

- 01 Vision
- 02 Socio-Economic Analysis & Response
- 03 Green & Blue Analysis & Response
- 04 Transport Links & Urban Mobility Analysis & Response
- 05 Built Environment Analysis & Response
- 06 Development Context
- 07 Masterplan

Site Analysis & Masterplan

The A Team

Becky Wakelin, O'Sanna Tomlinson,
Maiko Steiger, Jemma Temple, Zac
Furst

01 Vision

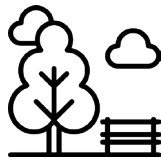
“ A Healing Community”

To create a place that acts to nurture community values, restore the distribution of wealth and support a high quality and robust public realm, in order to 'heal' and reconnect residents with their local neighbourhood.



Design Objectives

DO1 The new public realm will serve to increase the health and wellbeing of residents whilst simultaneously increasing the health of the surrounding built environment.



DO2 Billingsgate will be a neighbourhood that acts to re-balance current social disparities and strengthen connections between the borough's diverse range of residents.



DO3 Billingsgate will support a robust local economy within which small businesses will thrive and wealth will be increasingly recirculated and redistributed.



DO4 Billingsgate will stand as a living laboratory to showcase the abilities of current technologies to create an exciting, self-sustaining and thriving community.



Design Actions



DO1

DA1: 50% of all new housing units to be allocated as social housing, delivered in the form of a mixed community with equal access to all communal facilities.

DA2: New housing units to be built to lifetime homes standards, with particular emphasis on catering for larger multi-generational families.

DA3: New micro-mobility routes to be constructed to connect the site to its wider context, in particular the communities, facilities and transport connections located to the north of Aspen Way.

DA4: The former market will be redeveloped into a new central hub to host food stalls, cultural celebrations and community events.

DA5: Car free streets will encourage greater use of the public realm, creating a safe and accessible environment that affords high levels of connectivity to surrounding communities and services.



DO2

DA1: New commercial units will vary in size and be offered with flexible lease terms to suit small and start-up enterprises.

DA2: A new footbridge will be built to connect the site to Canary Wharf, encouraging wealthy workers into the new central food market during lunchtimes and after work.

DA3: A wide independent retail offering will be encouraged via incentives to local business owners to encourage residents to shop local and build loyal and lasting relationships.



DO3

DA1: Increased play provision, particularly for teens, will be implemented to encourage interaction and increase physical activity among young people.

DA2: New open green spaces will be strategically located to connect to residents as well as the wider green network of East London.

DA3: A fully inclusive landscaping strategy will be implemented, designed to the 8-80 model to activate the green spaces and water fronts, with a full sensory experience.

DA4: Considered landscaping will be planted alongside busy transport corridors to help mitigate the impacts of noise, air and visual pollution whilst planting will also be used to filtrate the water within the adjoining dock.



DO4

DA1: The construction of a floating, hydroponic, vertical garden will enable the onsite production of food, whilst supporting ongoing research and education into this new technology.

DA2: Biophilic buildings with productive green roofs will act as a visual reminder of the neighborhood's sustainable credentials and aspirations to the high rise buildings and investors within neighbouring Canary Wharf.

DA3: Buildings will be constructed using modular units and sustainable materials to prove that alternative methods can remain financially viable whilst delivering a high quality and individual neighbourhood.

02 Socio-Economic Analysis

The growth of London's financial and commercial sectors is significantly facilitated by Tower Hamlets.

Despite this, deprivation is still pervasive in the area. The Billingsgate site is situated between the distinctly diverse communities of Poplar and Canary Wharf. Figure 1.1 shows that Poplar has more areas of deprivation than Canary Wharf. This highlights the wealth disparity between the two areas, which creates a social divide.

Moreover, figure 1.2 further highlights the deprivation in Poplar, with 50%-60% of residents in work, compared to Canary Wharf with over 80%.

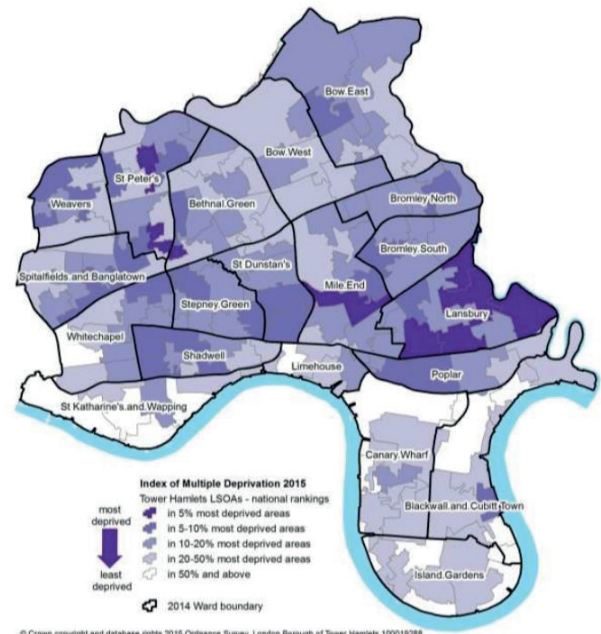


Figure 1.1: Index of Deprivation Map, Tower Hamlets
Source: DCLG, Indices of Deprivation, 2015

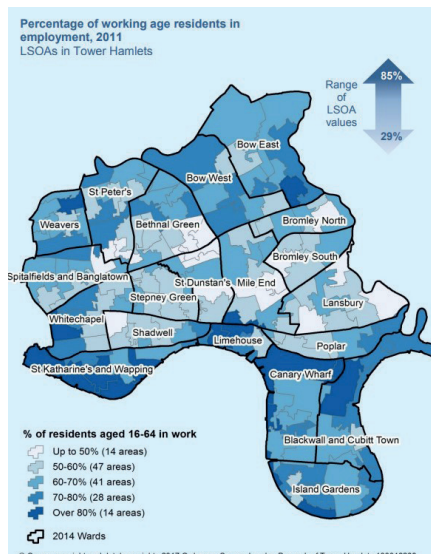


Figure 1.2: Working Age residents in Employment in Tower Hamlets
Source: Office for National Statistics, 2011 Census

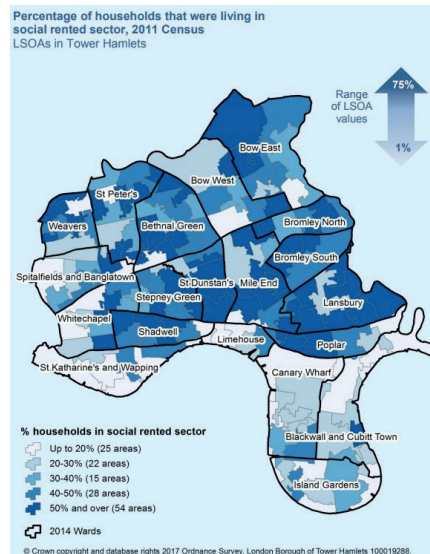


Figure 1.3: % of households in social rented sector, 2011
Source: Office for National Statistics, 2011 Census

