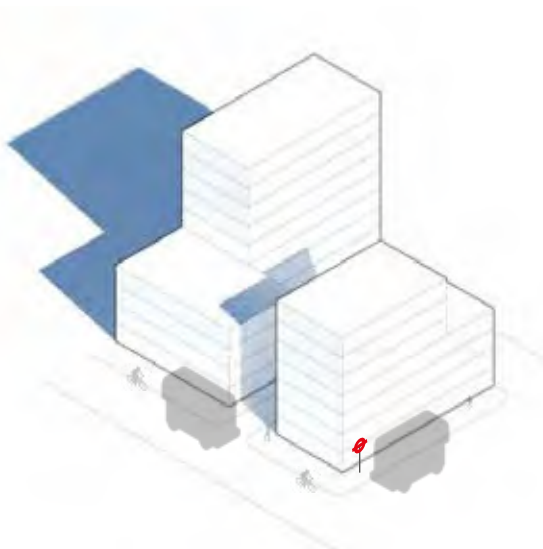
Different types of mix and co-location

There are different ways in which residential and industrial co-location can be achieved, including mix at neighbourhood level, at block level (horizontal mix) and at building level (vertical mix). Understanding the specific requirements for each location should help make the most of each different approach.



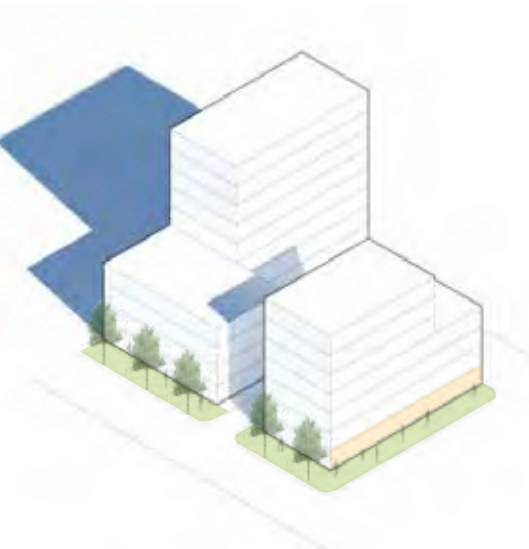
Separate access for different uses & users

Consolidate servicing areas and provide dedicated access to allow separate pedestrian and cycle access from the street. Locate residential entrances and units along the street edge to provide positive street frontage.



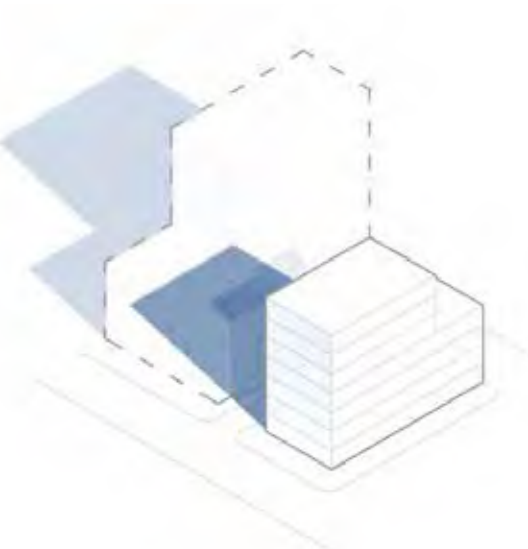
Public transport and active modes of mobility

Deliver legible cycle and pedestrian routes to public transport links such as railway stations and bus stops, ensuring a high level of pedestrian permeability across residential and industrial areas. Increasing density in areas with good transport accessibility is vital to attracting occupiers.



Positive frontages and support place-making

Provide strategies to improve the quality of the urban environment, such as improving the setting of existing heritage assets, creating positive street frontages and exploiting open spaces. This will also ensure a positive relationship with adjacent neighbours, as well as a better integration in an urban environment.



Phased developments to allow relocation

Redevelopment can be phased to ensure owner occupiers can stay operational and investors retain income through construction. Strong relocation strategies and incentives can ensure local businesses remain in the area.

2 Blackwall Trading Estate

2.4 Option testing

2.4.2 Summary of all tested options

Description of all tested options

Four different options have been tested. The first three, aimed at testing different approaches to residential and industrial co-location: comparing vertical, horizontal and hybrid co-location options. A final Option 4 was developed as the preferred option which had a hybrid approach to co-location.



Option 1
Horizontal split

- **Horizontal co-location:** Residential to the west, employment to the east, minimising nuisances and facilitating delivery
- **Separate vehicle access:** retaining industrial servicing as close as possible to the entrance point, minimising disruption
- **Mix of employment:** provision of a wide variety of space types, self-contained in a industrial-hotel type of building



Option 2
Hybrid co-location

- **Hybrid co-location:** Vertical co-location to the west and horizontal co-location to the east, providing mixture through different solutions
- **Two blocks:** all site developed in two phases
- **Higher degree of mixture and integration**



Option 3
Vertical co-location

- **Vertical co-location:** all residential blocks containing an element of employment on the ground levels and under podium
- **Employment only block** against motorway, buffering its nuisances from the new neighbourhood



Option 4
Preferred (hybrid)

- **Multiple types of co-location** in the neighbourhood
- **BTE:** Small and light-industrial workshops concentrated to the west, retaining current Blackwall Trading Estate's ecology of space types
- **Vertical co-location** to the core of the site
- **Employment only block** against motorway, buffering its nuisances from the neighbourhood

Blackwall Trading Estate
Option 1

2

Blackwall Trading Estate

2.5

Option 1

2.5.1

Plans

- Key Principles
1.

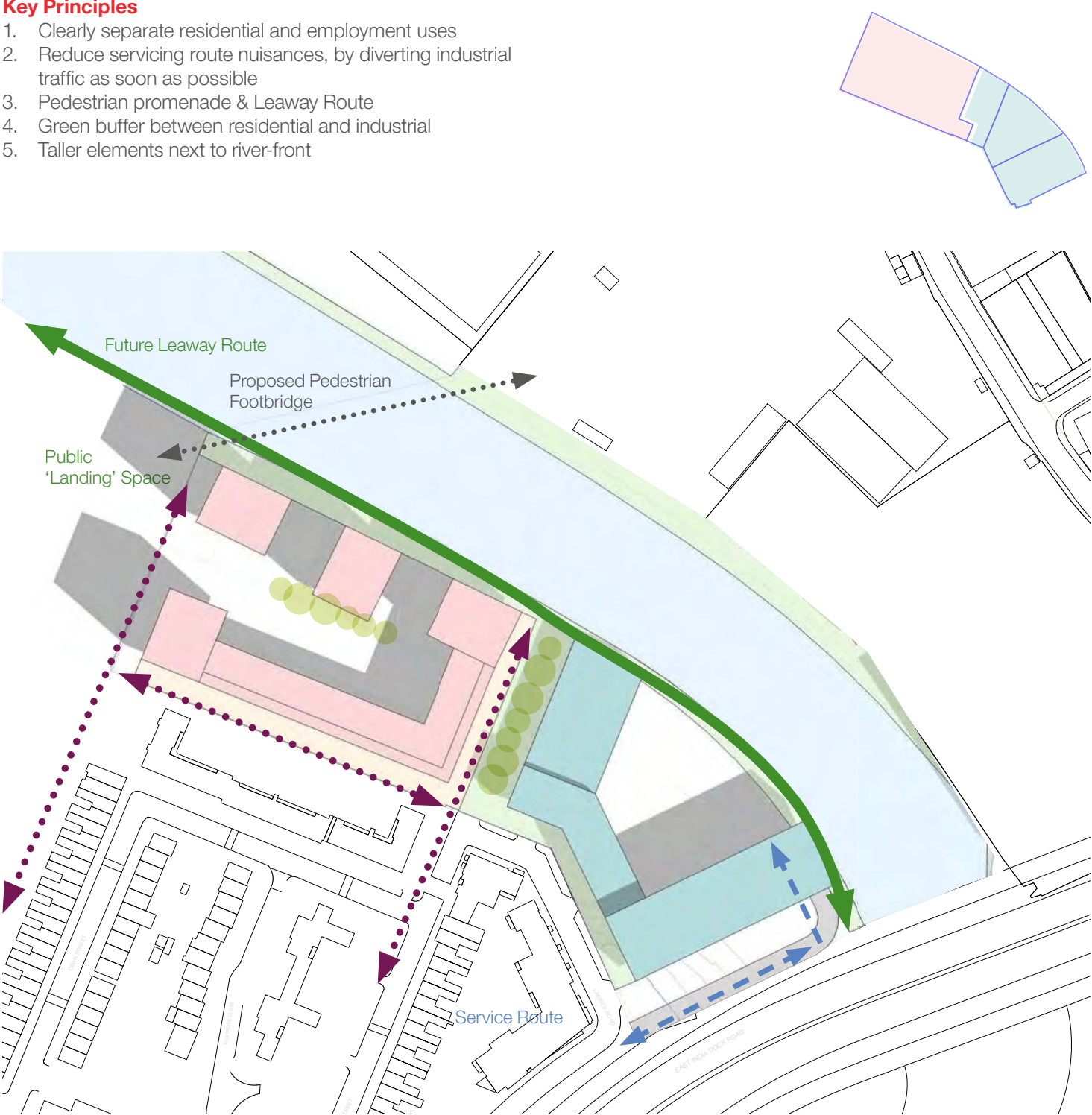
Clearly separate residential and employment uses
2.

Reduce servicing route nuisances, by diverting industrial traffic as soon as possible
3.

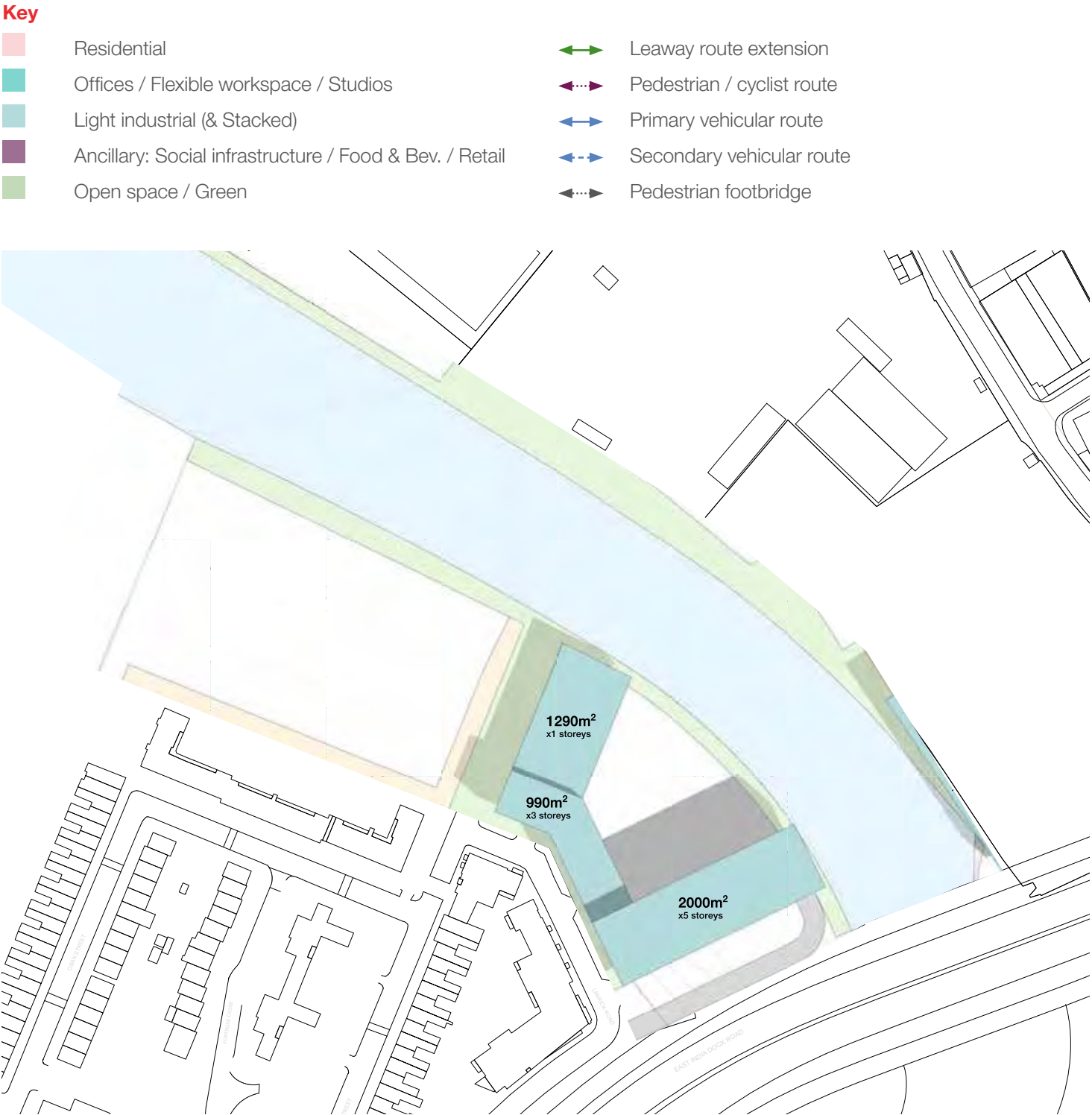
Pedestrian promenade & Leaway Route
4.

Green buffer between residential and industrial
5.

Taller elements next to river-front



Use distribution plan

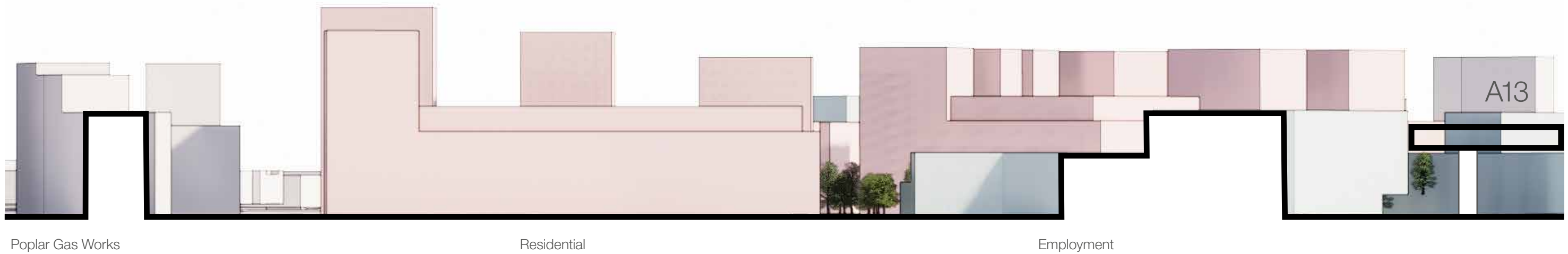


Employment ground floor plan

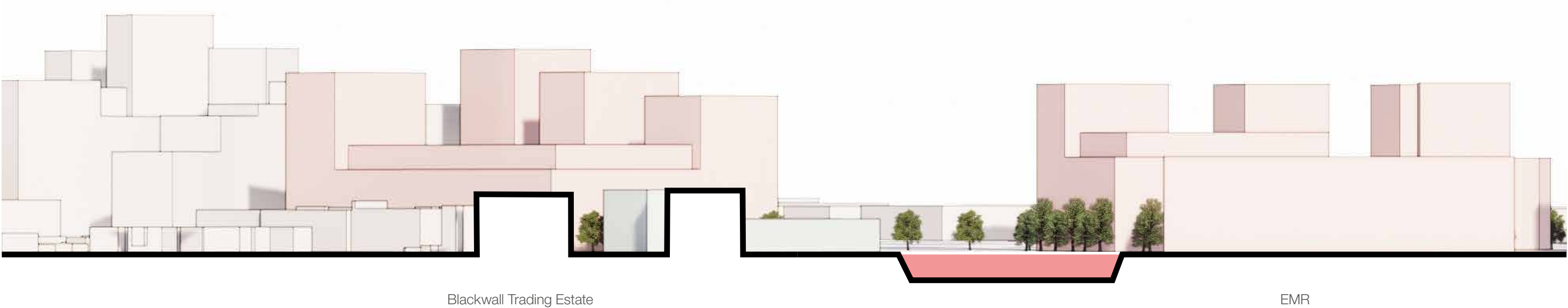
2 Blackwall Trading Estate
2.5 Option 1
2.5.2 Sections

Sections

Section A



Section B



2 **Blackwall Trading Estate**
2.5 Option 1
2.5.3 Massing and heights



2

Blackwall Trading Estate

2.5

Option 1

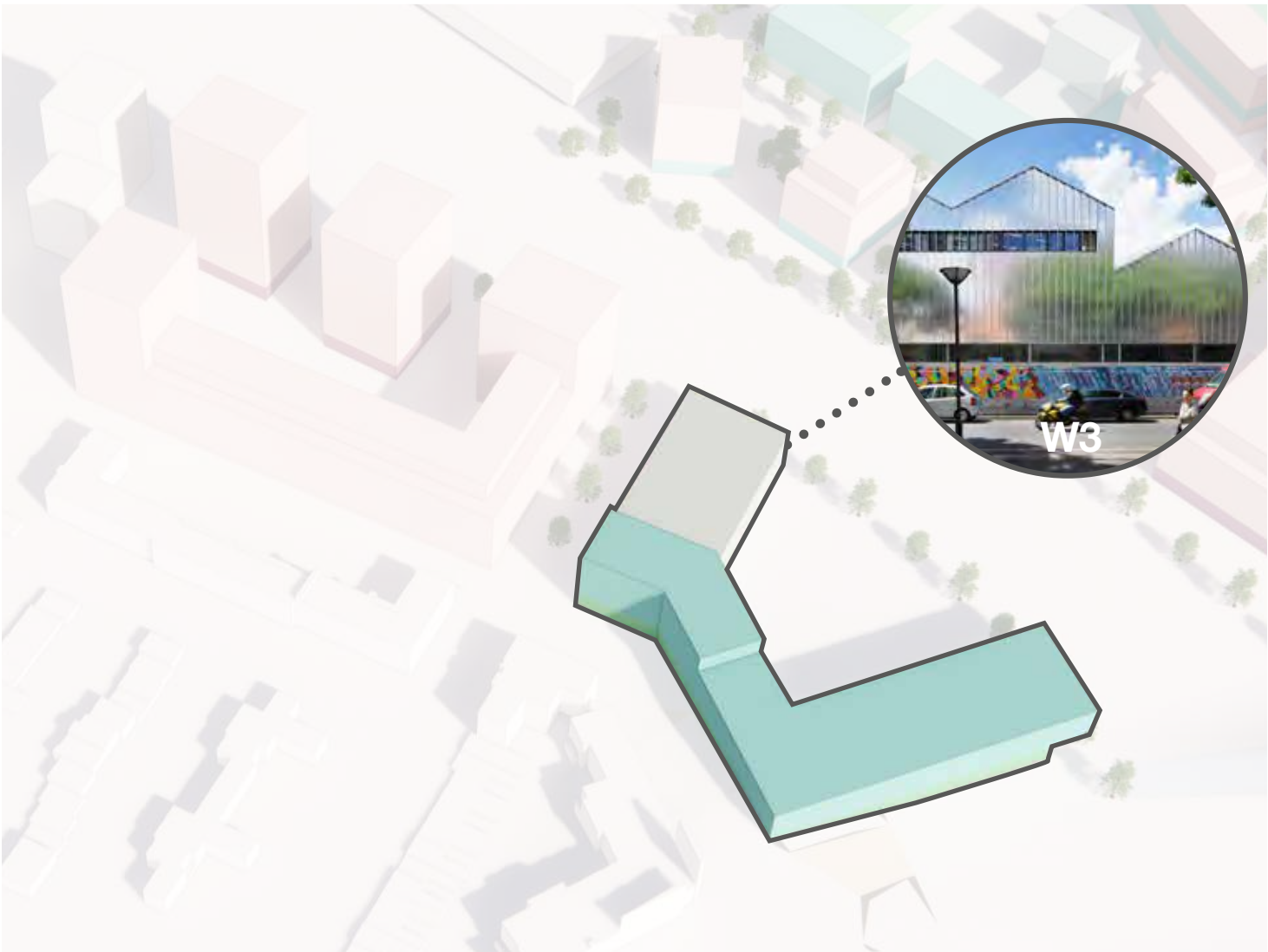
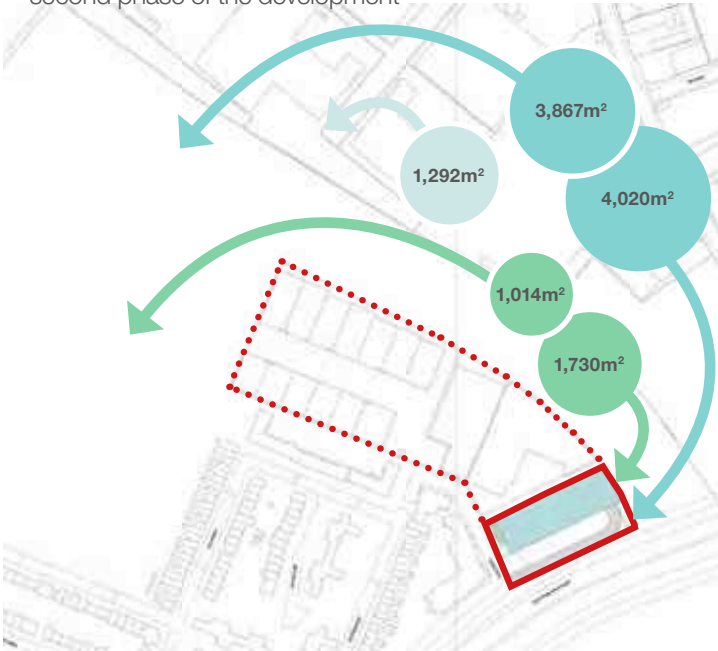
2.5.4