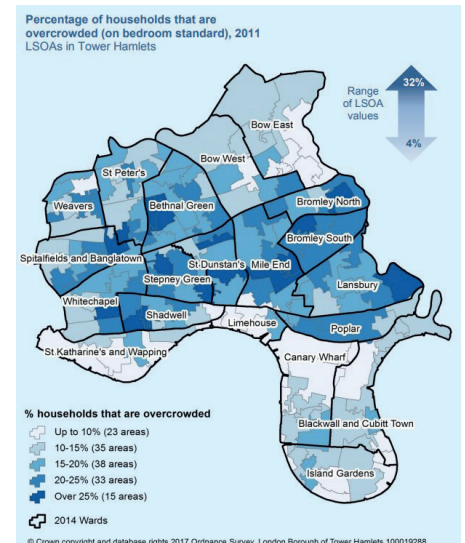


Figure 1.4: % of households that are overcrowded, 2011
Source: Office for National Statistics, 2011 Census

The Tower Hamlets local plan highlighted that there is a very high number of small to medium enterprises, however, only 15% of these jobs go to the local residents. Figure 1.3 shows that the percentage of households in the social rented sector is higher in Poplar than Canary Wharf. Over 50% of households in Poplar are in social rented homes and up to 20% in Canary Wharf. Figure 1.4 shows that Poplar has up to 20%-25% of households in overcrowded homes and up to 10% Canary Wharf. All of these maps highlight the distinct social and economic divide between Poplar and Canary Wharf.

Response



DO1: DA1

50% of all new housing units to be allocated as affordable social housing, delivered in the form of a mixed community with equal access to all communal facilities.



DO1: DA2

New housing units to be built to lifetime homes standards, with particular emphasis on catering for larger multi-generational families.



DO1: DA4

The former market will be re-developed into a new central hub to host food stalls, cultural celebrations and community events.



DO2: DA1

New commercial units will vary in size and be offered with flexible lease terms to suit small and start-up enterprises.



DO2: DA3

A wide independent retail offering will be encouraged via incentives to local business owners.

Policy Response

When designing the Billingsgate Masterplan, the following policies were taken into consideration.

Tower Hamlets Local Plan, 2031

- Policy S.SG1: Areas of growth and opportunity within Tower Hamlets
- Policy D.H2: Affordable housing and housing mix
- Policy D.H3: Housing standards and quality

03 Green & Blue Network Analysis

Green Network

The site's location allows for accessible travel to green networks in the wider surrounding area, with Elizabeth Olympic Park only being a 20min cycle from the site (see figure 2.1). The site is also close green networks such as Crossrail Place and Jubilee Park. The site's proximity to the harbour allows for a unique opportunity to integrate water features into the site and increase market value with water views.

There is a lack of accessible green spaces and attractive landscaping within walking distance of the site. Spaces north to the site in Poplar are unsafe to access due to Aspens Way the the heavy car use in the area. The area around the harbour is currently facing blank concrete wall from the Canary Wharf development and reduces connectivity to the sout of the site, requiring bridging of the two areas, which could not be financially viable. Further the area is within a flood zone so appropriate flood risk management would be necessary

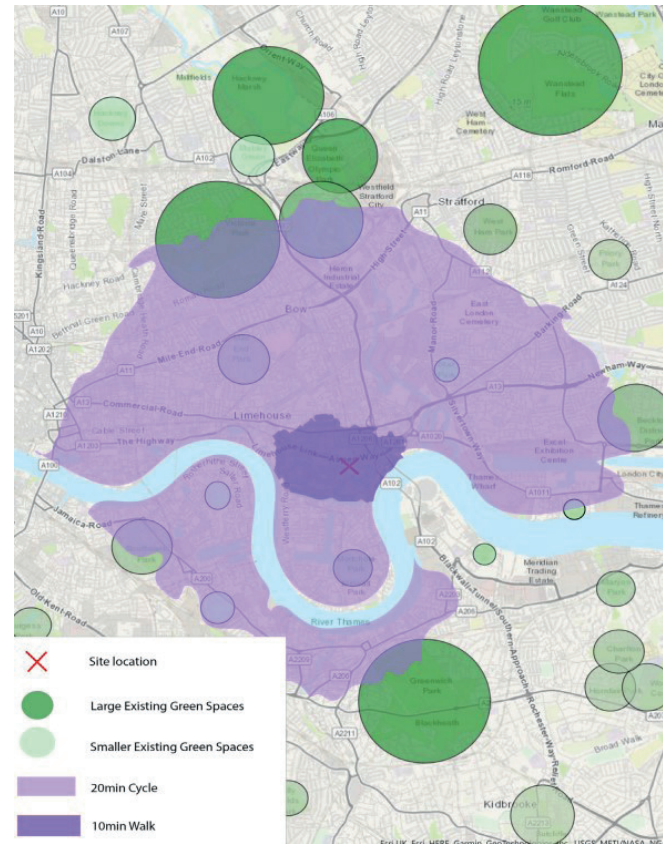


Figure 2.1: Wider Green Network and Connections

The provision of new open green spaces with attractive landscaping and areas for activities could encourage community use and integration to the site. Introducing waterside leisure space would help activate the waterfront and encourage people to visit and stay within the development as well as promote healthy travel through the site.



Figure 2.2: Green Network and Connections

Sunlight Analysis

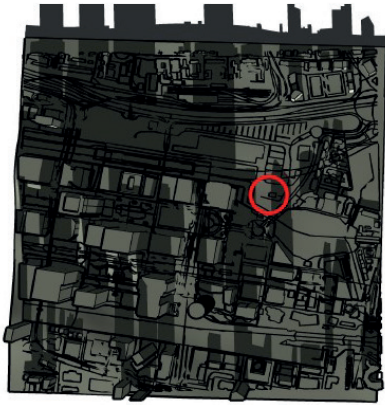


Figure 2.3: Sunlight Analysis January - 12:00

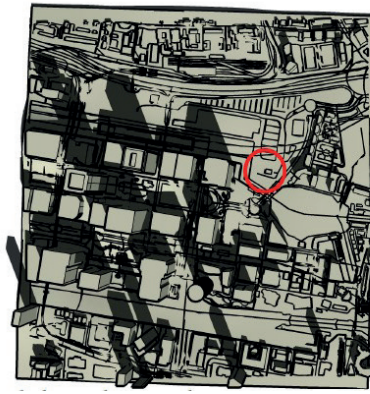


Figure 2.4: Sunlight Analysis April - 12:00



Figure 2.5: Sunlight Analysis July - 12:00

Due to the tall nature of the buildings of the Canary Wharf development areas of the site are affected by shadows, influencing the direction of development of the Billingsgate Market site. The images above are from a sunlight analysis identifying the placement of shadows during the months of January, April, July and October at 12:00. This analysis showed an area with the highest level of sun exposure (highlighted in the red circle), suggesting it to be an opportunity for the provision of a new green open space.