Accommodation schedule & Relevant precedents

Site				Non-Residential								Residential Mix Assumptions	Residential Unit Mix (NIA) PER FLOOR*						
Site	Site area	Existing Industrial			GEA		GIA		GEA		GIA*		NSA		50 m²	70 m²	85 m²		
	ha	m²	ft²	Use	Total Floorspace	ft²	GIA (90%)		m²	Total m²	Total ft²		85%	ft²	80%	ft²	Av. Size	30%	30%
					m²											70 m²	15 m²	21 m²	34 m²
Blackwall Trading Estate	2.27 ha	11,799 m²	127,003.26 ft²	Studio/Office	7,887 m²	84895 ft²				48,044 m²	517,141 ft²	40837 m²	439,570 ft²	32670 m²	351,656 ft²	467	0	0	0
				Light Industrial	1,292 m²	13907 ft²													
				Heavy Industrial/Logistics	2,744 m²	29536 ft²													
				Retained	0 m²	0 ft²													
				Retail/Community	1,188 m²	12788 ft²													
	2.27 ha	11,799 m²	127,003 ft²	13,111 m²	141125 ft²	48,044 m²	517,141 ft²	40,837 m²	439,570 ft²	32,670 m²	351,656 ft²	467	0	0	0				
				Employment	11,923 m²	128,338 ft²	Total B GIA (90%)		10,731 m²							88 m²			
			Retail/Community	1,188 m²	12788 ft²	Total Other GIA (90%)		1,069 m²						Avg GIA	942 ft²				


Relocation of current occupiers

- The proposed scheme would provide enough workspace (11,920m²) to relocate all uses (11,320m²) of the Blackwall Trading Estate.
- A 1st phase could be placed in a multi-storey block constructed on the East London Palettes site (requiring minimal demolition. This could provide at least 5,750 m² GEA (B1a, B1c, B8) with shared service yard, allowing to relocate at least 1/2 of current local businesses in the first phase.
- The remaining uses could be relocated in the area and/or in a second phase of the development



Blackwall Trading Estate

Option 1

 467 homes

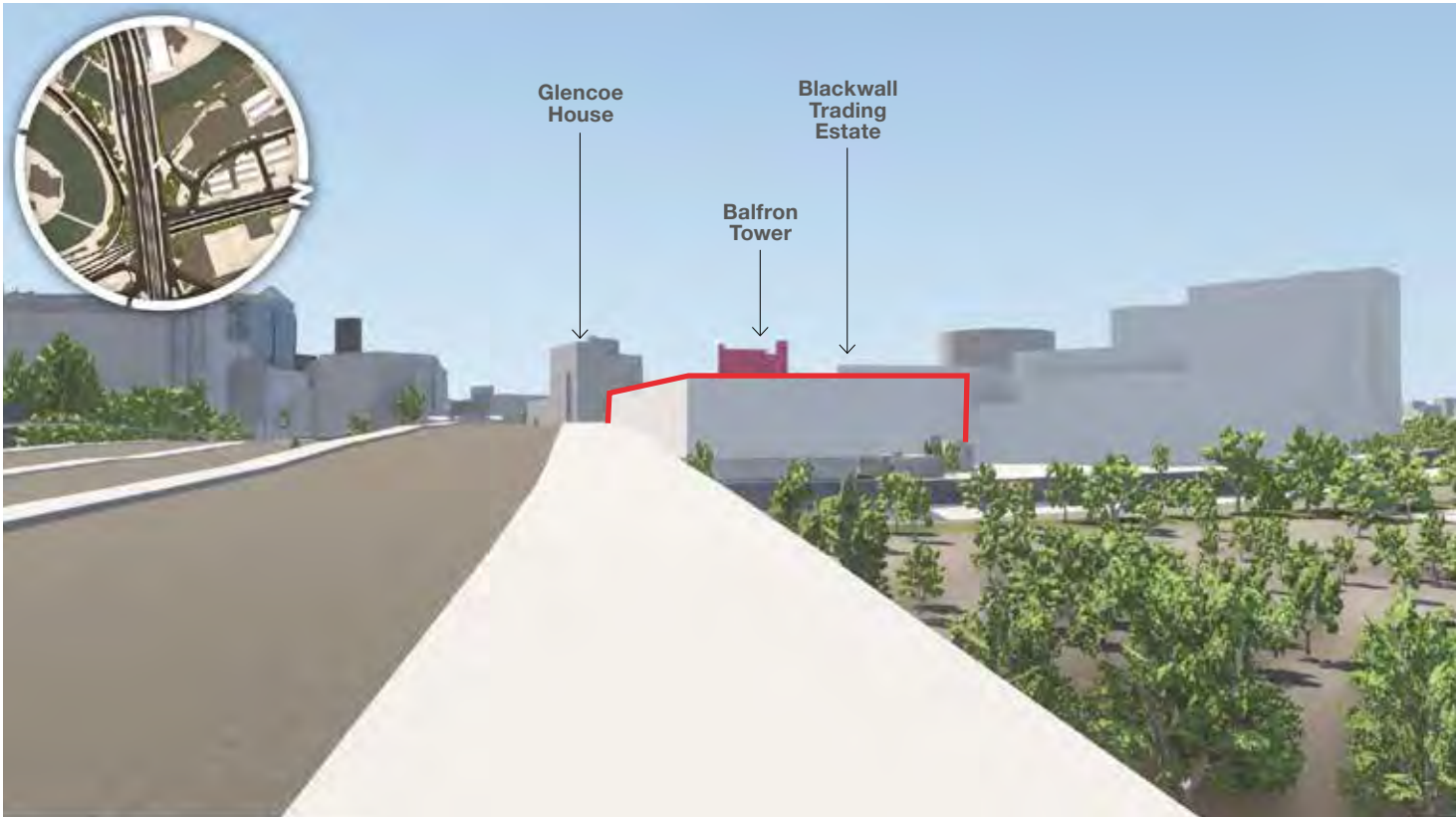
 11,920 m²

- Key conclusions
- This option allows to completely separate uses, therefore potentially de-risking development
 - However a horizontal split might not be policy compliant option, as the re-provision of floorspace tends to be required per-development. This would require all sites to be developed at once, removing the option to gradually develop the different sites.
 - The industrial provision is generous with large yard areas. The concentrating the built mass next to the A13 does help mitigate the impact of the road, but it obstructs the protected view to Balfron Tower from East India Dock Road bridge.

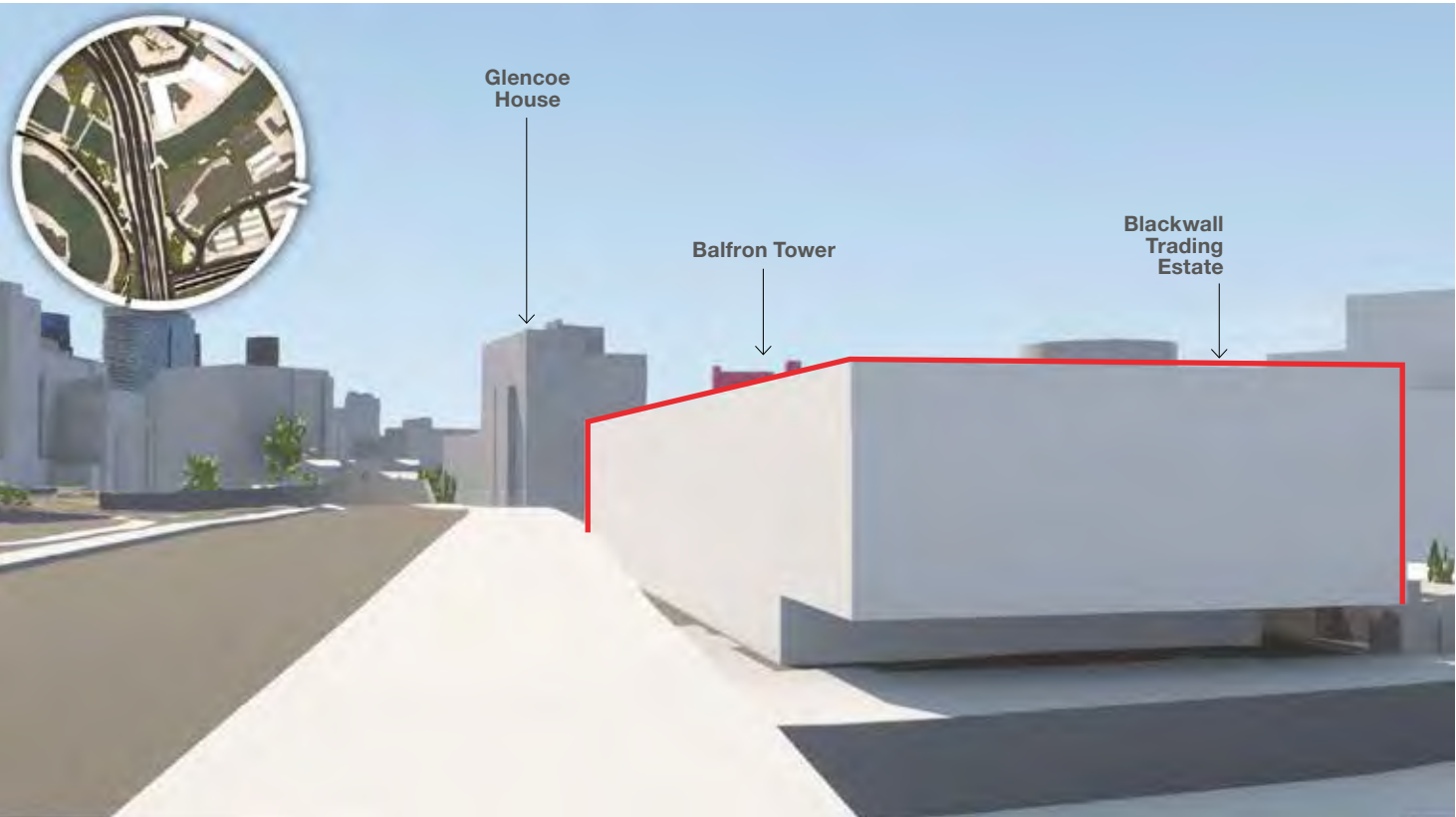
2 Blackwall Trading Estate

2.5 Option 1

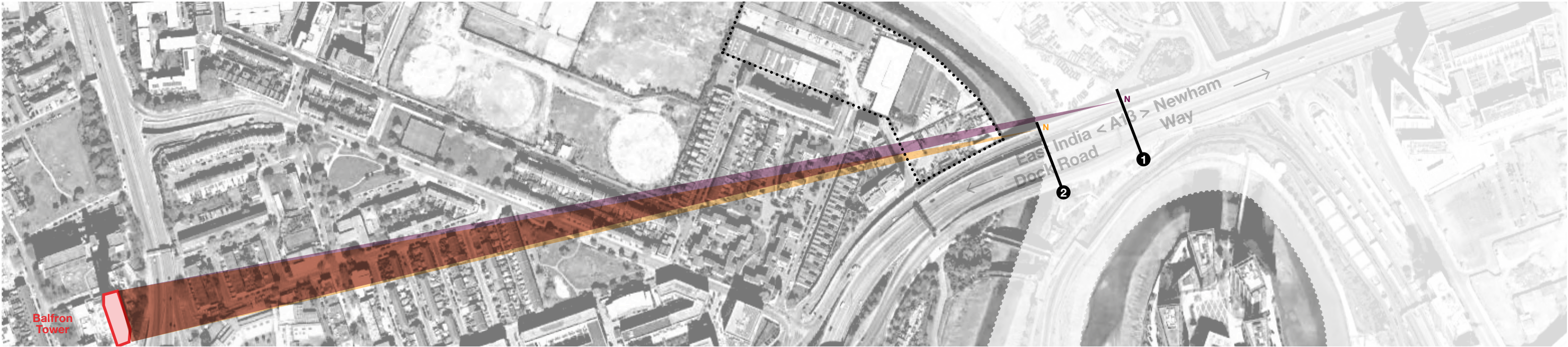
2.5.5 View to Balfon Tower



▲View 01 to Balfon Tower: including proposed Option 1
North side slip-road (Eastbound) / View point generated from VU City
View is partially covered by proposed building, therefore this option would require adjusting.



▲View 02 to Balfon Tower: including proposed Option 1
North side slip-road (Eastbound) / View point generated from VU City
View is partially covered by proposed building, therefore this option would require adjusting.



Blackwall Trading Estate
Option 2

2

Blackwall Trading Estate

2.6

Option 2

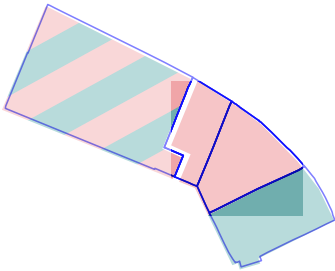
2.6.1

Plans

Key Principles

1. Hybrid co-location: different approach on each side of the site, vertical and horizontal
2. Western residential blocks built over podium decks, with Light Industrial and Studio workspaces below
3. Eastern block separates residential and employment development. Employment building acts as a buffer to the residential, placing its yard next to the A13.
4. Vehicle routes around site to servicing workspaces below podiums

5. Taller tower blocks and accents focused around the river and next to the A13,
6. Primary green space at centre and riverside promenade



Key

- Residential
- Offices / Flexible workspace / Studios
- Light industrial (& Stacked)
- Ancillary: Social infrastructure / Food & Bev. / Retail
- Open space / Green

- Leaway route extension
- Pedestrian / cyclist route
- Primary vehicular route
- Secondary vehicular route
- Pedestrian footbridge