Figure 2.6: Sunlight Analysis October - 12:00

Blue Network

The site is situated in Flood Zone 3, therefore further development actions will require landscaping features, permeable surfaces and minimal impact on existing flood defences with interceptors. Developing the water's edge will deliver on Policy S.OWS2; in particular by improving accessibility and way-finding; to and along water spaces to maximise opportunities for public use and enjoyment in the site and beyond.

In addition to land based mobility infrastructure the canals and Thames are an opportunity for new connections across Towerhamlets. Policy S.OWS1 Creating a network of open spaces the proposal will be required to provide or contribute to the delivery of an improved accessible, well-connected and sustainable network of open spaces, that will include the canals and the adjacent ; North Dock, Blackwall Basin and Poplar Dock Marina.

The red brick building is 200 Metres wide and 15m away from Crossrail Place. The distance between Canary wharf and Billingsgate is 45 across North Dock. The River creates a barrier between these two places, therefore the site requires a bridge, otherwise it's a 5 to 10 minute walk around.

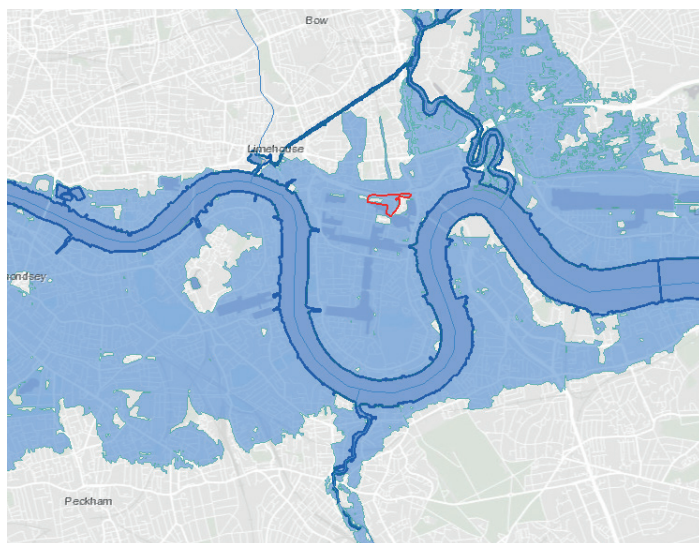


Figure 2.7: Map showing the flood zone 3

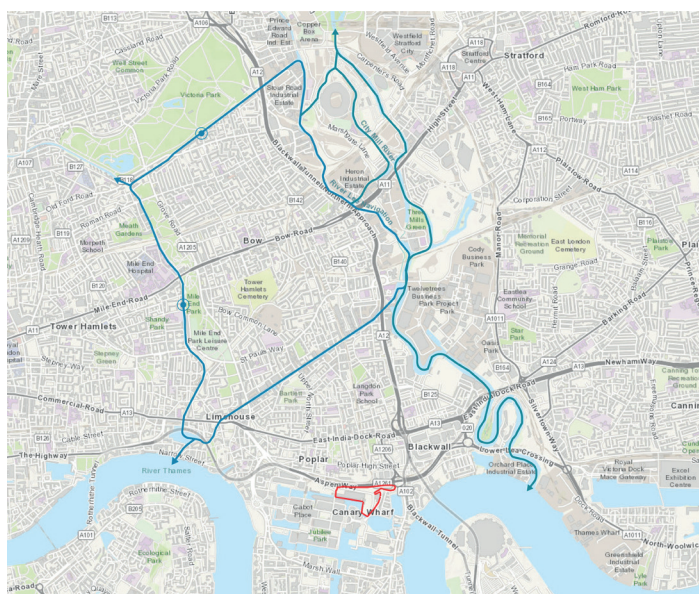


Figure 2.8: Map showing the river canals that flow near the site.



Figure 2.9: Image showing the river located between Billingsgate and Canary Wharf.

Policy Response

These policies were taken into consideration for the proposed Billingsgate Green and Blue network Master-plan.

Tower Hamlets Local Plan, 2031

Policy S.OWS1: Creating a network of open spaces

Delivering an improved network of green grid links in line with the Green Grid Strategy to enhance access to key destination points (town centres, community facilities and publicly accessible open spaces) and to and along water spaces, as well as provide ecological corridors for wildlife

Policy S.OWS2: Enhancing the network of water spaces

Improving accessibility and way-finding to and along water spaces to maximise opportunities for public use and enjoyment

Policy D.OWS3: Open space and green grid networks

Development should contribute to the delivery of new publicly accessible open space on site which should be well-connected and way-marked to other open spaces, in accordance with the Green Grid Strategy and Open Space Strategy

Policy D.OWS4: Water spaces. Development

Development adjacent to the borough's waterspaces is required to enhance the area's links with the water space and contribute to the delivery of continuous walkways, canal towpaths and cycle paths

Response



DO3: DA1

Increased play provision, particularly for teens, will be implemented to encourage interaction and increase physical activity among young people.



DO3: DA2

New open green spaces will be strategically located to connect to residents as well as the wider green network of East London.



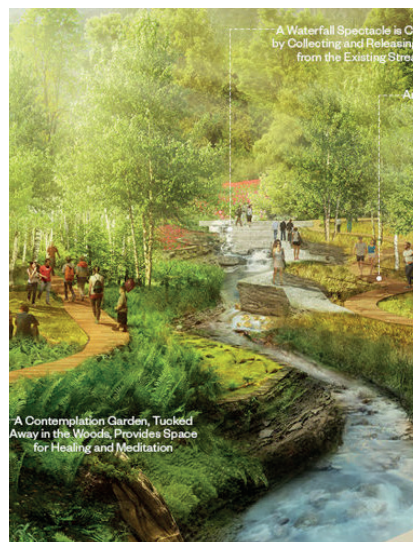
DO3: DA3

Considered landscaping will be planted alongside busy transport corridors to help mitigate the impacts of noise, air and visual pollution.



DO3: DA4

A fully inclusive landscaping strategy will be implemented, designed to the 8-80 model to activate the green spaces and water fronts, with a full sensory experience.