Use distribution plan



Employment ground floor plan

2 Blackwall Trading Estate
2.6 Option 2
2.6.2 Sections

Sections

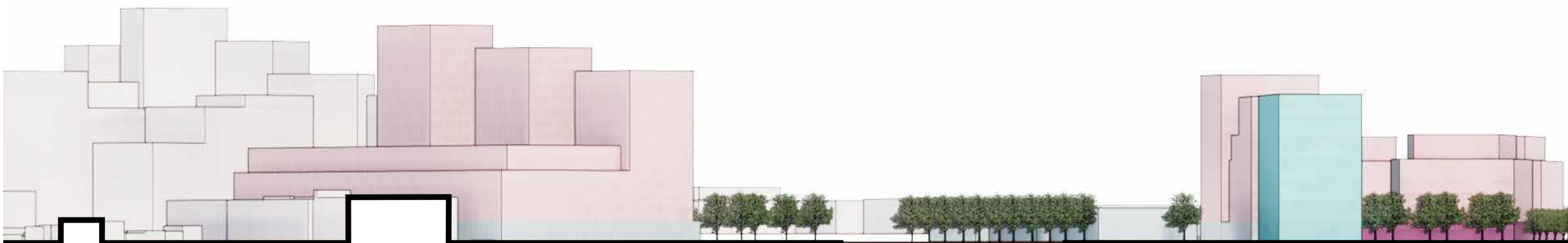
Section A



Poplar Gas Works

Employment under podium - Residential above

Section B



Blackwall Trading Estate

EMR

2 **Blackwall Trading Estate**
2.6 Option 2
2.6.3 Massing and heights



2

Blackwall Trading Estate

2.6

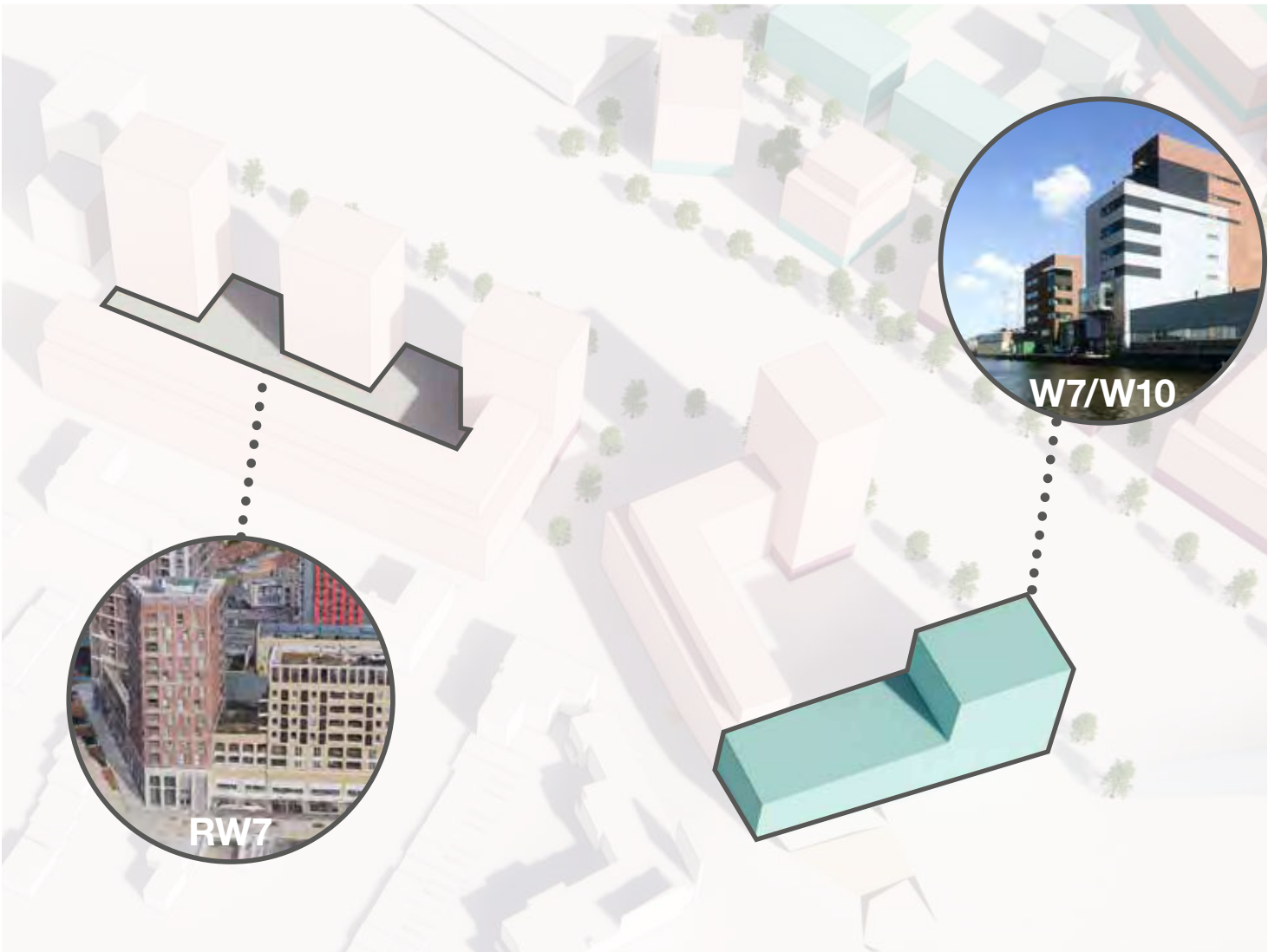
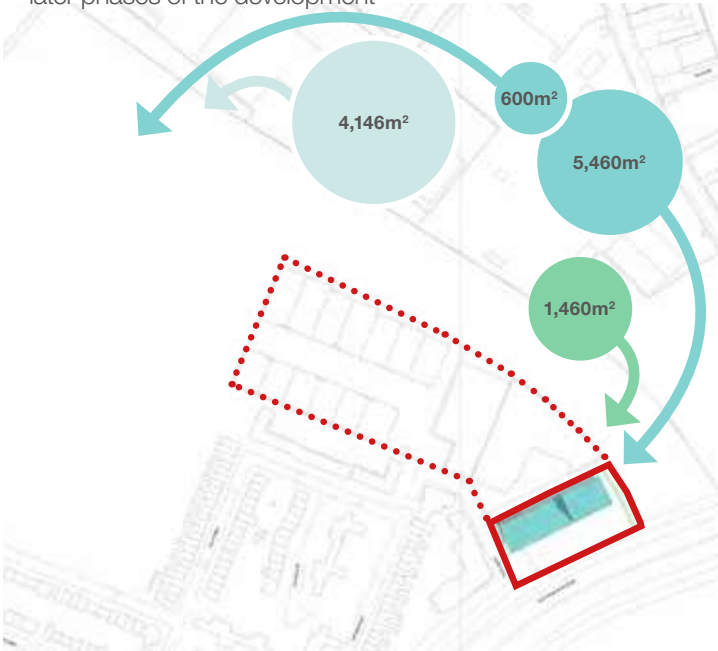
Option 2

2.6.4

Accommodation schedule & Relevant precedents

Site				Non-Residential										Residential Mix Assumptions	Residential Unit Mix (NIA) PER FLOOR*						
Site	Site area	Existing Industrial			GEA		GIA		GEA		GIA*		NSA		50 m²	70 m²	85 m²				
	ha	m²	ft²	Use	Total Floorspace	ft²	GIA (90%)		m²	Total m²	Total ft²	85%	ft²		80%	ft²	Av. Size	30%	30%	40%	
						m²												70 m²	15 m²	21 m²	34 m²
						m²															
Blackwall Trading Estate	2.27 ha	11,799 m²	127,003.26 ft²	Studio/Office	6,060 m²	65229 ft²			52,234 m²	562,242 ft²	44399 m²	477,905 ft²	35519 m²	382,324 ft²	507	0	0	0			
				Light Industrial	4,146 m²	44627 ft²															
				Heavy Industrial/Logistics	1,460 m²	15715 ft²															
				Retained	0 m²	0 ft²															
				Retail/Community	738 m²	7944 ft²															
	2.27 ha	11,799 m²	127,003 ft²		12,404 m²	133515 ft²	52,234 m²	562,242 ft²	44,399 m²	477,905 ft²	35,519 m²	382,324 ft²	507	0	0	0					
			Employment	11,666 m²	125,572 ft²	Total B GIA (90%)		10,499 m²							88 m²						
			Retail/Community	738 m²	7944 ft²	Total Other GIA (90%)		664 m²							Avg GIA	942 ft²					

- Relocation of current occupiers
- The proposed scheme would provide enough workspace (11,660m²) to relocate all uses (11,320m²) of the Blackwall Trading Estate.
 - A first phase could be placed in a multi-storey block constructed on the East London Palettes site (requiring minimal demolition. This could provide at least 6,920 m² GEA (B1a, B1c, B8) with shared service yard, allowing to relocate at least 2/3 of current local businesses.
 - The remaining uses could be relocated in the area and/or in later phases of the development



Blackwall Trading Estate

Option 2



507 homes



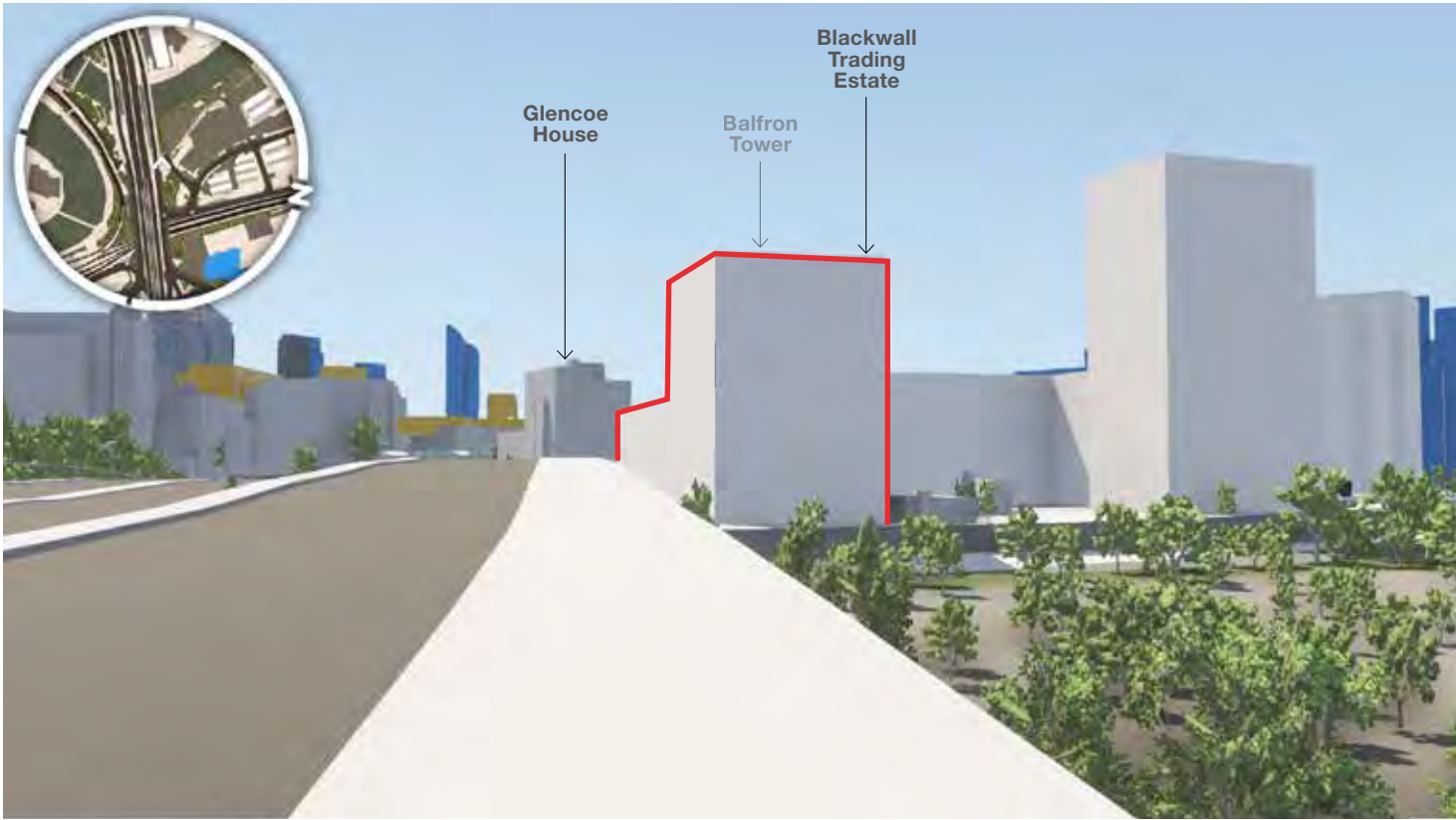
11,660 m²

- Key conclusions
- This option requires high industrial capacity to be concentrated at multi-storey building along the A13, in order to reduce industrial presence in other parts of the development
 - This obstructs the protected view to Balfon Tower from East India Dock Road bridge.

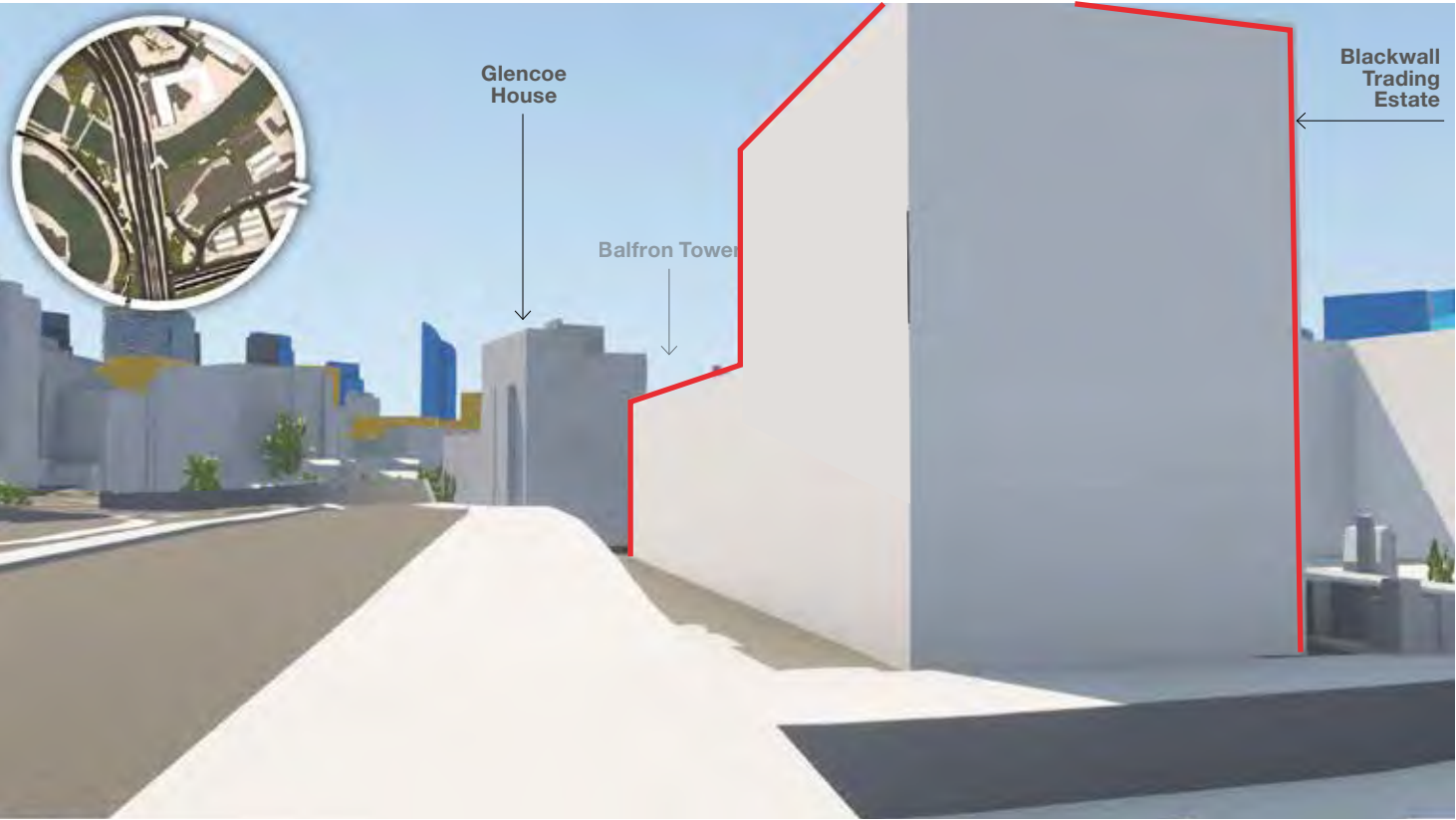
2 Blackwall Trading Estate

2.6 Option 2

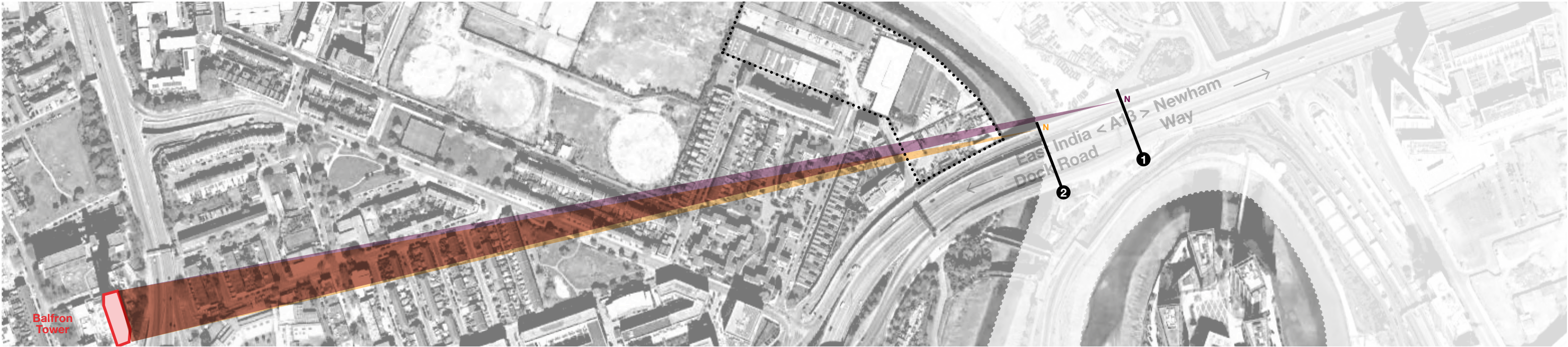
2.6.5 View to Balfon Tower



▲View 01 to Balfon Tower: including proposed Option 2
North side slip-road (Eastbound) / View point generated from VU City
View is completely covered by proposed building, therefore this option would require adjusting.



▲View 02 to Balfon Tower: including proposed Option 2
North side slip-road (Eastbound) / View point generated from VU City
View is completely covered by proposed building, therefore this option would require adjusting.



Blackwall Trading Estate
Option 3

2

Blackwall Trading Estate

2.7

Option 3

2.7.1

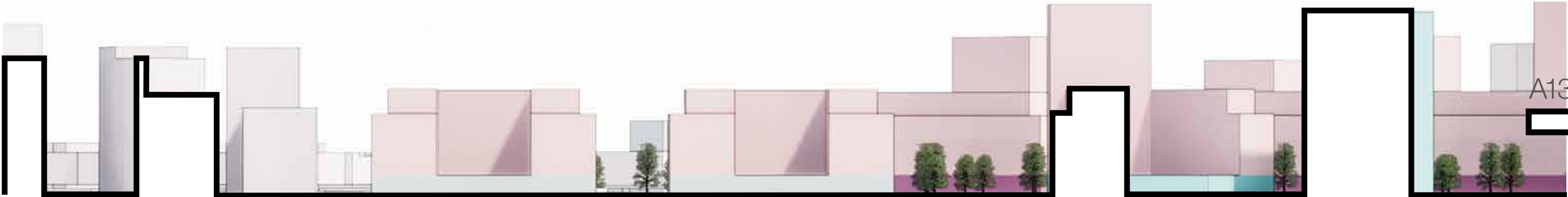
Plans



2 Blackwall Trading Estate
2.7 Option 3
2.7.2 Sections

Sections

Section A

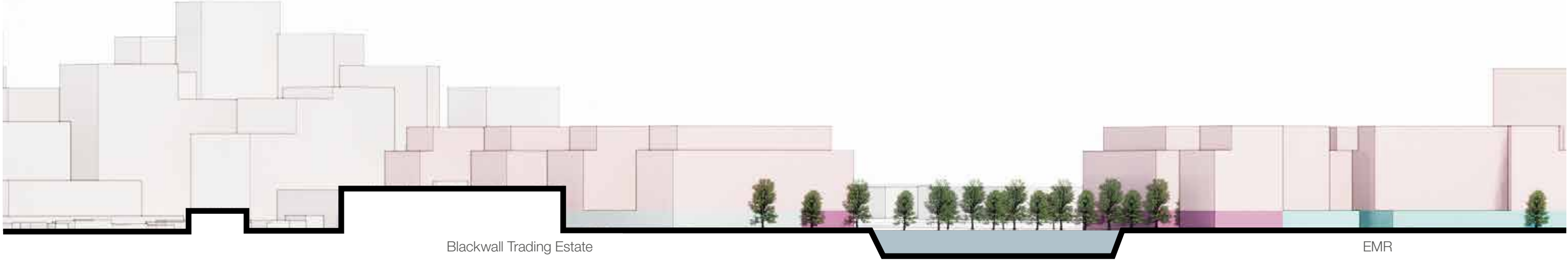


Poplar Gas Works

Employment under podium - Residential above

Employment block

Section B



2 **Blackwall Trading Estate**
2.7 Option 3
2.7.3 Massing and heights



Key

- Residential
- Offices / Flexible workspace / Studios
- Light industrial (& Stacked)
- Ancillary: Social infrastructure / Food & Bev. / Retail
- Open space / Green