DO3: DA5

Incorporate climate resilience through landscape-led interventions including the implementation of SuDS and permeable surfaces.

Design Response



Figure 3.0: Green and Blue Network Design Response

Public Open Space

The network of public open spaces includes a sizable, multipurpose park that is south of the site and incorporates play features designed to promote interaction amongst young people. The listed building created the opportunity for the development of a square, which acts as a node on the site. This enhances the public realm and invites people to the site. Additionally, a public square is close by the market. This area is designed to entice visitors to remain after they have visited the market. It makes it possible for residents of Canary Wharf and Poplar to re-connect.

Also, the presence of steps activates the water frontage. The river's depollution presents a chance to develop aquatic activities that will further enliven the neighbourhood.



Figure 3.1: Play space located near the busy road.



Figure 3.2: Steps to activate water frontage

04 Transport Links & Urban Mobility

Roads

Following a comprehensive analysis of the existing Site, a number of weaknesses in respect to connectivity have been identified. Firstly, there are many fast moving, arterial roads that surround the Site and a lack of safe, pedestrian connections, particularly from North to South, act to sever the Site from the facilities and services found in neighbouring Poplar. At present, the only two route options for pedestrians wishing to visit Poplar are at ground level, negotiating the fast-moving traffic and blind junctions connected to the roundabout, or via the underpass, which feels particularly undesirable at night to many. A lack of safe, pedestrian crossings and the prevalence of high speed roads currently discourage pedestrians and support a car-centric neighbourhood.

Aspen Way, a six lane highway that borders the Site to the North, is a particularly busy and fast-moving road that produces high levels of noise and air pollution. The Local Plan has identified this road, along with the large roundabout that sits to the North East of the Site, to have some of the poorest air quality levels in Europe. A lack of vegetation on the Site amplifies these effects which will need to be remedied within the new master plan.

Site Permeability

Due to the current use of the Site, there are only two entrance points. This lack of permeability, along with the changes in height along the northern and eastern boundaries, restricts potential options for the new master plan. However, with pedestrian-priority and micro-mobility being fundamental to the new design, a lack of current vehicular connectivity will not prove to be a great threat. In addition, such prioritisation of sustainable travel choices such as walking and cycling is supported by the Tower Hamlets Local Plan Policy S.TR1.



Figure 3.3: North dock acting as a barrier between the site and Canary Wharf



Figure 3.4: The current, unsafe connections between Canary Wharf and amenities at Poplar.

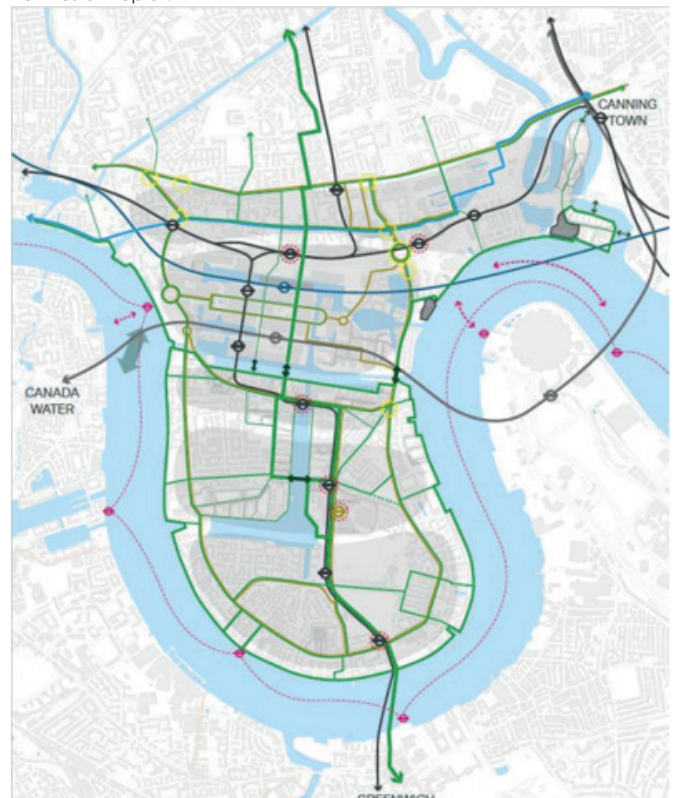


Figure 3.5: Isle of Dogs Mobility Map

Public Transport Connections

Despite the borough's lacking pedestrian connections, the Tower Hamlets Local Plan 2031 highlights the area's 'excellent transport links via tube, rail and bus to the City of London, Stratford, Greenwich' and other infrastructure such as London's many airports. This level of connection brings immense value to the Site and the master plan must ensure that this value is harnessed and maximised. However, Tower Hamlets has the highest levels of child and pensioner poverty in England and despite public transport being achievable to many, there is still a large percentage of the population to whom it remains unaffordable. Therefore, the new neighbourhood must prioritise pedestrian connectivity instead of simply relying on public transport connections to support those on the lowest incomes, as stated within the vision statement that seeks to support and redistribute wealth creation within the community.

Local Policy Response

Many of the priorities identified by the Isle of Dogs and South Poplar Area Planning Framework relate to the current lack of connectivity between the North and South of the borough. These key priorities include:

- The need to safeguard and improve air quality.
- The need to promote healthy lifestyles and in particular address obesity and levels of physical activity.
- The need to tackle deprivation, including areas with existing deprivation linked to poor accessibility to key services, facilities and economic opportunities.
- The need to ensure that community facilities and services are appropriate and accessible to users in order to meet the diverse needs of residents and workers.

Policy D. DH2 - Attractive streets, spaces and public realm.

Development is required to contribute to improving and enhancing connectivity, permeability and legibility across the borough, ensuring a well-connected, joined-up and easily accessible street network and wider network of public spaces.

Policy S.TR1 - Sustainable travel

Travel choice (including connectivity and affordability) and sustainable travel will be improved within the borough and to other parts of London, and beyond. A) prioritise the needs of pedestrians and cyclists as well as access to public transport, including river transport, before vehicular modes of transport.

Sub Area 4 - Isle of Dogs and South Poplar Vision

New and enhanced connections across strategic roads, docks and the River Thames, together with public realm improvements, will enhance walking and cycling across the area.

Policy S.SG1 - Delivering Sustainable Places

Improve connectivity and travel choice by contributing to/ delivering new and improved high quality legible routes and public realm to reinforce north-south and east-west connectivity and accessibility in the area.

Sub Area 4 - Isle of Dogs and South Poplar Objectives

Address severance across the area and to surrounding areas through connectivity enhancements as well as new linkages over the waterways and road network.