2

Blackwall Trading Estate

2.7

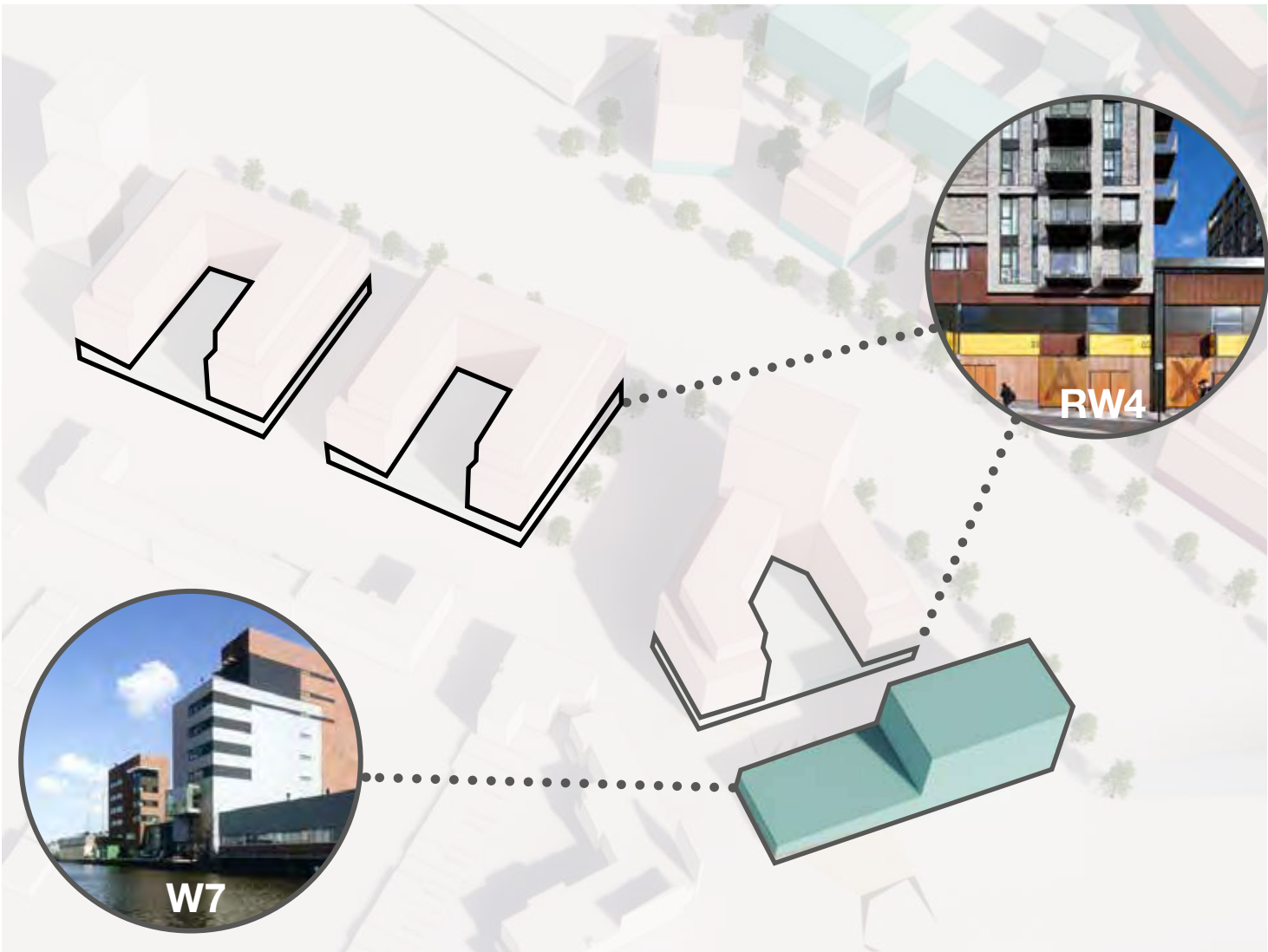
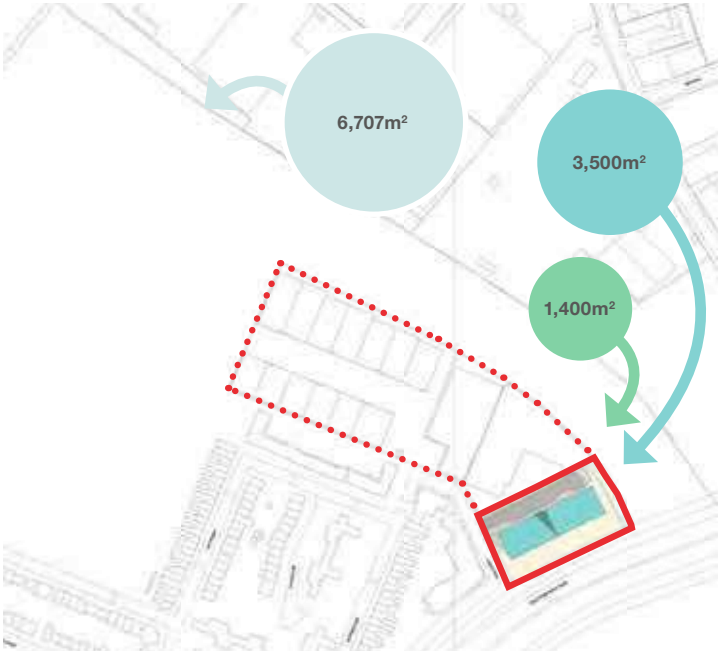
Option 3

2.7.4

Accommodation schedule & Relevant precedents

Site				Non-Residential										Residential Mix Assumptions	Residential Unit Mix (NIA) PER FLOOR*				
Site	Site area	Existing Industrial			GEA		GIA		GEA		GIA*		NSA		50 m²	70 m²	85 m²		
	ha	m²	ft²	Use	Total Floorspace	ft²	GIA (90%)		m²	Total m²	Total ft²	85%	ft²	80%	ft²	Av. Size	30%	30%	40%
					m²											70 m²	15 m²	21 m²	34 m²
Blackwall Trading Estate	2.27 ha	11,799 m²	127,003.26 ft²	Studio/Office	3,500 m²	37674 ft²				34,567 m²	372,076 ft²	29382 m²	316,264 ft²	23506 m²	253,011 ft²	336	0	0	0
				Light Industrial	6,707 m²	72193 ft²													
				Heavy Industrial/Logistics	1,400 m²	15069 ft²													
				Retained	0 m²	0 ft²													
				Retail/Community	1,296 m²	13950 ft²													
	2.27 ha	11,799 m²	127,003 ft²		12,903 m²	138887 ft²				34,567 m²	372,076 ft²	29,382 m²	316,264 ft²	23,506 m²	253,011 ft²	336	0	0	0
				Employment	11,607 m²	124,937 ft²	Total B GIA (90%)		10,446 m²							88 m²			
			Retail/Community	1,296 m²	13950 ft²	Total Other GIA (90%)		1,166 m²					Avg GIA		942 ft²				

- Relocation of current occupiers
- The scheme provides enough workspace (11,600m²) to relocate all uses (11,320m²) of the Blackwall Trading Estate.
 - A first phase could be placed in a multi-storey block constructed on the East London Palettes site (requiring minimal demolition. This could provide at least 4,900 m² GEA (B1a, B1c, B8) with shared service yard, allowing to relocate at least 1/3 of current local businesses.
 - The remaining uses could be relocated in the area and/or in later phases of the development



Blackwall Trading Estate

Option 3



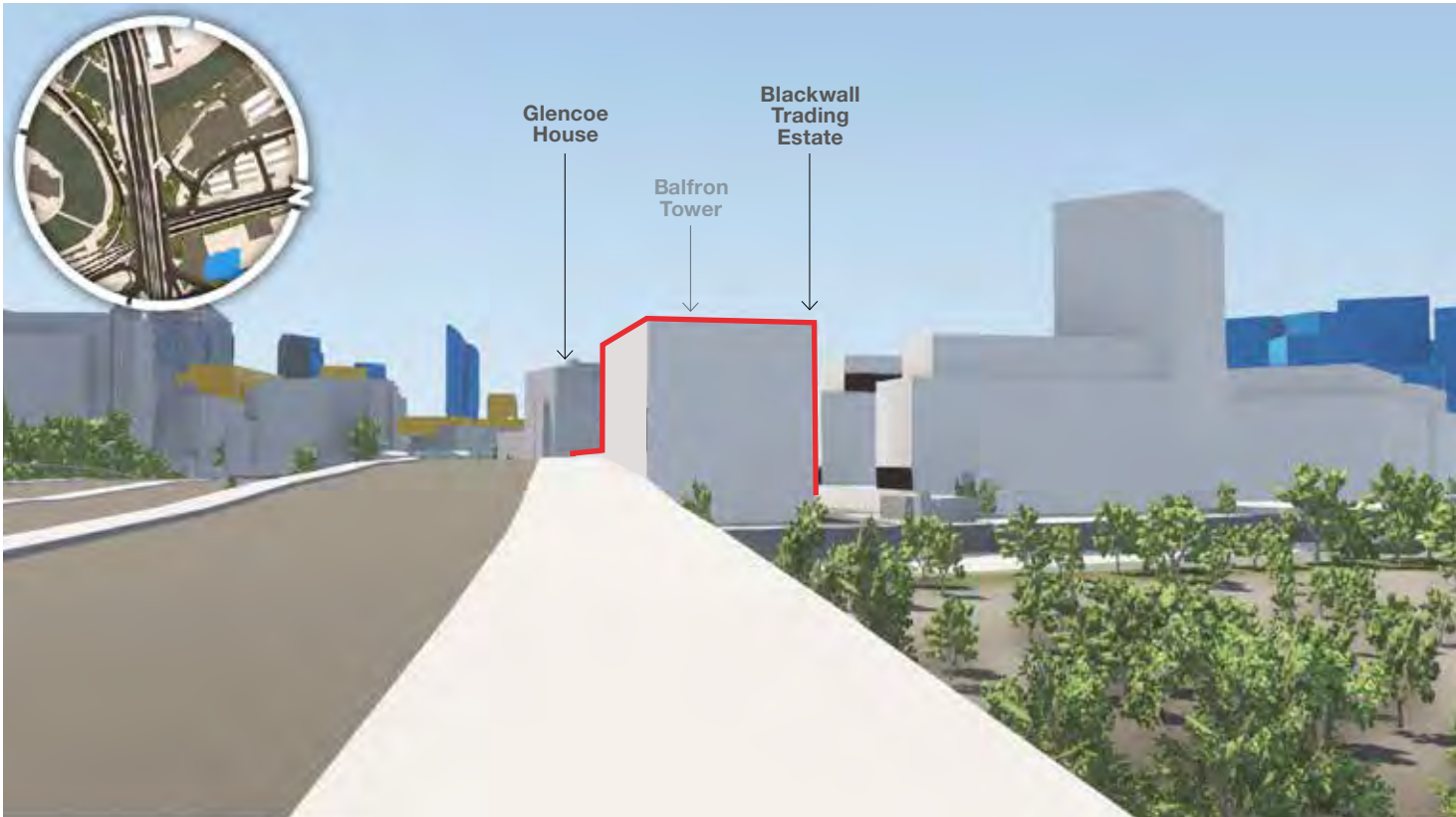
336 homes



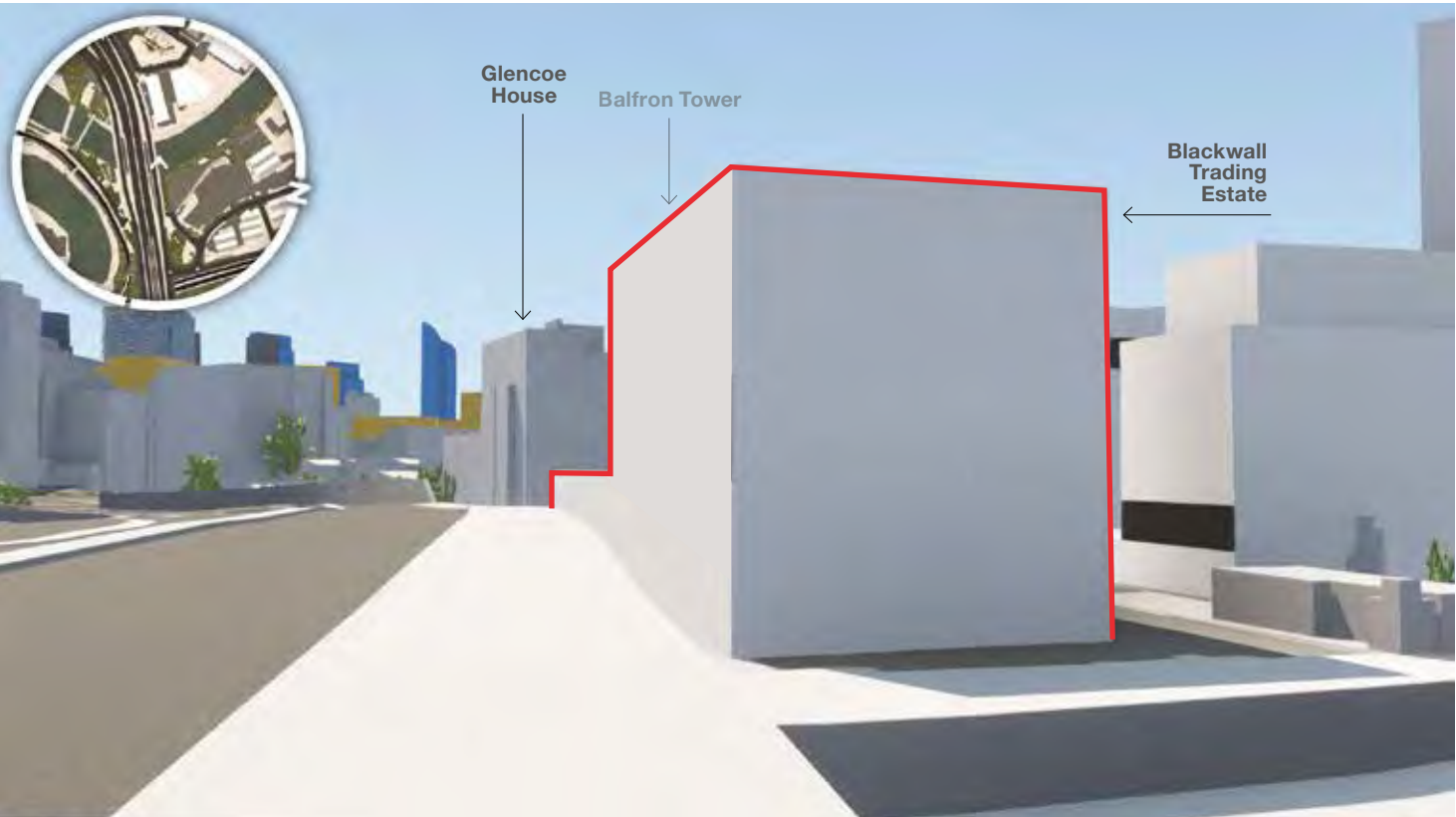
11,600 m²

- Key conclusions
- Whilst providing co-located blocks across the sites, this option requires higher industrial capacity to be concentrated at multi-storey building along the A13, in order to reduce industrial presence in other parts of the development
 - This obstructs the protected view to Balforn Tower from East India Dock Road bridge.

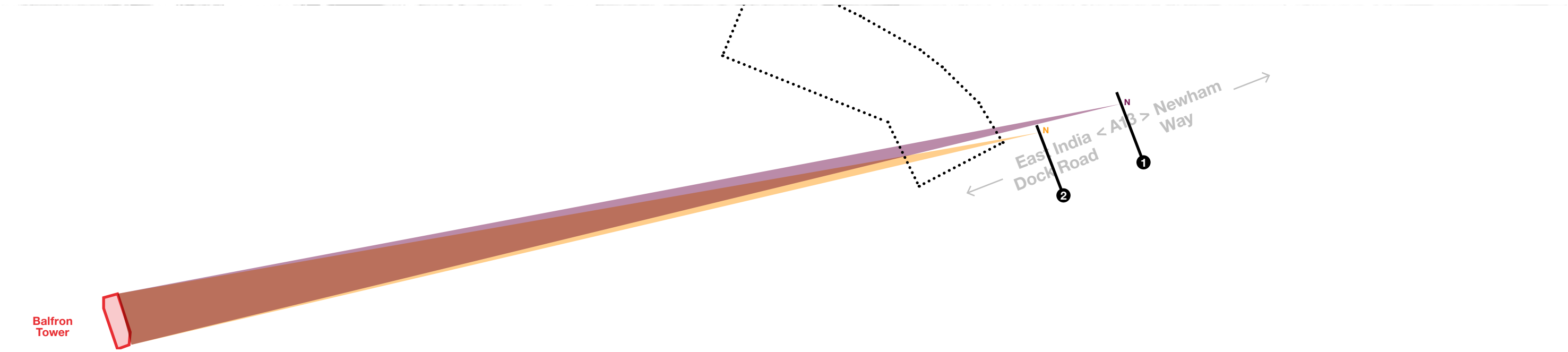
2 **Blackwall Trading Estate**
2.7 Option 3
2.7.5 View to Balfron Tower



▲View 01 to Balfron Tower: including proposed Option 3
North side slip-road (Eastbound) / View point generated from VU City
View is completely covered by proposed building, therefore this option would require adjusting.



▲View 02 to Balfron Tower: including proposed Option 3
North side slip-road (Eastbound) / View point generated from VU City
View is completely covered by proposed building, therefore this option would require adjusting.



Blackwall Trading Estate

Option 4

Preferred option

2

Blackwall Trading Estate

2.8

Option 4 (preferred option)

2.8.1

Plans

Key Principles

1.

Mixture of vertically co-located podium blocks and horizontally split programme areas
2.

Development mostly contained by individual ownership boundaries, accommodating potential variations in leasehold time-scales
3.

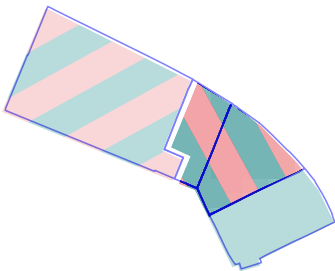
Primary pedestrian route along waterfront, aligning with forthcoming Leaway Route extension
4.

Green spaces forming linear park terminating the 'promenade' at A13
5.

Retail/community spaces located at the central open space and along the western edge of the site
6.

Multiple industrial servicing options for light and small business spaces
7.