Response



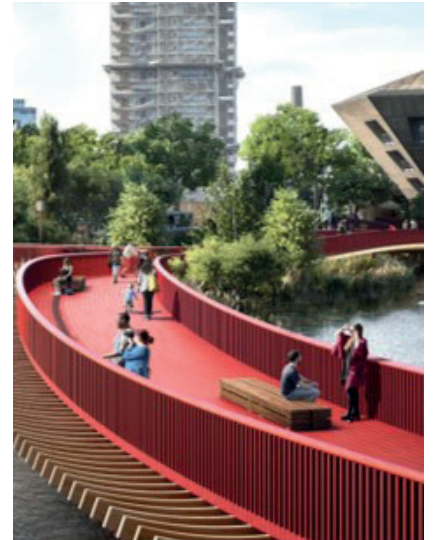
DO1: DA3

New micro-mobility routes to be constructed to connect the site to its wider context, in particular the communities, facilities and transport connections located to the North of Aspen Way.



DO1: DA5

Car free streets will encourage greater use of the public realm, creating a safe and accessible environment that affords high levels of connectivity to surrounding communities and services.



DO2: DA2

A new footbridge will be built to connect the site to Canary Wharf, encouraging wealthy workers into the new central food market during lunchtimes and after work.

Design Response

In response to the aforementioned weaknesses and threats imposed by the current lack of pedestrian and urban mobility surrounding the Site, a set of design objectives and associated design actions have been formulated.

To improve the Site's connectivity to its surrounding context, new pedestrian and micro-mobility routes have been designed. In response to local policy, these routes will focus on North/South connections and will include connections to planned walkways spanning Aspen Way as well as the construction of a new footbridge between the Site and Canary Wharf. Such design actions will allow residents to access existing services within Poplar as well as encouraging affluent workers and residents into the Site from the South, supporting a mixed community and the redistribution of wealth, some of the fundamental aspects of the neighbourhood's new mission statement.

Proposed Pedestrian Connectivity

The master plan is built upon the principals of pedestrian priority to afford residents easy access to the social and economic opportunities that the new development, along with neighbouring communities, provide. A highly permeable street network allows residents and visitors to quickly and easily access all areas of the Site on foot, whilst being safe from fast moving, unpleasant traffic.

Vehicular Streets

Whilst the Site is ideally located within close proximity to a number of high quality public transport links, the master plan recognises that some households still require the assistance of a car - for example those with limited mobility or very young children. Therefore, the new master plan has been designed as a low traffic neighbourhood where vehicular access roads are restricted to the peripheries of the development whilst under croft parking has been allocated to a select number of buildings. Pedestrianisation of the central quarter ensures safer streets for pedestrians as well as a higher quality environment, owing to greatly reduced levels of noise and air pollution.

A single access road runs East/West (see Vehicular Streets Map) through the heart of the development to allow access for goods and delivery vehicles as well as emergency services. This road is only accessible to the former from 10pm - 6am daily when the street will be least busy, therefore causing minimal impact to pedestrians.

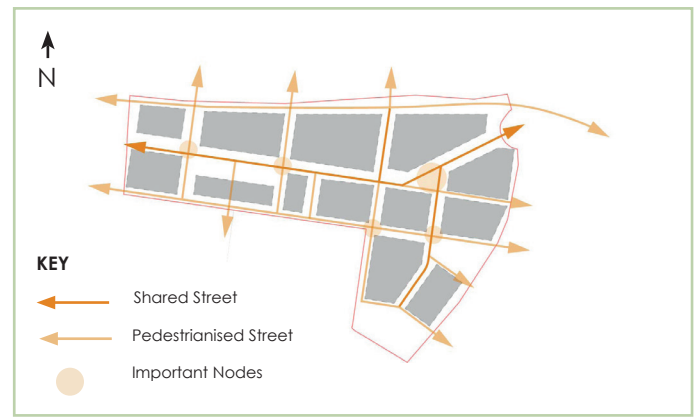


Figure 3.6: Shared Streets Map



Figure 3.7: Shared Streets Map



Figure 3.8: Pedestrianised streets promote safe movement & exercise

Limiting and discouraging car ownership supports local policy that emphasises the need to promote micro-mobility methods that in turn promote greater health and activity among new and existing populations. Moreover, by decreasing reliability on cars and increasing opportunities to walk, local residents can save on the ever increasing costs of car ownership, yet another way that the design is seeking to rebalance wealth within the wider community.

Pedestrianised Streets

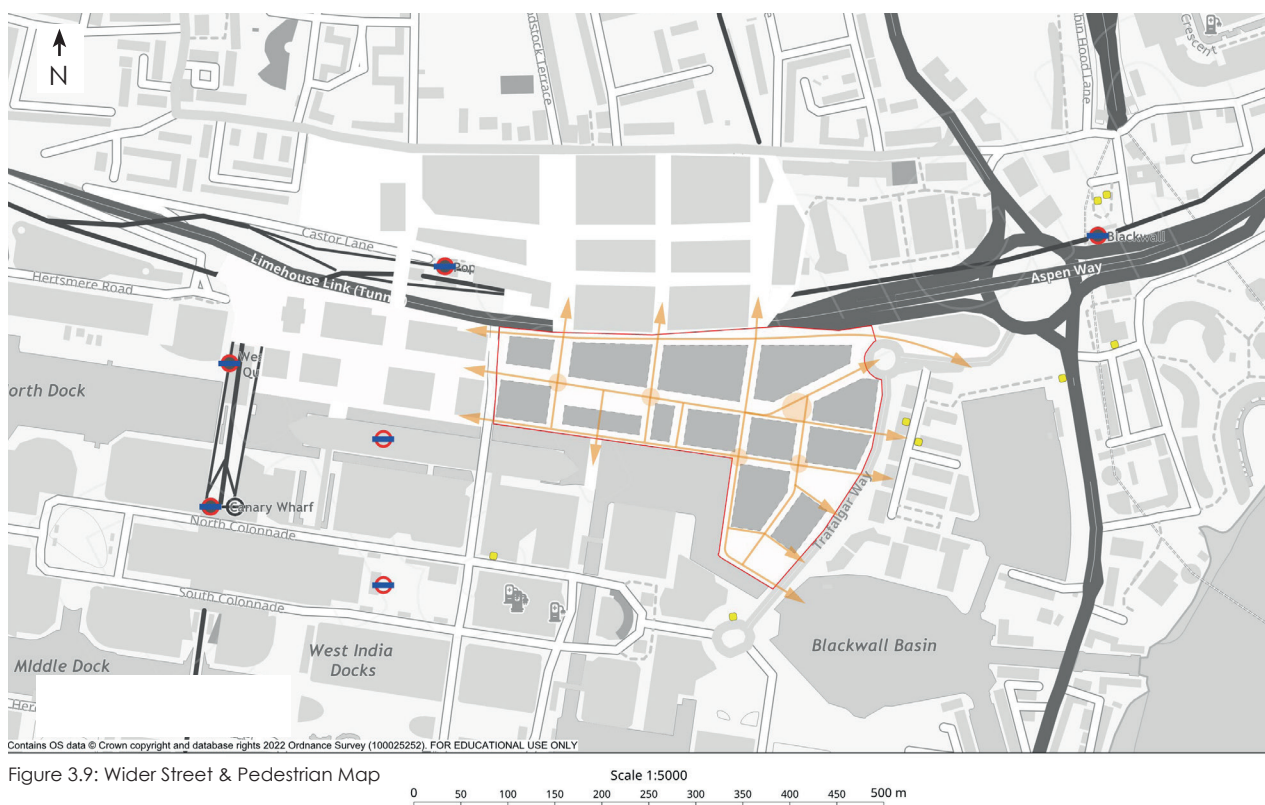
A majority of streets are pedestrianised (as shown in light orange on the Pedestrian Routes Map) with a grid system implemented to maximum permeability.

Streets connect to each corner of the Site as well as the many planned bridges and walkways that will lead into the upcoming, new developments that border the Site. Connections to neighbouring communities are essential to achieving greater social connection and a stronger social fabric between residents which is essential for integration in such a diverse and quickly developing borough (the fastest growing in London).

Multiple new connections have been created that link the East of the Site to existing, neighbouring communities. These pedestrian connections are essential in stitching the new development into the existing context, including establishing a continued connection to the blue network along the waterfront.

Moreover, as is highlighted by the wider pedestrian routes map, a majority of current bus stops are located to the East of the Site meaning these improved local connections will aid in improving wider connectivity. Making use of existing mobility methods is highlighted within Policy S.SG1.

A new footbridge will lead from the South of the Site into Canary Wharf and this design action is integral to achieving the mission of redistributing wealth within the area. Tower Hamlets has the highest wealth disparity of any London borough with the wealth of Canary Wharf failing to filter down into surrounding communities. By providing direct access from this business hub into the market heart of our development, small businesses and enterprises can access a new, affluent customer base.



Nodes

The grid network of streets come together to form a series of nodes that lead visitors through the development and towards the retail hub, market and important green open spaces. This way finding supports increased footfall to local businesses as well as providing easy access to quality public spaces for neighbouring residents. All nodes can be accessed from at least one pedestrianised street (see Shared Streets Map) and offer opportunities to sit and stay, increasing the desirability of the space and opportunities for further social interaction and connection.

Cycle Connections

We have identified bicycle routes as a low cost alternative to public transport (supported by council backed bike share/purchase schemes for local people). Safe cycling routes are essential for supporting movement within the wider community and allowing residents to travel further distances to seek employment and education opportunities. Such intervention is addressed within the Local Plan with deprivation in local areas linked to poor accessibility to key services, facilities and economic opportunities.

The cycle routes map highlights the lack of current cycling infrastructure to the South of Aspen Way and the opportunities to connect to wider routes which run East along the Northern bank of the Thames.



Figure 4.1: Streets promote movement into the vibrant market, heart of the site.



Figure 4.2: Streets will prioritise pedestrians and cyclists.



Figure 4.3: Dedicated cycle routes connect to the new neighbouring developments

Proposed Connections

The proposed cycle routes will run East/West through the Site and seamlessly connect to the new development at North Quay. Routes will be clearly marked and mature vegetation will provide protection from the elements as well as the associated pollution from Aspen Way.

In response to the need for increased North/South connections, and as stated within Design Objective 1, Design Action 3, we have further proposed a link from the Site into the new development to the North. The street network has been designed to follow the block structure of these new residential blocks to allow for easy access to the facilities offered within neighbouring Poplar centre.

In addition, a new link has been proposed beyond the Site to the South. The cycle route would connect with those within our Site and trace the existing vehicular road South into Canary Wharf. This is an important element to connecting the Site with the multiple public transportation hubs within Canary Wharf, including the DLR, Elizabeth and Jubilee lines, and the Thames Clipper (distances illustrated on the Cycle Routes Map), all of which support local policies including S.TR1 Sustainable Travel and the Sub Area 4 Objectives.