Taller tower blocks focused around the river and next to the A13, buffering road

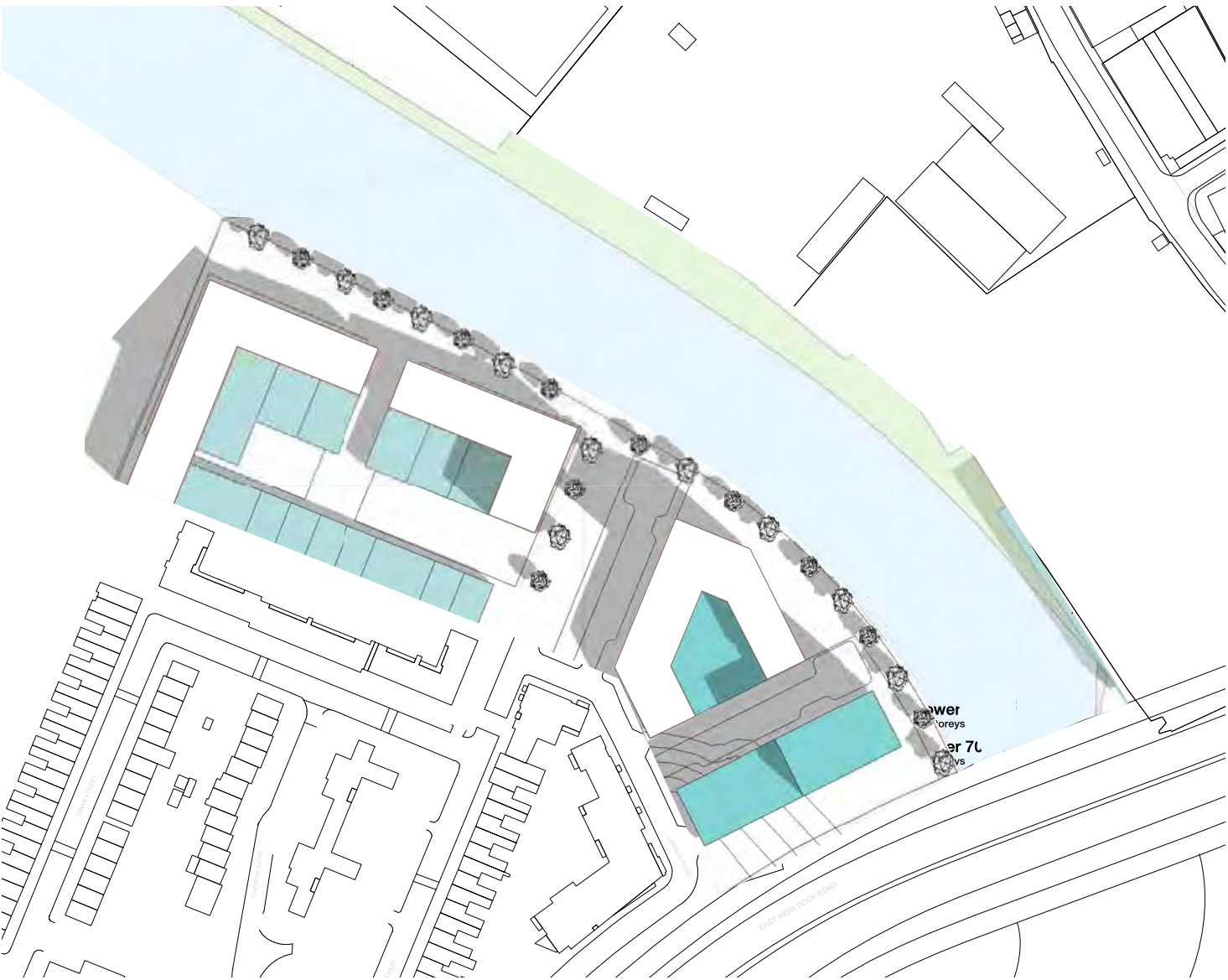


Key

- Residential
- Offices / Flexible workspace / Studios
- Light industrial (& Stacked)
- Ancillary: Social infrastructure / Food & Bev. / Retail
- Open space / Green
- Leaway route extension
- Pedestrian / cyclist route
- Primary vehicular route
- Secondary vehicular route
- Pedestrian footbridge



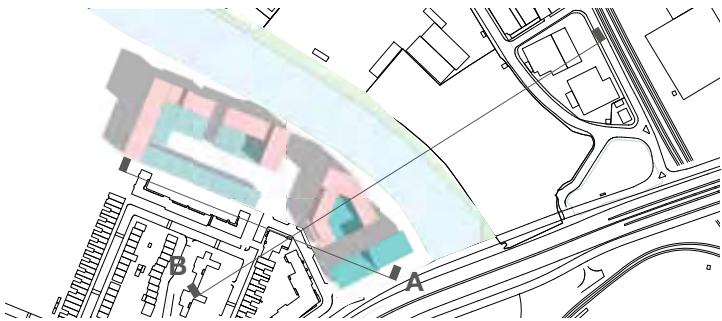
Use distribution plan



Employment ground floor plan

2 **Blackwall Trading Estate**
2.8 Option 4 (preferred option)
2.8.2 Sections

Sections



Section A



Poplar Gas Works site

Workspace under podium - Residential above

Workspace block

A13

Section B



Blackwall Trading Estate

EMR

2 **Blackwall Trading Estate**
2.8 Option 4 (preferred option)
2.8.3 Massing and heights



2

Blackwall Trading Estate

2.8

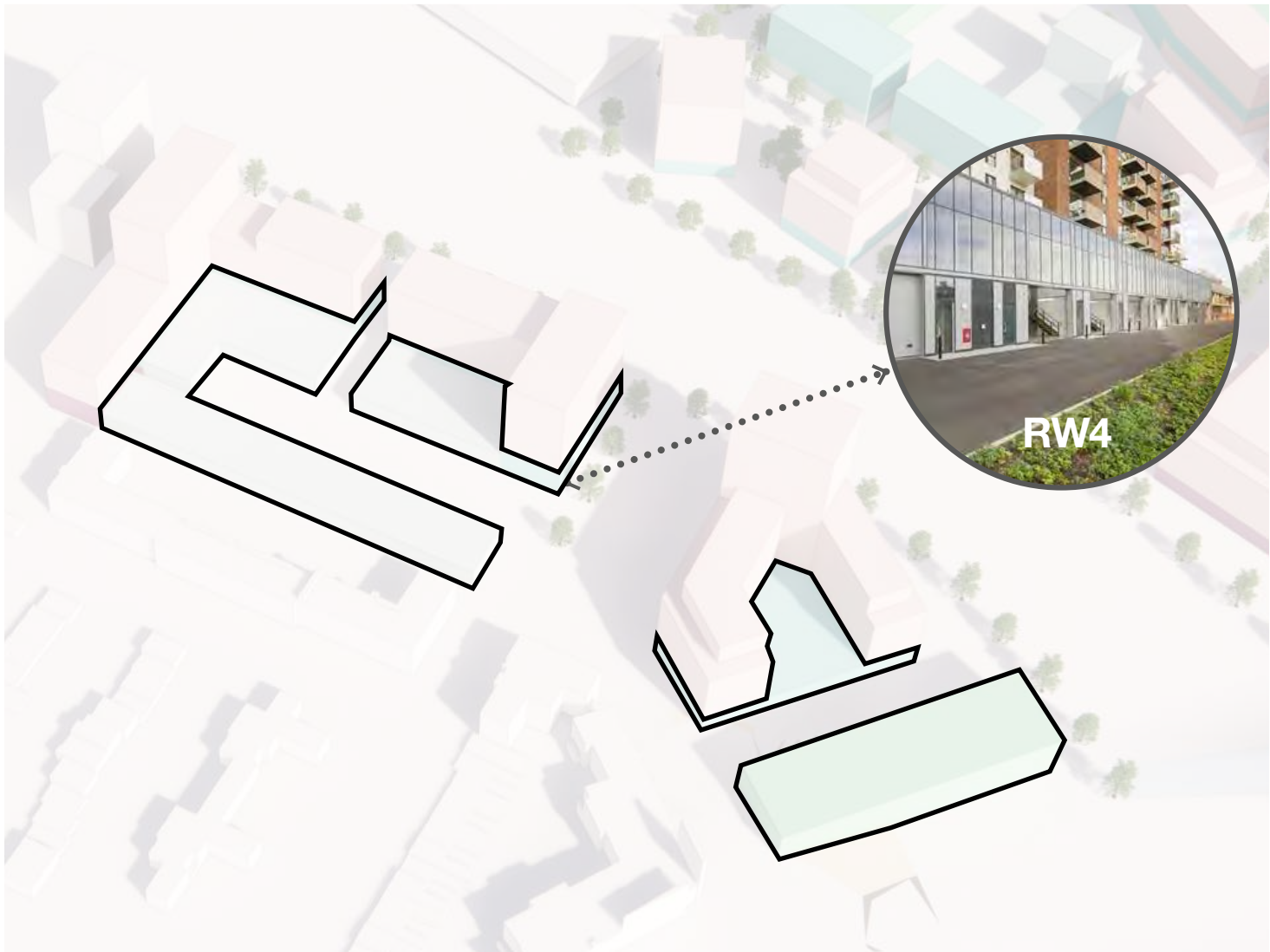
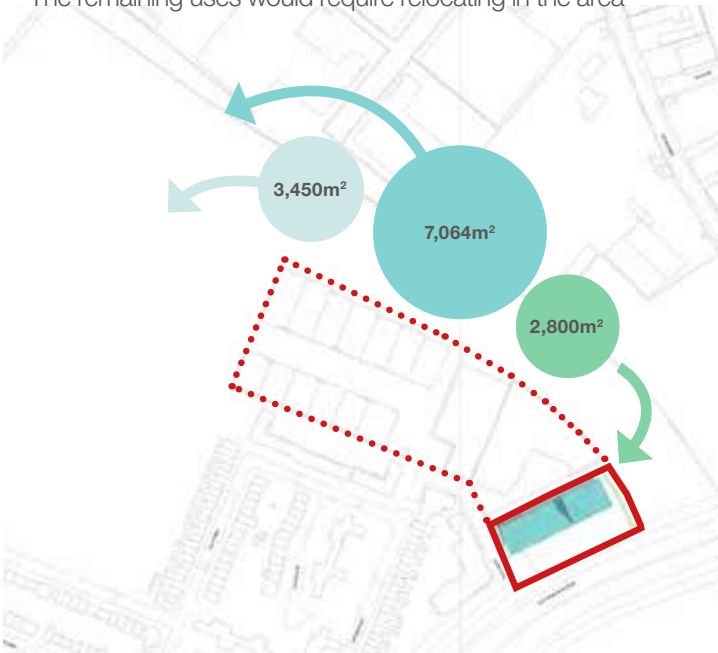
Option 4 (preferred option)

2.8.4

Accommodation schedule & Relevant precedents


Site				Non-Residential										Residential Mix Assumptions	Residential Unit Mix (NIA) PER FLOOR*				
Site	Site area	Existing Industrial			GEA		GIA		GEA		GIA*		NSA		50 m²	70 m²	85 m²		
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					m²												70 m²	15 m²	21 m²
Blackwall Trading Estate				Studio/Office	7,064 m²	76036 ft²			34,567 m²	372,076 ft²	29382 m²	316,264 ft²	23506 m²	253,011 ft²	336	0	0	0	
				Light Industrial	3,450 m²	37135 ft²													
				Heavy Industrial/Logistics	2,800 m²	30139 ft²													
				Retained	0 m²	0 ft²													
				Retail/Community	1,296 m²	13950 ft²													
				2.27 ha	11,799 m²	127,003.26 ft²	14,610 m²	157261 ft²	34,567 m²	372,076 ft²	29,382 m²	316,264 ft²	23,506 m²	253,011 ft²	336	0	0	0	
								Employment	13,314 m²	143,311 ft²	Total B GIA (90%)		11,983 m²				88 m²		
				Retail/Community	1,296 m²	13950 ft²	Total Other GIA (90%)		1,166 m²				Avg GIA	942 ft²					


- Relocation of current occupiers
- The proposed scheme would provide enough workspace (13,250m²) to relocate all uses (11,320m²) of the Blackwall Trading Estate.
 - Phase 1 could provide at least 2,800 m² GEA of floor area (B1c, B8) with shared service yard, in a two-storey block constructed on the East London Palettes site and therefore requiring minimal demolition.
 - Units in the southern block of the Trading Estate could in principle remain in place while works are happening on site.
 - The remaining uses would require relocating in the area



Blackwall Trading Estate

Option 4

336 homes

13,250 m²

- Key conclusions
- This option provides highest industrial capacity and while retaining an industrial ecology that is most similar to the existing.
 - This allows to have less industrial density at the southern edge, also avoiding to obstruct views to Balfron Tower.
 - Explores opportunity to retain some of the industrial terraces while doing residential works on site.
 - Provides a balanced co-located development
 - Clearly separates industrial servicing areas from residential and pedestrian streets.

2 Blackwall Trading Estate

2.8 Option 4 (preferred option)

2.8.5 Illustration



2 Blackwall Trading Estate

2.8 Option 4 (preferred option)

2.8.6 View analysis: Massing in context



2 Blackwall Trading Estate

2.8 Option 4 (preferred option)

2.8.6 View analysis: Massing in context

► 01/West to East:
Above Canning Town.
Including sites under construction (blue) and consented (yellow) sites.



► 03/West to East:
Above Aberfeldy Village and Poplar.
Including sites under construction (blue) and consented (yellow) sites.



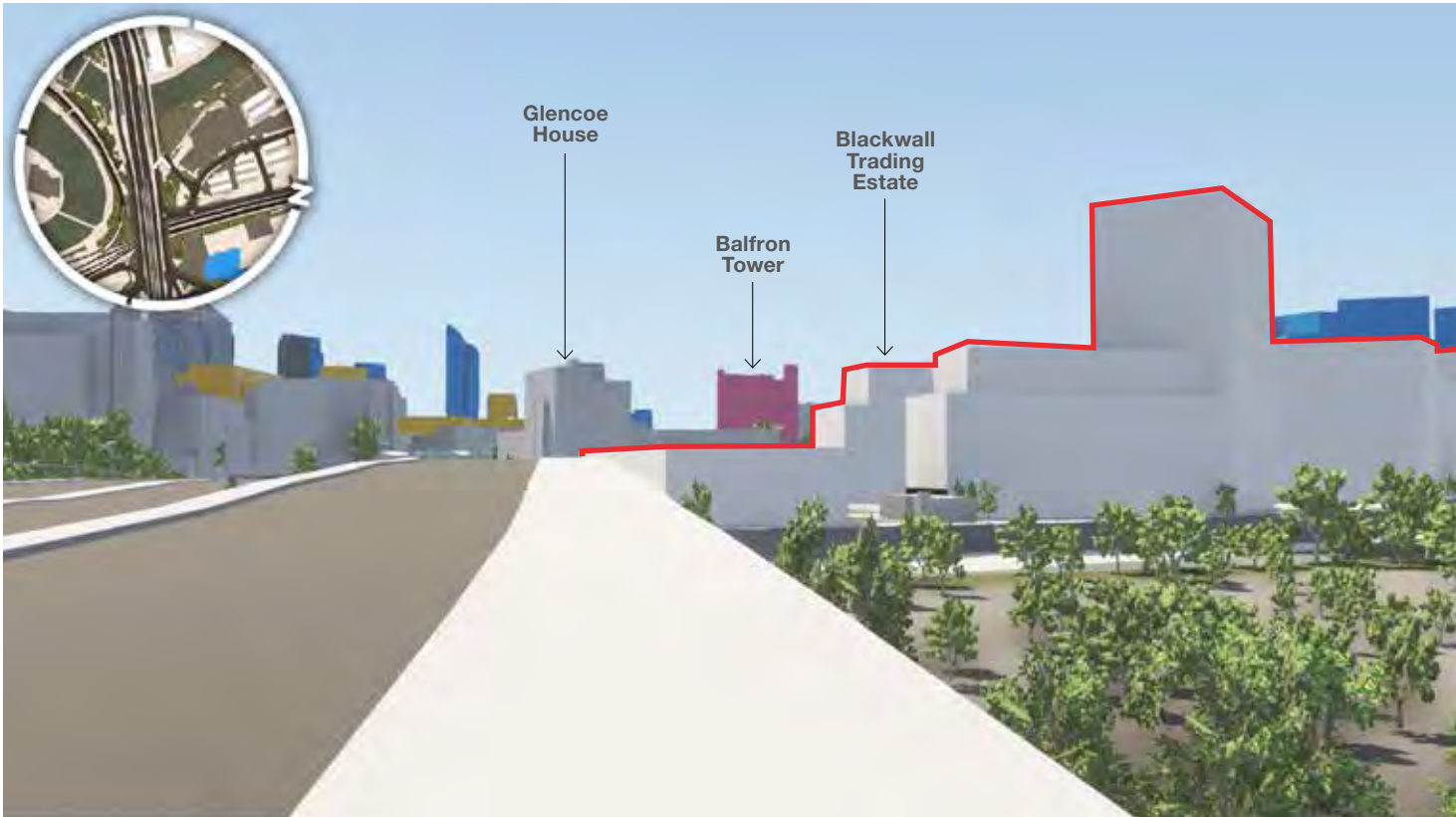
► 02/South to North:
Above Leamouth and East India Dock basin.
Including sites under construction (blue) and consented (yellow) sites.



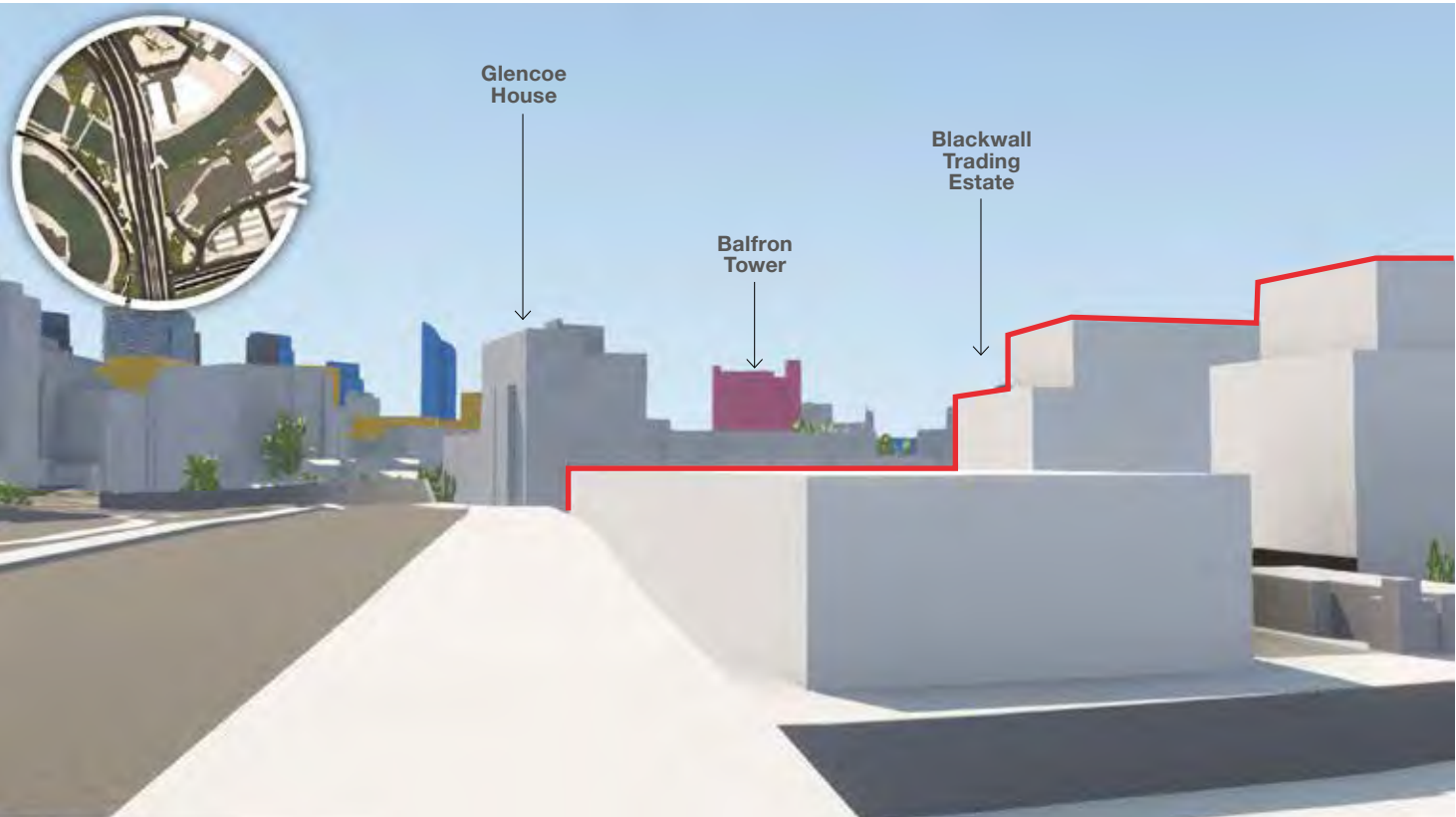
► 04/North to South:
Above Canning Town Industrial Estate.
Including sites under construction (blue) and consented (yellow) sites.