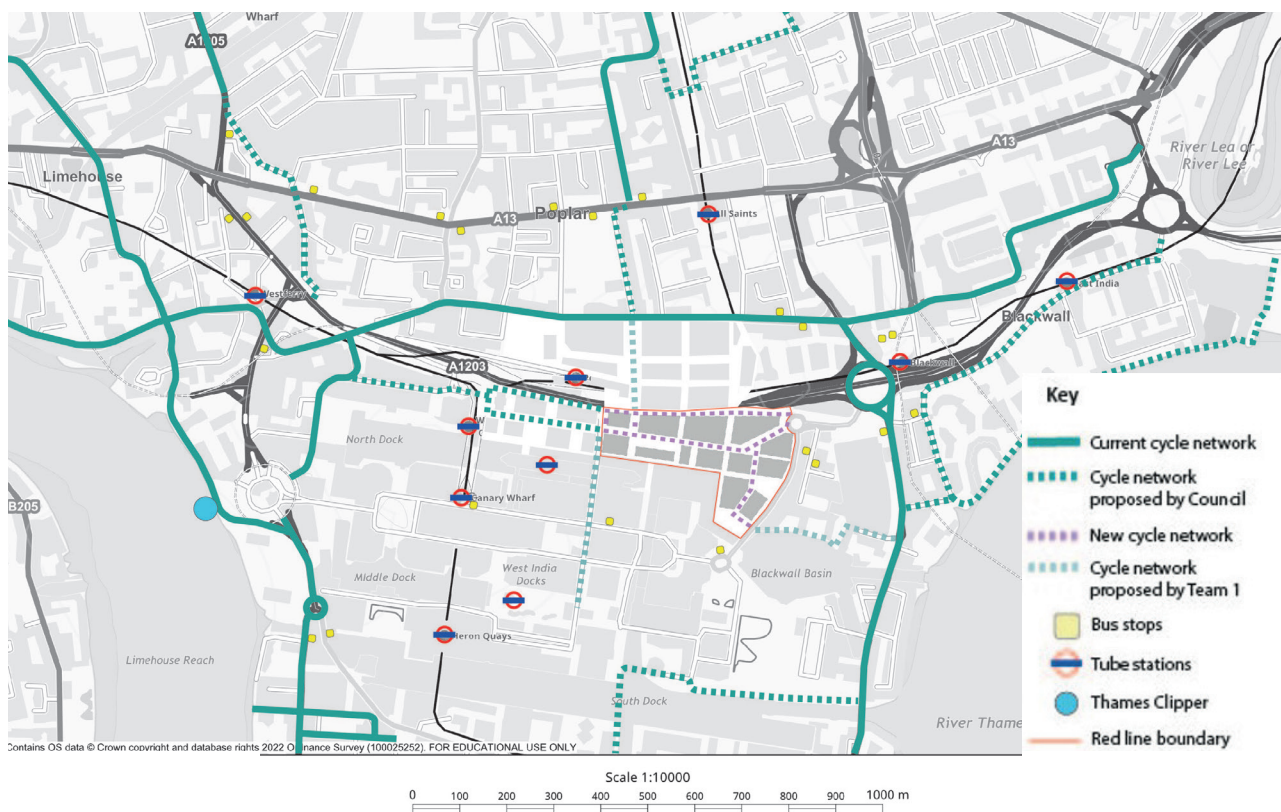


Figure 4.4: Cycle routes map

Street Sections

Street Type A is the standard street typology based on manual for streets (2007) lightly trafficked streets. The traffic section (8m) allows two forms of vehicle through but at closer proximity as a traffic calming measure, whilst allowing cyclists along the outer edges. Parking for delivery vehicles and/or emergency vehicles is also allotted in this width.

Street Type B, in juxtaposition to Street Type A the kerb is absent. In a street with a shared surface pedestrians and vehicles share the same surface at the same level. Shared surface schemes work best in relatively calm traffic environments (Manual for Streets, 2007,p81) The key aims are; allow people to feel encouraged to play, interact and ease movement across the site. Also to reduce traffic speeds, deter cars from moving through the area and make right of way negotiable.

However to prevent those with cognitive disabilities or are based problems from feeling unsafe or making the street uninterpretable different types of permeable material will be used to identify a “kerb” and “road”.

Street type C has the same principles as Street Type B however, to best allow waterside walks a shorter width has been allocated - once street furniture and planting is added - the “kerb” will feel more enclosed and therefore a nice space to walk. The majority of traffic on this type of street is pedestrians, although it also provides access for emergency vehicles.

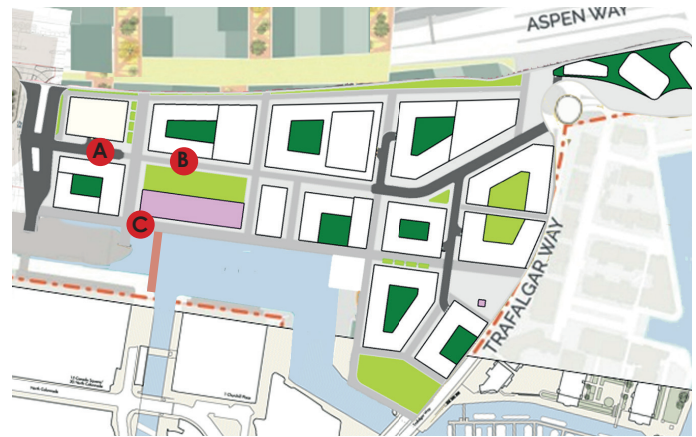


Figure 4.5: Map highlighting street sections

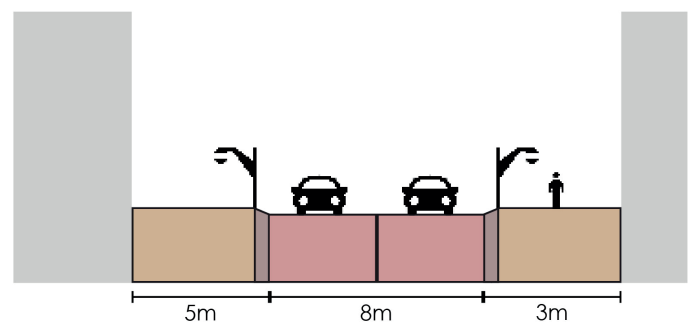


Figure 4.6: Street Type A

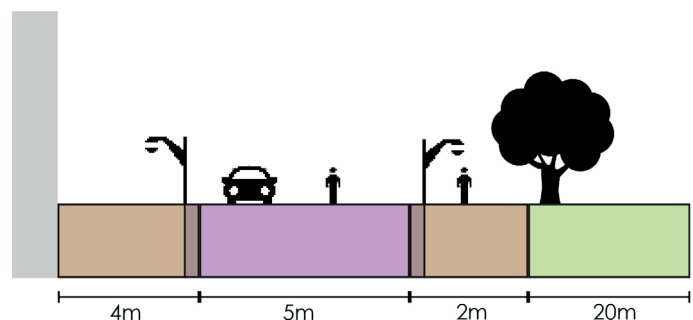


Figure 4.7: Street Type B

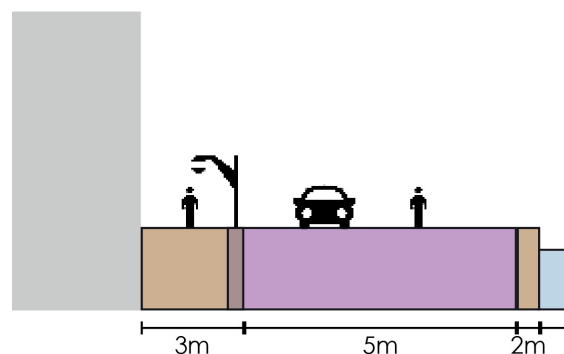


Figure 4.8: Street Type C

05 Built Environment Analysis

The land use map shows that the site divides two distinct different developments. On the Southern side there is Canary Wharf which has mainly commercial and retails land uses. Compared to north of the site (Poplar) where is mainly residential.

The DLR & Aspen Way are huge barriers from South Poplar to Canary Wharf, hindering connectivity to the site. There is limited pattern to connect residential units from South Poplar due to the barriers created by the railway and major road.

Canary Wharf is designed with large blocks of glass towers, with the juxtaposition of Poplar including small-medium scale residential homes and apartment blocks with beige bricks. The images to the right show Poplar and Canary Wharf are disjointed, which we intend to heal through our design.