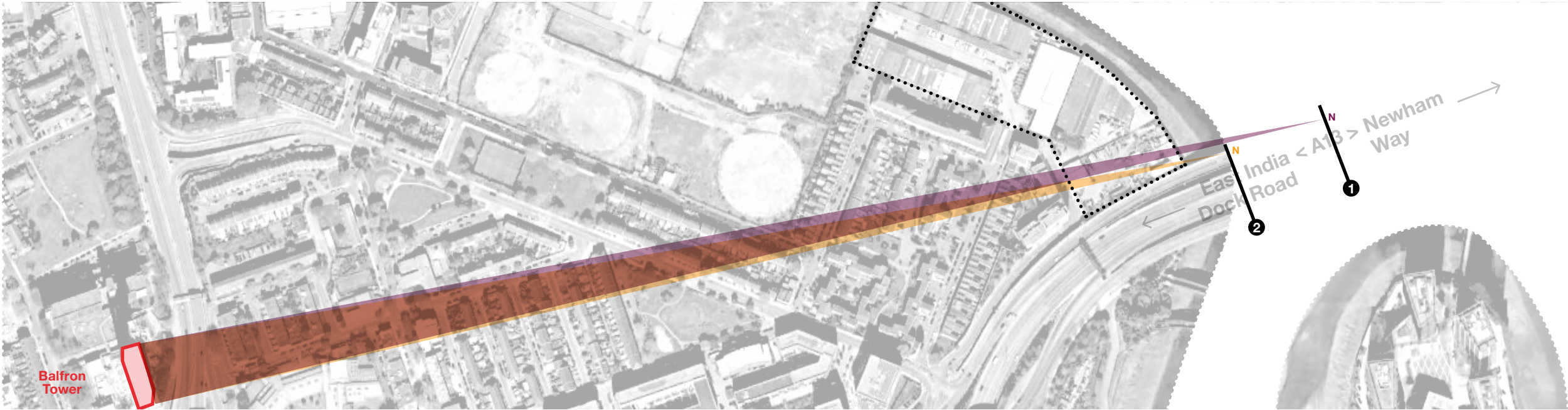
2 **Blackwall Trading Estate**
2.8 Option 4 (preferred option)
2.8.6 View analysis: Massing in context



▲View 01 to Balfro Tower: including proposed Option 4
North side slip-road (Eastbound) / View point generated from VU City
View allows complete and unobstructed vision of the Balfro Tower.



▲View 02 to Balfro Tower: including proposed Option 4
North side slip-road (Eastbound) / View point generated from VU City
View allows complete and unobstructed vision of the Balfro Tower.



Blackwall Trading Estate
Relevant precedents

2 Blackwall Trading Estate
2.9 Relevant precedents
2.9.1 Industrial Intensification

W1
Small units



Poplar Works
LB Tower Hamlets, London



W2
Small terraced units



Wildspace Warehouse
Rainham, London



2 **Blackwall Trading Estate**
2.9 Relevant precedents
2.9.1 Industrial Intensification

W3
Logistics - Medium



Chartier Dalix Tafanel, Entrepot
Paris, FR



W4
Logistics - Large



Frankfurt Cargo Center
Frankfurt, DE



2 **Blackwall Trading Estate**
2.9 Relevant precedents
2.9.1 Industrial Intensification

W5
Intensification / Flexible Studios



Tariff Street Studios
Manchester

Flexible studio types can be an efficient way of increasing density, providing appropriate space for the multiple service related businesses and B1 use classes. Its scale and character can allow urban integration with town-centre uses including residential.



W6
Intensification / Industrial Hôtel



Industrial Hôtel - Satigny
(Satigny, Geneva)

Industrial-Hôtels are a typology of stacked-light-industrial workspaces, common in France and Switzerland. This specific Swiss example includes double-height light-industrial units at ground level with enough loading and servicing areas at the rear of the building; basement car parking; and four stories of workspaces for B1 use types, spanning workspace for uses that may have additional spatial requirements above and beyond those of office-types.



2 Blackwall Trading Estate

2.9 Relevant precedents

2.9.1 Industrial Intensification

W7

Intensification / Stacked multi-space



Kaap Nord
Amsterdam

Scheme providing a range of light-industrial units and flexible workspaces in Amsterdam. A central courtyard organises the loading and access in the ground floor, with free parking areas, additional roof-parking and shared servicing.



W8

Intensification / Hybrid



Beiza Building
(Igara, Donostia-San Sebastian)

Mixed use development including: active retail frontages facing the main street with shops, showrooms and food&beverage offer; 3 floors of offices and flexible workspaces above; light industrial uses are accessed from the courtyard at the rear and a ramp providing access to small light-industrial units at the 2nd floor of the building behind.



2 **Blackwall Trading Estate**
2.9 Relevant precedents
2.9.1 Industrial Intensification

W9
Intensification / Stacked



Belartza
Belartza, Donostia-San Sebastian

Industrial-Hôtel typology comprising multiple workspace types, including commercial spaces, showrooms and small units at ground floor, and medium sized terraced units around the central yard in two levels, with ramps providing access to white vans.



2 Blackwall Trading Estate
2.9 Relevant precedents
2.9.1 Industrial Intensification

W10
Intensification / Stacked studios & labs



NW corner building, Columbia University
NYC, USA



W11
Intensification / Offices



Barnet Council Offices
LB Barnet, London



2 **Blackwall Trading Estate**
2.9 Relevant precedents
2.9.2 Industrial co-location

RW1
Co-location / Vertical mix



Hepscoth Road
Hackney Wick London

Residential led vertical co-located development, including B1 use classes at ground +1 floor levels, mainly targeted at professional & business services, creative industries, social enterprises, start-ups and early-stage enterprises.



RW2
Co-location / Vertical mix



Bow Enterprise Park
Tower Hamlets, London

Residential led neighbourhood, with managed B1c light industrial units facing into the railways along a shared servicing. These types, require enough space to provide separate vehicular accesses for residents and workspaces.



2 **Blackwall Trading Estate**
2.9 Relevant precedents
2.9.2 Industrial co-location

RW3
Co-location / Vertical mix



Swandon Way
LB Wandsworth
Residential led development, mixing flexible workspaces at ground floor podium, with open light-wells.

RW4
Co-location / Vertical mix



Caxton Works
LB Newham



2 **Blackwall Trading Estate**
2.9 Relevant precedents
2.9.2 Industrial co-location

RW5
Co-location / Horizontal mix



Monier Road
Hackney Wick, London

Residential led development with horizontal multi-storey co-location of B1space types, mainly targeted at professional & business services, creative industries, social enterprises, start-ups and early-stage enterprises.



RW6
Co-location / Hybrid mix



The Arts Building
Finsbury Park, London

Multi-storey flexible workspaces within a residential led mixed-use courtyard block. The Arts Building spans under the full depth of the podium providing loading and heavy goods handling, stacked workspaces above, and a café.



2 Blackwall Trading Estate

2.9 Relevant precedents

2.9.2 Industrial co-location

RW7

Co-location / Vertical mix



Canning Town

LB Newham

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Site capacity analysis and options appraisal

3. Blackwall Depot

Introduction

- Brief
- Existing Site
- Constraints
- Opportunities
- Design Principles

Design Options

- Option 1
- Option 2
- Option 3
 - Option 3.1
 - Option 3.2
 - Option 3.3
 - Option 3.4
- Flexibility for Alternative or Future Requirements
- Co-Location Constraints / Parameters
- Precedents

3

Blackwall Depot

3.1

Introduction

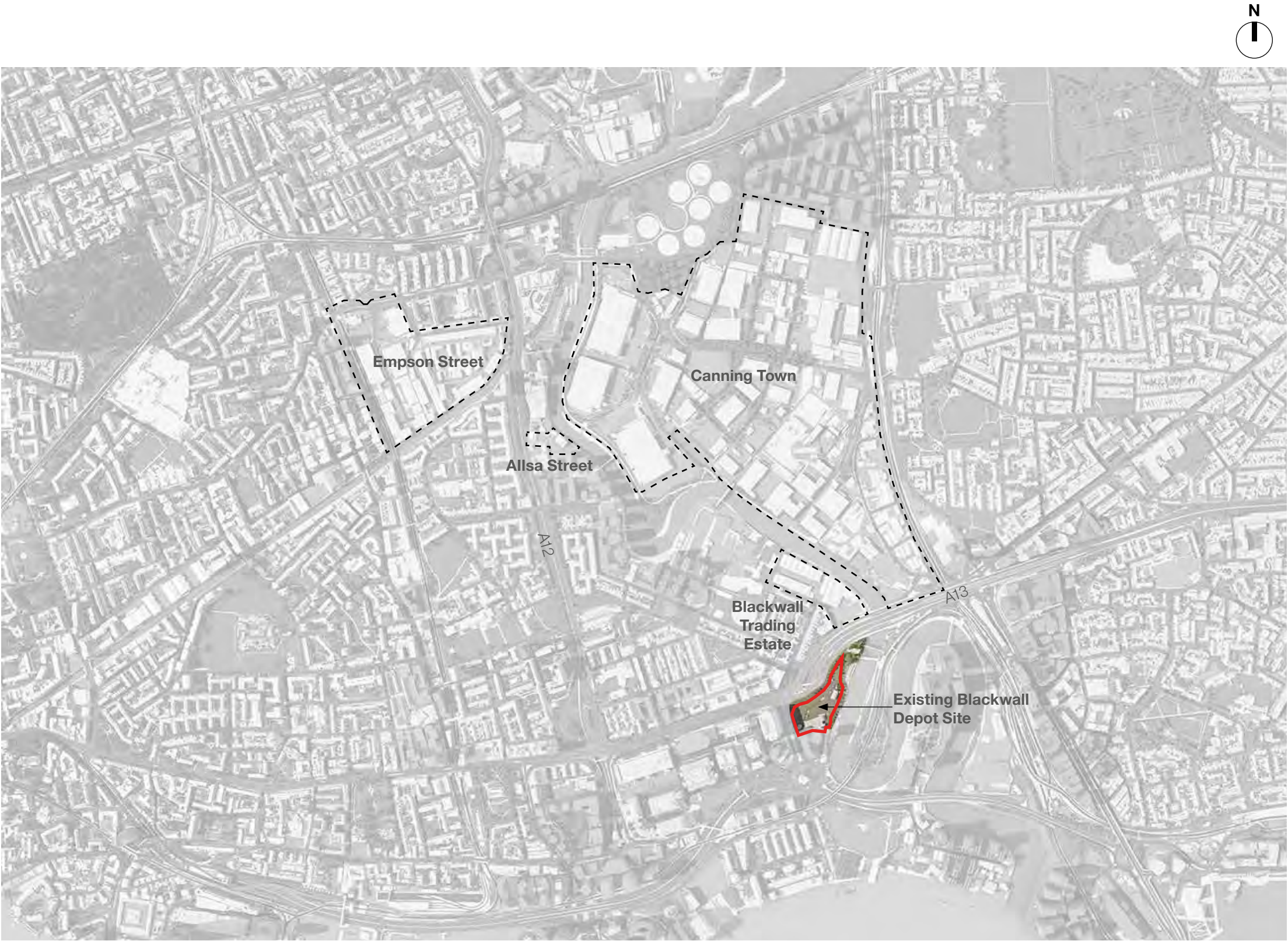
3.1.1

Brief

This exercise aims to explore the opportunity to utilise and intensify the Blackwall Depot site, currently used as a Tower Hamlets Council Depot. This site provides the opportunity to consolidate of a number of the Borough’s council services, to free up other Council Depot sites around the borough for other uses.

The existing Depot is strategically located between the A13 and River Lea in the east of the borough near the East India Dock Tunnel entrance. It is well connected through the A13 and in an area surrounded by some key industrial estates.

The depot houses its fleet and passenger transport services, waste collection and street cleansing services.



3 Blackwall Depot
3.1 Introduction
3.1.2 Existing Site



View 01



View 02



View 03



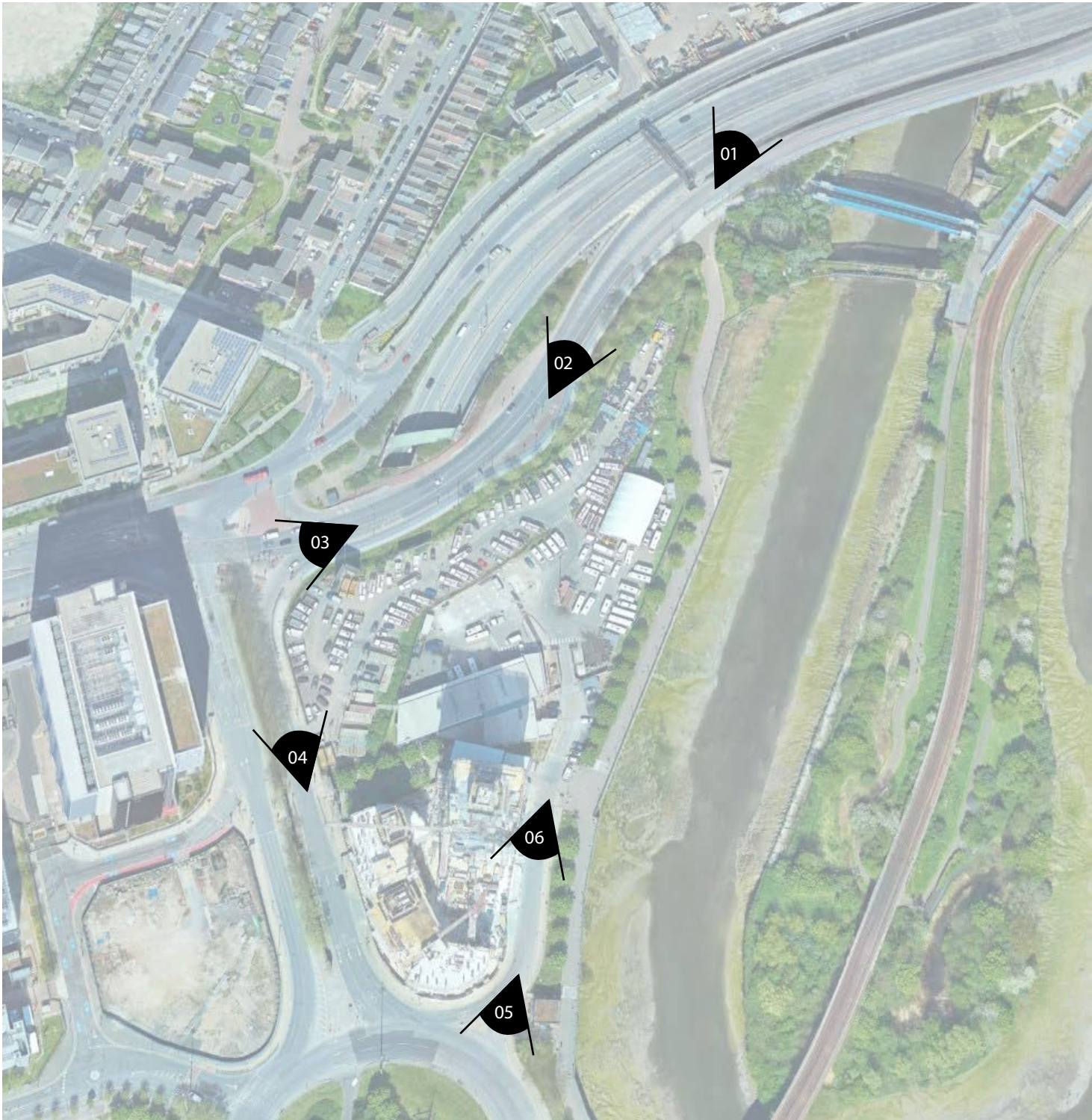
View 04



View 05



View 06



3 Blackwall Depot

3.1 Introduction

3.1.2 Existing Site

Site Area: 3.24 acres/ 13,120 sqm

Access via Leamouth Road and Silvocea Way.

Bounded by the elevated East India Dock Road (A13) to the north, new residential development to the south (Castle Wharf), the River Lea to the East, and Leamouth Road to the West. The Docklands Light Railway runs to the East and South of the site.

As identified in a previous site study, the East India dock link tunnel runs under the west side of the site, and as such it is assumed that any structures cannot be built on top of this or for a distance of 15m either side of the tunnel.

There are significant services which run around the perimeter of the site which constrain the development to the area within the red development boundary. An electricity pylon sits at the northern end of the site (outside of the red line boundary).

Existing Facilities:

A - 295 sqm (waste treatment))

B - 572 sqm (salt / grit barn)

C - 1,265 sqm (existing offices and workshops)



3 Blackwall Depot

3.1 Introduction

3.1.3 Constraints

There are several minor and major infrastructure elements bounding the site including:







- A13 (road tunnel) alignment
- Electricity pylon

The Castle Wharf development to the south requires any development to be set apart to maintain sufficient distance between residential developments

An appropriate buffer will be required between the Depot and Residential uses to mitigate any noise and smell issues that might arise from the Depot.

Ownership boundary at southern end of site overlaps with that of the adjacent residential development.

Key

-  Site development boundary
-  Existing buildings
-  Existing pylon
-  Pedestrian routes
-  Vehicle routes
-  Riverside frontage



3 Blackwall Depot

3.1 Introduction

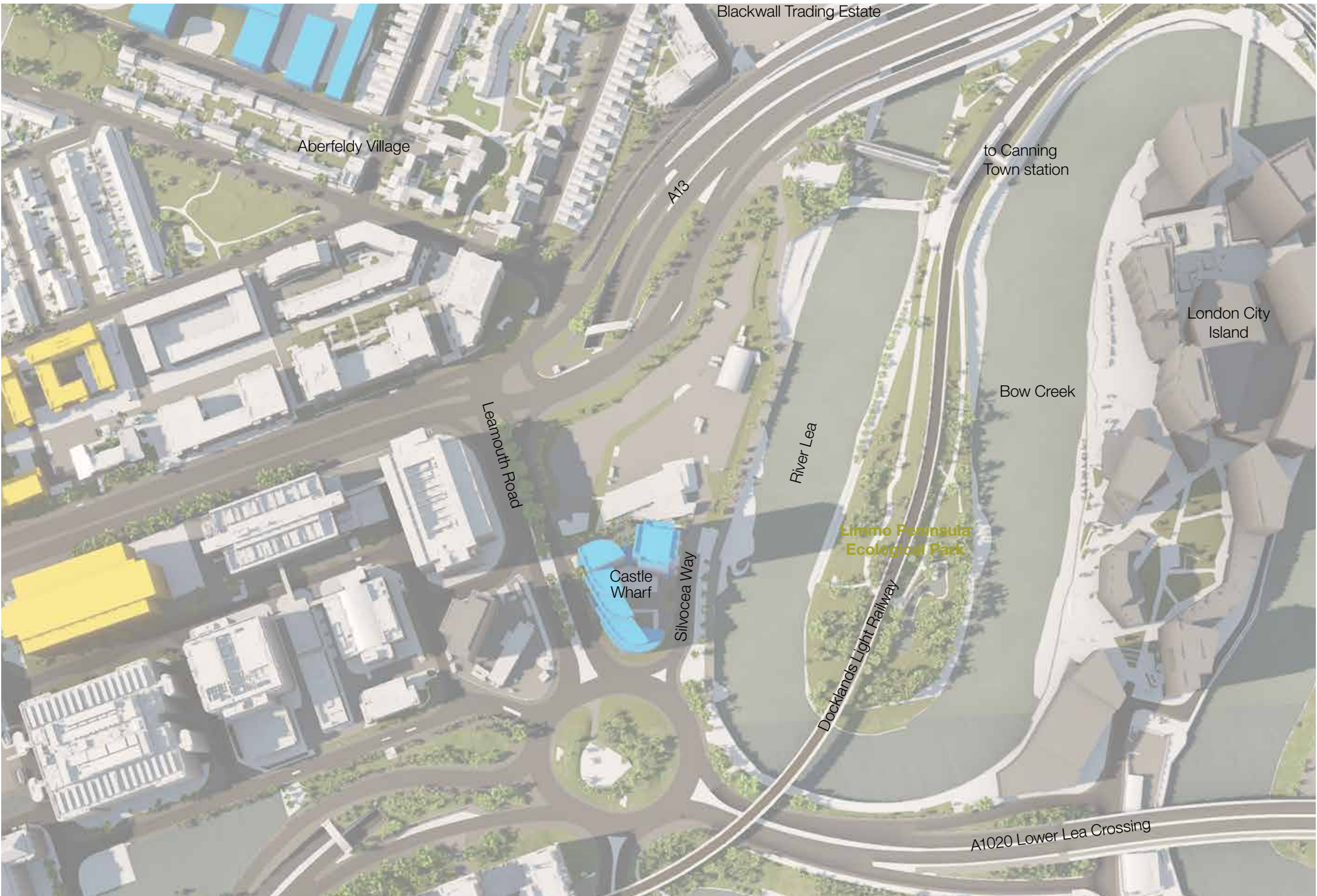
3.1.4 Opportunities

General Site Opportunities:

- The site has direct easy access from major road network
- It can benefit from good orientation and great views to the Lower Lea, the Limmo Peninsula Ecological Park and the Limmo Peninsula behind.
- Previous studies have identified that the site would be suitable for high density housing-led mixed use development
- Intensification of Consolidated Depot facilities potentially to unlock other sites in the Borough for redevelopment,

Tall Buildings Zone

Purple hatched zones indicate sites considered appropriate for tall buildings, of which the site in question falls within.



3

Blackwall Depot

3.1

Introduction

3.1.5

Design Principles: Depot

This site provides the opportunity to consolidate of a number of the Borough’s council service sites —including Toby Lane, Southern Growth and Commercial Road— to free up these sites for other uses.

This opportunity was explored in detail in the Canning Town & Empson Street Pilot Area Study (CTES) —commissioned by the GLA and developed together with LB Newham and LB Tower Hamlets. The Spatial requirements were obtained from the Blackwall Depot Scoping document provided by LB Tower Hamlets Council, and a number of options were tested for a consolidated depot. The study also explored the residential capacity that could be accommodated on the site co-located with the consolidated council depot, which is brought into this report.

Depot Specific Opportunities:

- Consolidation of various Council environmental service sites onto one intensified site including Toby Lane, Southern Growth and Commercial Road
- Future-proofed vehicle energy / fuel provision e.g. Hydrogen / Electric charging to prepare for likely transition to alternative fuel technologies
- Whether to provide workshop /maintenance capacity on-site for all vehicles, and whether that service is sufficiently specialist to be outsourced – the transport fleet is currently maintained in-house and on site, the waste / cleansing fleet is maintained largely off-site by an external provide
- Does salt / grit need to be stored on site and in a permanent setting – this takes up considerable space for facility only required in Winter months
- Should the council be providing a commercial MOT facility, and if not are there other useful purposes for this space?

Key

- Site boundary
- Footprint of Depot
- Landscape
- Area within development that has been included within adjacent Castle Wharf scheme - TBC



Depot principles

1. No dependent parking i.e. all vehicles can leave their bay without any other vehicle needing to move first.
2. All structures kept clear of assumed 15m easement required to tunnel.
3. Provision for residential basement parking / storage and access to podium deck (via core) from Leamouth Rd.
4. One-way vehicle movement around site with separate in and out access points into site.
5. Internal office and storage space contained within single building in southern part of site freeing up rest of site for parking / external storage.
6. Pedestrian access into Depot building could be shared with Residential access.
7. Residential access required to podium level from Leamouth Road and Riverside.
8. Concentrate storage areas to awkward parts of site not considered appropriate for parking.
9. Ramped access up to upper levels - clear of main circulation route at ground floor level.
10. Existing landscape buffer maintained and enhanced around depot.

3 Blackwall Depot
3.1 Introduction
3.1.6 Preferred Depot: Layout

Preferred Depot Option
As part of the CTES Pilot Area Study, and working together with LB Tower Hamlets Council, several options were tested for a consolidated Council-Depot at Blackwall Depot site, which could meet the council's operational needs. This consolidated depot would also support a range of additional benefits, including the modernisation of the council services fleet, buffering the depot from adjacent residential areas, providing a podium which can enable housing delivery, employment generating uses and public space. These studies are subject to further investigation

However, as part of the work, a preferred option was identified, where depot uses were stacked in two storeys above ground —totalling 15m of depot structure— accessed through a vehicle ramp, maximising capacity of the site. The depot structure was constrained by an easement area where construction was discouraged due to the location of the A13 tunnel; however, the full ground floor of the site was envisaged as usable space for the depot.

This study marked the appropriate entrance and access points to the vertical cores of any co-located uses, placed on top of the depot podium.

The report also included a section on Flexibility for alternative or future requirements, where the appropriate location for a Grit Store was suggested (not included in these designs), as well as the location for additional parking and/or storage, which was proposed as a deck built on the western side of the site —not considered as part of the selected options due to potential challenges to deliver, for its location above the A13 tunnel easement area.

Vehicle Parking Provision

The reconfigured depot will include various vehicle types belonging to different Council organisations. The vehicle bay sizes are taken from the PBA transport study 2018. The vehicle spaces are colour-coded on the proposed plans as follows:

Key

[Red outline]	Site boundary	[Yellow]	BWD - Cars
[Light blue]	BWD - Cars	[Red]	BWD - RCVs
[Purple]	Other/unknown - Cars	[Pink]	BWD - 3.5T Tipplers
[Orange]	BWD - Minibuses	[Dark red]	BWD - Gritters
[Green]	TobyLane - Cars-vans	[Purple]	BWD - Sweepers
[Dark blue]	Comm.R. - Cars-vans	[Grey]	Southern Growth -
[Light green]	BWD - Cars		3.5T Tipplers



3 Blackwall Depot

3.1 Introduction

3.1.7 Preferred Depot: Schedule of Accommodation

Overall Site Area	3.24 acres/ 1.31 hectares
Existing GEA	c. 1,265 sqm

Depot Building GEA	3,332 sqm / 35,865 sqft
Depot Footprint	13,120 sqm / 141,222 sqft

Area Splits:

Basement:

Residential parking provision	5,090 sqm / 54,788 sqft
-------------------------------	-------------------------

Ground Floor:

Depot (parking and storage)	9,947 sqm / 107,068 sqft
Depot building (over 2 levels)	1,858 sqm / 19,999 sqft
Residential provision	1,591 sqm / 17,125 sqft
Depot / Resi Pedestrian Access	225 sqm / 2,421 sqft
Area of land in Castle Wharf	434 sqm / 4,671 sqft

First Floor Depot building: 1,160 sqm / 12,486 sqft

First Floor (parking deck): 6,271 sqm / 67,500 sqft

Second Floor (parking deck): 7,433 sqm / 80,008 sqft

People		Internal Space Requirements		External Space Requirements		Vehicles	
Staff located at New Depot	No. Req.	Storage space	size (m2)	Parking	No. Req.	Blackwall Depot	No.
Animal Wardens	3	FM	100	2020 Vehicles	299	Cleansing / Waste	
Transport Services	131	Cleansing / Waste	20	2030 Vehicles	366	Tipper	25
Commercial Waste Enforcement	6	Animal Wardens	139.5			RCV	40
Pest Control	14	Parking	125	Storage	size (m2)	Sweeper	9
Parking and Mobility Services	37	Transport	74			Small van	25
Community Safety	2	Safer communities	131	Workshop	500		
NSL	3	TOTAL	589.5	Commercial Rd - Ext. Storage	480	Transport Services	
Waste Collection	133	Workshop space	size (m2)	Toby Club - Ext. Exercise Yard	228	Minibus	22
Cleansing	158			2 x containers (Toby Club)	27	Accessible bus	30
TOTAL	487	Waste / cleansing	90	Gritting (salt store)	0 (593 req)	Van	10
		Parking services	15	Cleansing / Waste	1544	Gritter	2
2020 Desk spaces required	71	Transport services	346	Toby Lane Animal Wardens	255	Crime Prevention (car)	1
		TOTAL	451	Pest Control	120	Parking services (car)	1
2030 predicted employment count	659			Parking	282	TOTAL PROVIDED	165
2030 predicted desk spaces required	101	Meeting space	size (m2)	Transport	500		
				Civil Contingency	60	Commercial Road	No.
		Parking services	148	TOTAL PROVIDED	3996		
		Transport services	60	Fuel	size (m2)	Emergency business continuity (car)	3
		TOTAL	208			Youth service (car)	2
				Cleansing / Waste	40	Pest Control (car)	12
		TOTAL STORAGE SPACE	1248.5	Civil Contingency	40	Parking services (car)	81
				TOTAL PROVIDED	80	Additional (car) Spaces	4
		Office workspace (10m2/person)	1010			TOTAL PROVIDED	102
		Welfare	400			Toby Lane / Toby Club	No.
		TOTAL INTERNAL SPACE	2658.5			Animal Wardens (small van)	3
						CCTV / Community Safety (car)	3
						Trading Standards (car)	1
						Additional (car) Spaces	3
						TOTAL PROVIDED	10
						Southern Growth	No.
						3.5 tonne tipper	4
						TOTAL PROVIDED	4
						Other / Unknown	No.
						Parks and Events (car)	3
						Youth Services (car)	5
						TOTAL PROVIDED	8
						OVERALL TOTAL PROVIDED	289

3

Blackwall Depot

3.1

Introduction

3.1.8

Option Testing Summary

Description of all tested options
Four different options have been tested, all assuming the same depot-base configuration. The tests seek to understand the best possible arrangement for the co-located residential blocks around the depot, also in relation to the emerging development in the southern edge of the site. There is a tests that includes an element of commercial space and the potential for other ancillary uses.



Blackwall Depot

Option 1

Depot scheme

Residential Base

Residential Podium and Above

3

Blackwall Depot

3.2

Option 1

3.2.1

Proposed layout

The scope of this study extends to providing some indicative massing of potential residential use within the scheme.

Provision has been made for a residential core accessed from Leamouth Road, and also a basement car park / storage area below the Depot also accessed via a ramp off Leamouth Road.

The residential blocks are concentrated to the south-east of the site, located away from the A13 and open depot space, bringing it close to the river.

Access from the northern part of the site is likely to be more complex and less desirable given the surrounding road network and the position of the ramp to the first floor depot deck.

The residential massing takes the form of 3 blocks sat on top of a transfer slab with the remainder of the space given over to external amenity. The blocks range in height from 6-18 storeys.

It's likely that additional cores may be required with the most logical position to the east of the site alongside the river-front promenade. There is potential for a direct link to the basement within the north-eastern corner of the basement footprint adjacent to the riverside elevation.

Subject to clarification of any restrictions on building on top of the tunnel zone, the podium deck footprint could be enlarged towards the western side of the site. The deck could also be extended further north with additional column structures installed at ground level.

Key

- Site development boundary
- Pedestrian routes
- Vehicle routes
- Vehicular access-ramp to basement
- Residential parking - Basement
- Residential blocks on top of depot-podium
- Depot: landscaped podium with residential access




2ND FLOOR (PODIUM) LEVEL

3 Blackwall Depot

3.2 Option 1

3.2.2 Capacity & heights

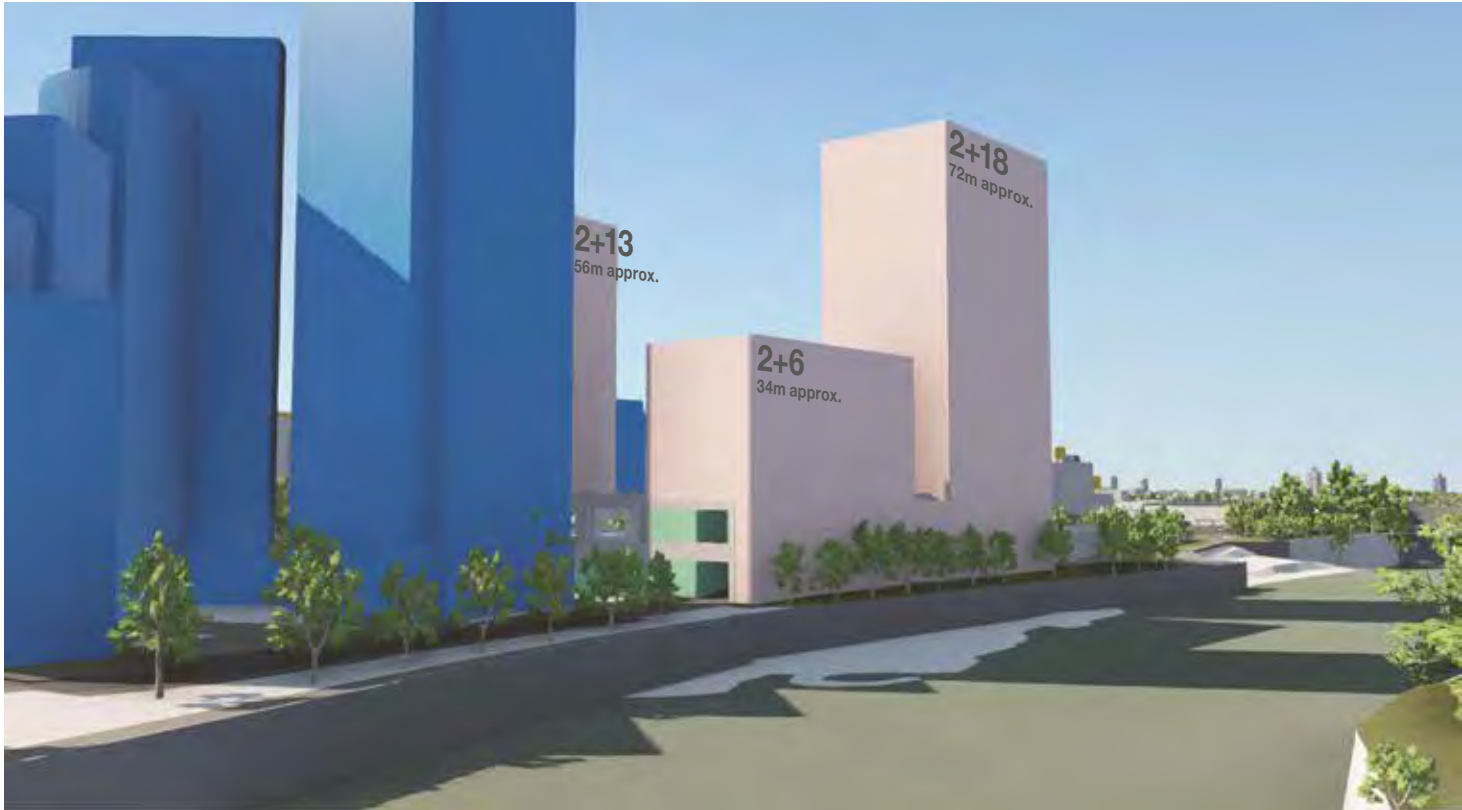
Blackwall Depot
Option 1



263 homes

Distributed in 3x tower blocks

Site	Residential			Indicative Area Conversion						Residential Mix Assumptions	Residential Unit Mix (NIA) PER FLOOR*			1B2P	2B4P	3B5P
	Block	Area per storey	Height	GEA		GIA		NSA			50 m²	70 m²	86 m²			
				Total m²	Total ft²	85%	ft²	80%	ft²		30%	40%	30%			
											Av. Size	15 m²	28 m²	26 m²		
	No.	m²	No. of storeys													
Blackwall Depot Residential	Block 1	756 m²	13	9,828 m²	105,788 ft²	8,354 m²	89,919 ft²	6,683 m²	71,936 ft²	97	29	39	29			
	Block 2	638 m²	6	3,828 m²	41,204 ft²	3,254 m²	35,024 ft²	2,603 m²	28,019 ft²	38	11	15	11			
	Block 3	719 m²	18	12,942 m²	139,306 ft²	11,001 m²	118,410 ft²	8,801 m²	94,728 ft²	128	38	51	38			
	2,113 m²			26,598 m²	286,298 ft²	22,608 m²	243,353 ft²	18,087 m²	194,683 ft²	263	79	105	79			
											86 m²					
										Avg GIA	926 ft²					



View looking north from DLR bridge level



View looking south from A13 level

3 Blackwall Depot
3.2 Option 1
3.2.3 Indicative Massing Views



Aerial view looking south

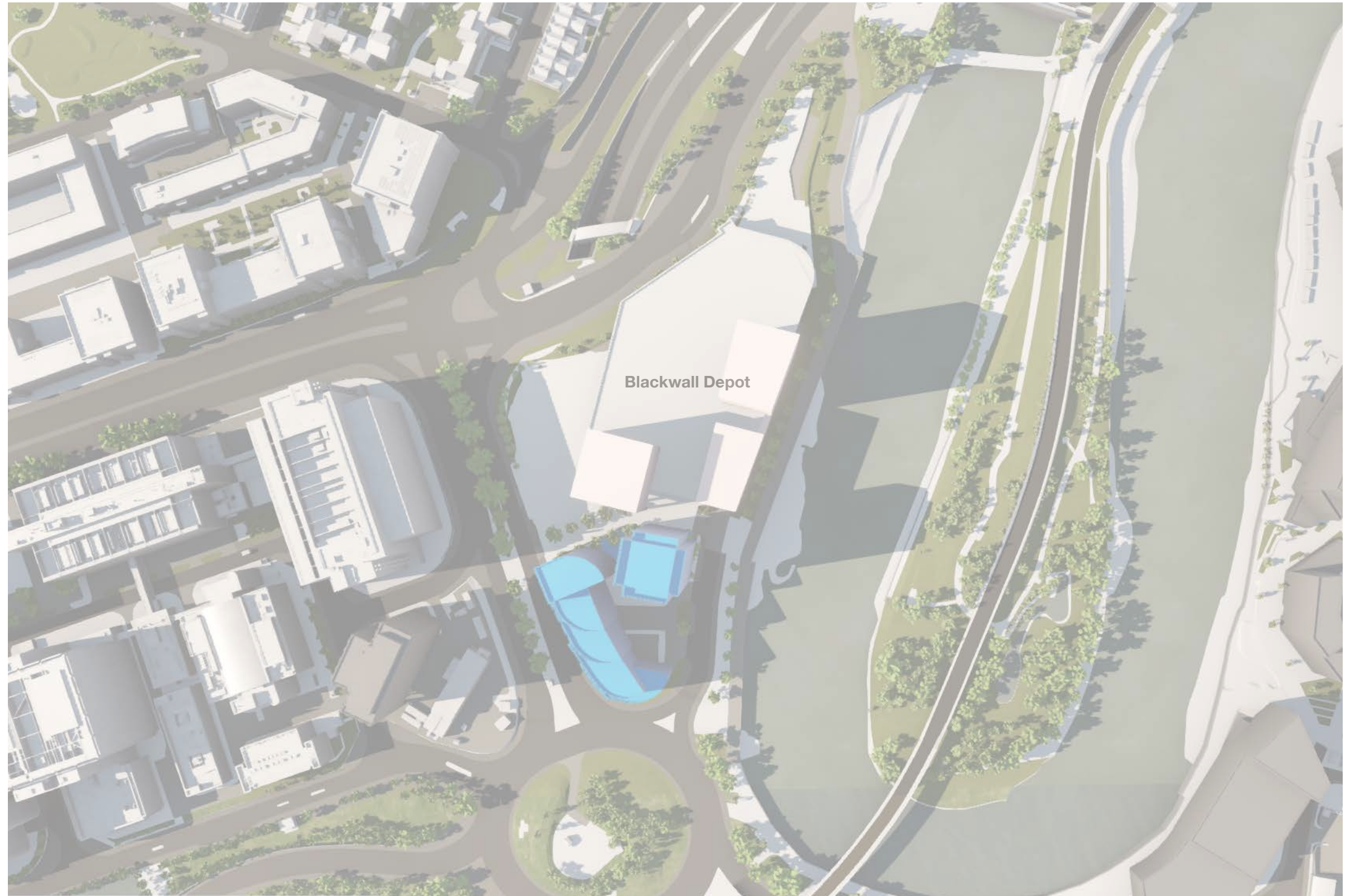
3 Blackwall Depot

3.2 Option 1

3.2.4 Opportunities for further consideration / clarification

Key conclusions

- The residential part of the development is to re-considered with a higher density, considering access and servicing and how this integrates with the river path and other surrounding public realm and road network.
- Whilst the depot maximises the use of land, the residential aspect could still benefit more from its location
- Residential towers could improve their relationship to the pedestrian routes and waterfront promenade by developing further north along the edge of the depot.
- This allows to have more active ground floors and less of an impact of the depot



Blackwall Depot
Option 2

3 Blackwall Depot

3.3 Option 2

3.3.1 Proposed layout

Option 2 tests occupying the whole length of the river-frontage with residential uses, placing a residential block at the northern edge of the site.

Heights are balanced across all blocks, setting the tallest element at the centre of the site and along the edge to the river.

Where not wrapped by the residential development, the Depot will be wrapped with cladding to provide visual and acoustic buffer. Provision to be made for ventilation services within the Depot if cladding does not permit required fresh air requirements.

At podium level and above the residential development continues upwards via towers ranging from 8-20 storeys.

Key

Site development boundary

Pedestrian routes

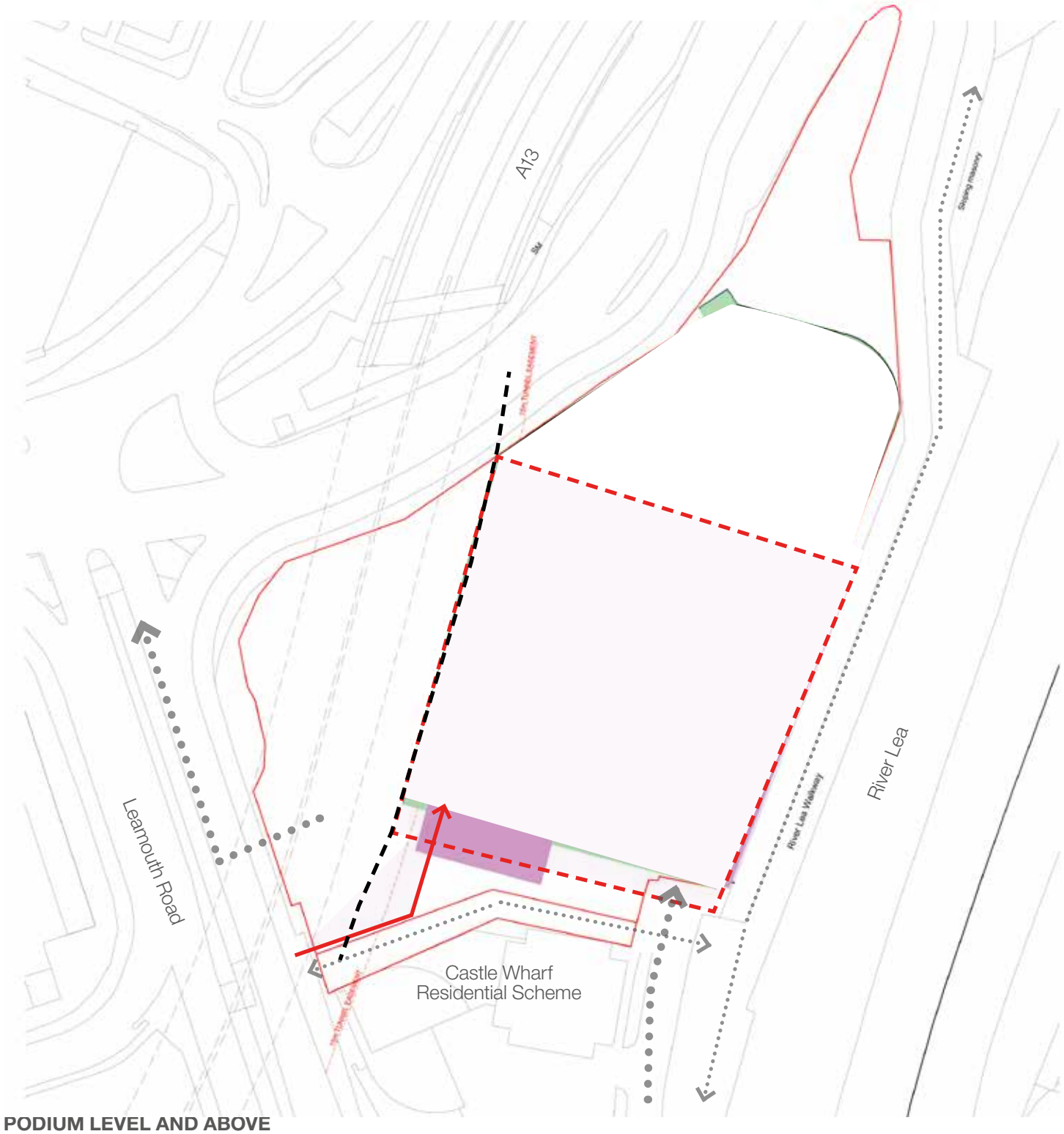
Vehicle routes

Vehicular access-ramp to basement

Residential parking - Basement

Residential blocks on top of depot-podium

Depot: landscaped podium with residential access




3 Blackwall Depot

3.3 Option 2

3.3.2 Capacity & heights

Blackwall Depot
Option 2



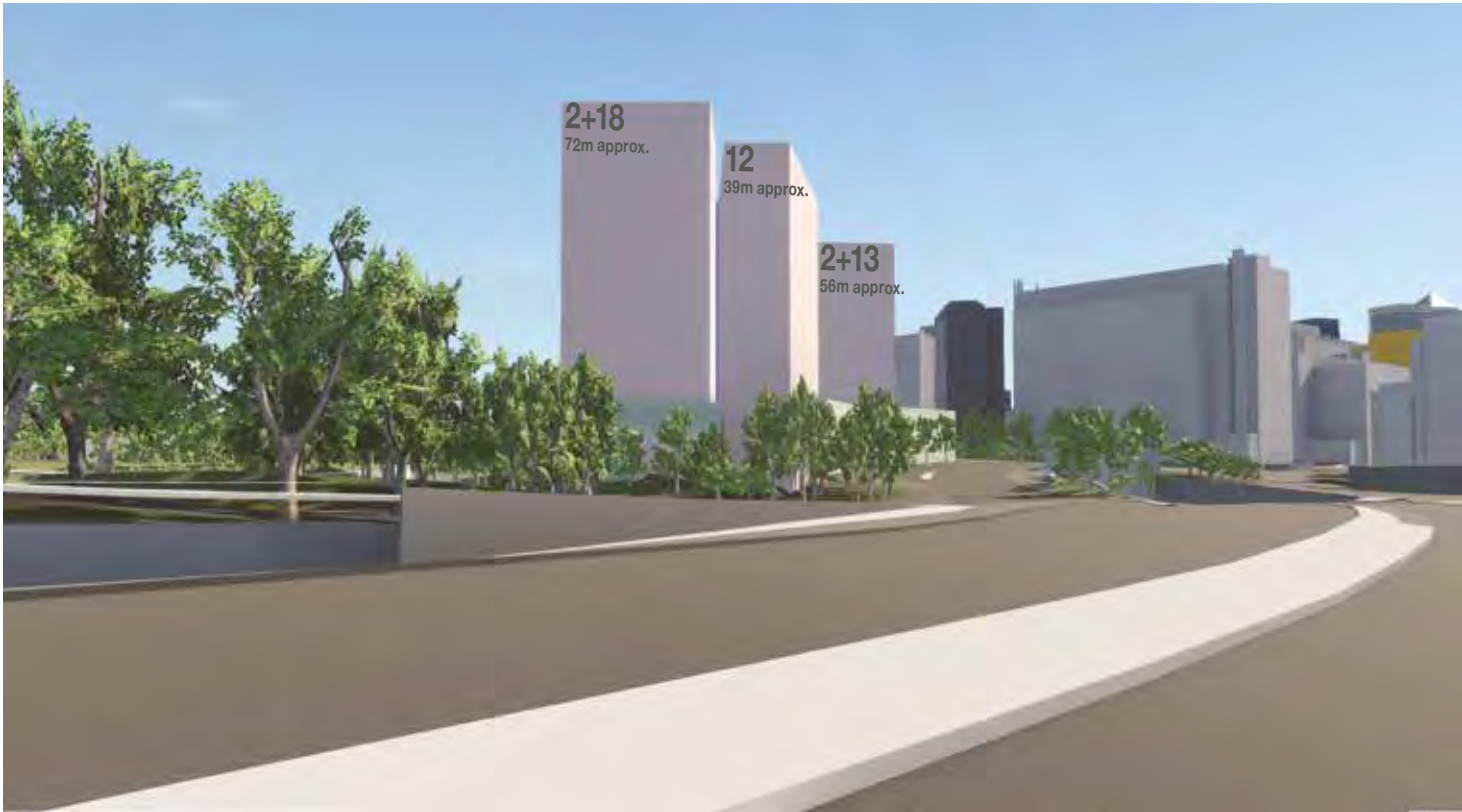
400 homes

Distributed in 4x blocks

	Residential			Indicative Area Conversion						Residential Mix Assumptions	Residential Unit Mix (NIA) PER FLOOR*		
	Block	Area per storey	Height	GEA		GIA		NSA			50 m²	70 m²	86 m²
				Total m²	Total ft²	85%	ft²	80%	ft²		Av. Size	30%	40%
	No.	m²	No. of storeys								68.80 m²	15 m²	28 m²
Blackwell Depot Residential	Block 1	594 m²	15	8,910 m²	95,906 ft²	7,574 m²	81,520 ft²	6,059 m²	65,216 ft²	88	26	35	26
	Block 2	680 m²	8	5,440 m²	58,556 ft²	4,624 m²	49,772 ft²	3,699 m²	39,818 ft²	54	16	22	16
	Block 3	729 m²	20	14,580 m²	156,938 ft²	12,393 m²	133,397 ft²	9,914 m²	106,718 ft²	144	43	58	43
	Block 2-3 bottom	701 m²	3	2,102 m²	22,626 ft²	1,787 m²	19,232 ft²	1,429 m²	15,385 ft²	21	6	8	6
	Block 4	372 m²	19	7,063 m²	76,028 ft²	6,004 m²	64,624 ft²	4,803 m²	51,699 ft²	70	21	28	21
	Block 5	297 m²	8	2,379 m²	25,610 ft²	2,022 m²	21,769 ft²	1,618 m²	17,415 ft²	24	7	9	7
		3,373 m²		40,474 m²	435,663 ft²	34,403 m²	370,314 ft²	27,523 m²	296,251 ft²	400	120	160	120



View looking north from DLR bridge level



View looking south from A13 level

3 Blackwall Depot

3.3 Option 2

3.3.3 Indicative Massing Views



Aerial view looking west

Key conclusions

- Residential towers could improve their relationship to the pedestrian routes and waterfront promenade by developing further north along the edge of the depot.
- This allows to have more active ground floors and less of an impact of the depot

Blackwall Depot

Option 3

Employment base
Residential Podium and Above

3

Blackwall Depot

3.4

Option 3

3.4.1

Proposed layout

Option 3 further explores the idea of placing residential uses along the eastern edge of the depot and next to the river-front, benefiting from views and buffering from the A13.

In this case, the northernmost block is optimised to provide greater capacity, while the heights of the towers is concentrated towards the south, closer to where heights are concentrated in the emerging Castle Wharf site to the south. Heights are gradually reduced north-wise.

Where not wrapped by the residential development, the Depot will be wrapped with cladding to provide visual and acoustic buffer. Provision to be made for ventilation services within the Depot if cladding does not permit required fresh air requirements.

At podium level and above the residential development continues upwards via towers ranging from 8-20 storeys.

Key

Site development boundary

Pedestrian routes

Vehicle routes

Vehicular access-ramp to basement

Residential parking - Basement

Residential blocks on top of depot-podium

Depot: landscaped podium with residential access




3 Blackwall Depot


3.4 Option 3

3.4.2 Employment Base option: Accommodation Schedule

Blackwall Depot
Option 3



414 homes
Distributed in 4x blocks



2,600 m²

	Residential			Indicative Area Conversion						Residential Mix Assumptions	Residential Unit Mix (NIA) PER FLOOR*			
	Block	Area per storey	Height	GEA		GIA		NSA			50 m²	70 m²	86 m²	
				Total m²	Total ft²	85%	ft²	80%	ft²					Av. Size
	No.	m²	No. of storeys							68.80 m²	15 m²	28 m²	26 m²	
Blackwall Depot Residential	Block 1	672 m²	18	12,096 m²	130,200 ft²	10,282 m²	110,670 ft²	8,225 m²	88,536 ft²	120	36	48	36	
	Block 2	729 m²	20	14,580 m²	156,938 ft²	12,393 m²	133,397 ft²	9,914 m²	106,718 ft²	144	43	58	43	
	Block 3	680 m²	8	5,440 m²	58,556 ft²	4,624 m²	49,772 ft²	3,699 m²	39,818 ft²	54	16	22	16	
	Block 4	372 m²	20	7,435 m²	80,029 ft²	6,320 m²	68,025 ft²	5,056 m²	54,420 ft²	73	22	29	22	
	Block 5	297 m²	8	2,379 m²	25,610 ft²	2,022 m²	21,769 ft²	1,618 m²	17,415 ft²	24	7	9	7	
		2,750 m²		41,930 m²	451,333 ft²	35,641 m²	383,633 ft²	28,513 m²	306,906 ft²	414	124	166	124	
Employment Base Wrap				GEA		GIA								
				m²	ft²	95%	ft²							
	Block 1 bottom	167 m²	3	501 m²	5,393 ft²	476 m²	5,123 ft²							
	Block 2-3 bottom	701 m²	3	2,102 m²	22,626 ft²	1,997 m²	21,494 ft²							



View looking north from DLR bridge level



View looking south from A13 level

3 Blackwall Depot

3.4 Option 3

3.4.3 Employment Base: Indicative Massing Views

In response to feedback in the previous option, the residential massing has been increased. There are two variants of the option depending on uses of the base floors: all residential or commercial base wrapping around the Depot.



Aerial view looking west

Blackwall Depot

Option 4

Residential base
Residential Podium and Above

3 Blackwall Depot

3.5 Option 4

3.5.1 Proposed layout

With a similar layout as the previous option, Option 4 aims to optimise the residential shape-efficiencies thus allowing greater height on the previously mid-height blocks. Heights follow the same gradual criteria, where tallest buildings are placed to the south and the lowest to the north.

Where not wrapped by the residential development, the Depot will be wrapped with cladding to provide visual and acoustic buffer. Provision to be made for ventilation services within the Depot if cladding does not permit required fresh air requirements.

At podium level and above the residential development continues upwards via towers ranging from 8-20 storeys.

Key

Site development boundary

Pedestrian routes

Vehicle routes

Vehicular access-ramp to basement

Residential parking - Basement

Residential blocks on top of depot-podium

Depot: landscaped podium with residential access



3

Blackwall Depot

3.5

Option 4

3.5.2

Residential Base: Accommodation Schedule

471 homes

Distributed in 4x blocks

Option 3.4 All Residential	Residential			Indicative Area Conversion						Residential Mix Assumptions	Residential Unit Mix (NIA) PER FLOOR*		
	Block	Area per storey	Height	GEA		GIA		NSA			50 m²	70 m²	86 m²
				Total m²	Total ft²	85%	ft²	80%	ft²	Av. Size			
	No.	m²	No. of storeys							68.80 m²	15 m²	28 m²	26 m²
	Block 1	672 m²	18	12,096 m²	130,200 ft²	10,282 m²	110,670 ft²	8,225 m²	88,536 ft²	120	36	48	36
Block 1 bottom	167 m²	3	500 m²	5,379 ft²	425 m²	4,572 ft²	340 m²	3,658 ft²	5	1	2	1	
Block 2	729 m²	20	14,580 m²	156,938 ft²	12,393 m²	133,397 ft²	9,914 m²	106,718 ft²	144	43	58	43	
Block 3	704 m²	15	10,560 m²	113,667 ft²	8,976 m²	96,617 ft²	7,181 m²	77,293 ft²	104	31	42	31	
Block 2-3 bottom	669 m²	3	2,006 m²	21,587 ft²	1,705 m²	18,349 ft²	1,364 m²	14,679 ft²	20	6	8	6	
Block 4	372 m²	15	5,576 m²	60,022 ft²	4,740 m²	51,019 ft²	3,792 m²	40,815 ft²	55	17	22	17	
Block 5	297 m²	8	2,379 m²	25,610 ft²	2,022 m²	21,769 ft²	1,618 m²	17,415 ft²	24	7	9	7	
	3,609 m²		47,697 m²	513,403 ft²	40,542 m²	436,392 ft²	32,434 m²	349,114 ft²	471	141	189	141	



View looking north from DLR bridge level



View looking south from A13 level

3 Blackwall Depot

3.5 Option 4

3.5.3 Employment Base: Indicative Massing Views



Aerial view looking west

Blackwall Depot
Relevant precedents

3 **Blackwall Depot**
3.9 Relevant precedents
3.9.1 Industrial Co-Location

RW1
Co-location / Hybrid mix



The Arts Building
Finsbury Park, London

Multi-storey flexible workspaces within a residential led mixed-use courtyard block. The Arts Building spans under the full depth of the podium providing loading and heavy goods handling, stacked workspaces above, and a café.



RW2
Co-location / Vertical mix



Travis Perkins
Camden, London

Student residential development with ground floor construction merchants' depot.



3 **Blackwall Depot**
3.9 Relevant precedents
3.9.1 Industrial Co-Location

RW3
Co-location / Vertical mix



100 logements pour etudiants
Rue Bruenesau, Paris

Student residential development with ground floor municipal depot.



RW4
Co-location / Vertical mix



Ecoquartier Jonction
Rue du Stand, Geneve

Mixed use block.



3 **Blackwall Depot**
3.9 Relevant precedents
3.9.2 Residential podium

P1
Over commercial uses



Hallsville Quarter
Canning Town, LB Newham

Approx. area 4,600m²



P2
Over light industrial uses



The Arts Building
Finsbury Park, LB Islington

Approx. area 1,400m²



3 **Blackwall Depot**
3.9 Relevant precedents
3.9.2 Residential podium

P3
Over commercial uses



Porter's Edge (Decathlon)
Surrey Quays, LB Southwark

Approx. area 3,400m²



P4
Over parking



Athletes village
Stratford, LLDC

Approx. area 2,900m²



3

Blackwall Depot

3.9

Relevant precedents

3.9.3

Depot Cladding

The aim of this study is primarily around site capacity rather than detailed design of buildings, however, it is worth noting that the Depot structures will be exposed and whilst likely to be a combination of steel and concrete, future work should consider more closely what this might look like. Ventilation will need to be considered, and if not using mechanical ventilation systems then any cladding will need to provide sufficient fresh air intake / exhaust. This could be looked at as a positive constraint. Below are some precedents using different solutions.



Guy’s Hospital, London
Sculpted mesh panels



MSCP, New Covent Garden
Metal grating with planting



The Lexicon, Bracknell
Timber louvres / Mesh with planting



MSCP, Manchester
Metal gratings and tiles

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