Figure 4.9: Canary Wharf's, tall, glass buildings



Figure 5.1: Contrast between buildings in Poplar and Canary Wharf

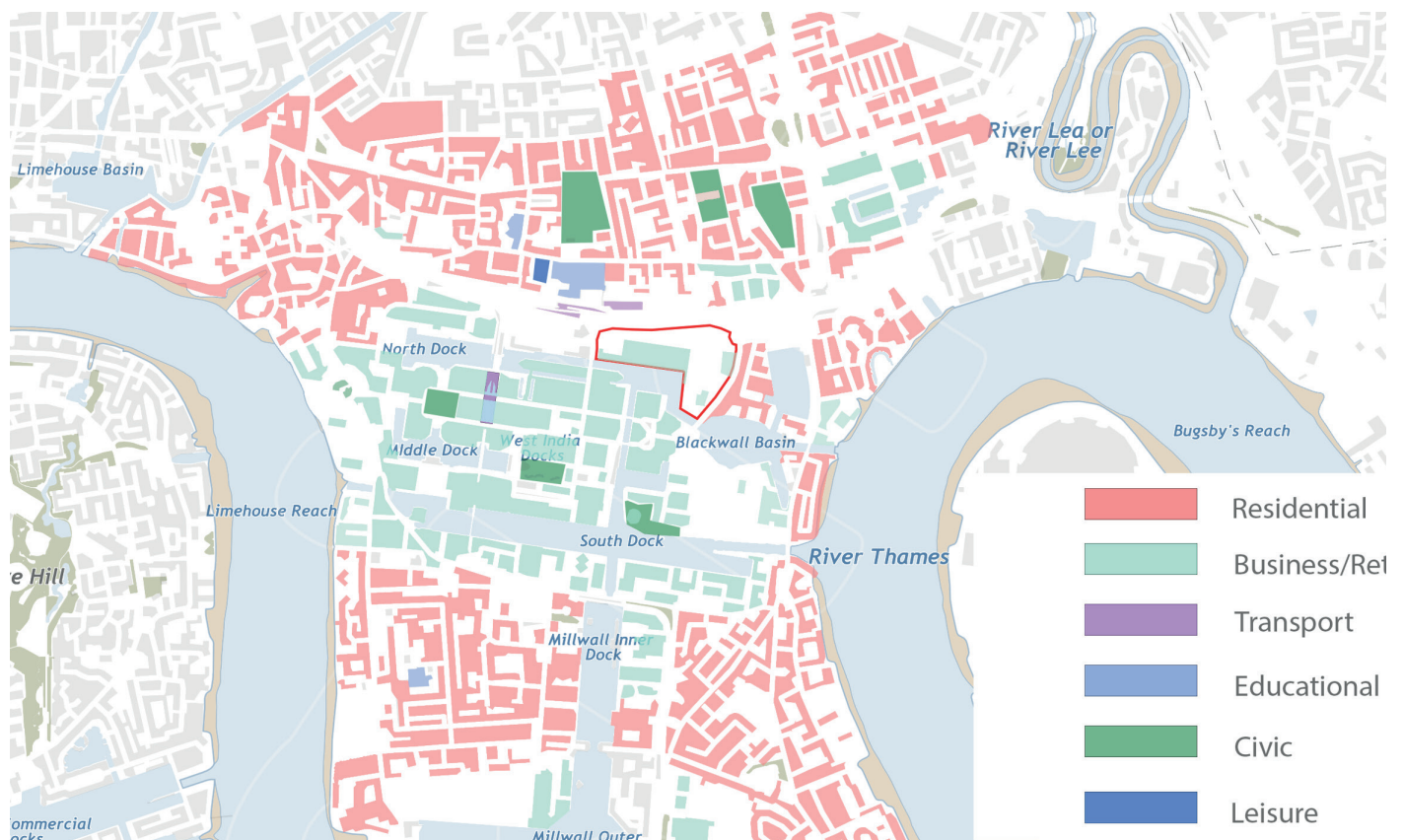


Figure 5.2: Existing Land Use Map

Heritage

The Grade 2 Accumulator tower on the West Side of Poplar Dock is built of stock brick with red brick dressings. Serving the dockside vanes as a power source promotes opportunity for better energy. Though this building creates constraints for the new development, it also creates an opportunity for the creation of a node within the site.

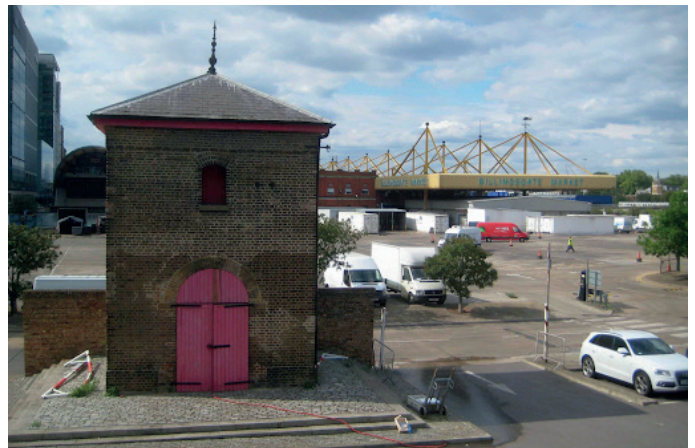


Figure 5.3: Listed building on site

The Red Brick Warehouse has existed on the site since 1910 and has a unique red brick facade facing the open dock. Its height, material composition and position make it a prime spot for a market and potential icon for the site. It is significant as it is the last of three warehouses that once supported the West India Dock.



Figure 5.4: Red Brick Warehouse attached to Billingsgate Market

Policy Response

The following policies were taken into consideration upon the development of the Masterplan.

Tower Hamlets Local Plan, 2031

Policy S.H1: Meeting housing needs

All housing must be well-designed, sustainable and take appropriate account of cumulative development. Developments are strongly encouraged to demonstrate this through meeting the Home Quality Mark standard.

Policy D.H2: Affordable housing and housing mix

Development is required to maximise the provision of affordable housing in accordance with a 70% rented and 30% intermediate tenure split.

Policy D.TC7: Markets

Development proposals impacting existing markets will only be supported where:

- they demonstrate that the overall quality of the market and public realm will be improved

Policy D.EMP2: New employment space

Within major commercial and mixed-use development schemes, at least 10% of new employment floorspace should be provided as affordable workspace.

Response



DO1: DA1

50% of all new housing units to be allocated as affordable social housing, delivered in the form of a mixed community with equal access to all communal facilities.



DO1: DA4

The former market will be re-developed into a new central hub to host food stalls, cultural celebrations and community events.



DO2: DA3

A wide independent retail offering will be encouraged via incentives to local business owners to encourage residents to shop local and build loyal and lasting relationships.



DO4:DA1

The construction of a floating, hydroponic, vertical garden will enable the onsite production of food, whilst supporting ongoing research and education into this new technology.



DO4: DA2

Biophilic buildings with productive green roofs will act as a visual reminder of the neighborhood's sustainable credentials and aspirations to the high rise buildings and investors within neighbouring Canary Wharf.



DO4: DA3

Buildings will be constructed using modular units and sustainable materials to prove that alternative methods can remain financially viable whilst delivering a high quality and individual neighbourhood.

Design Response

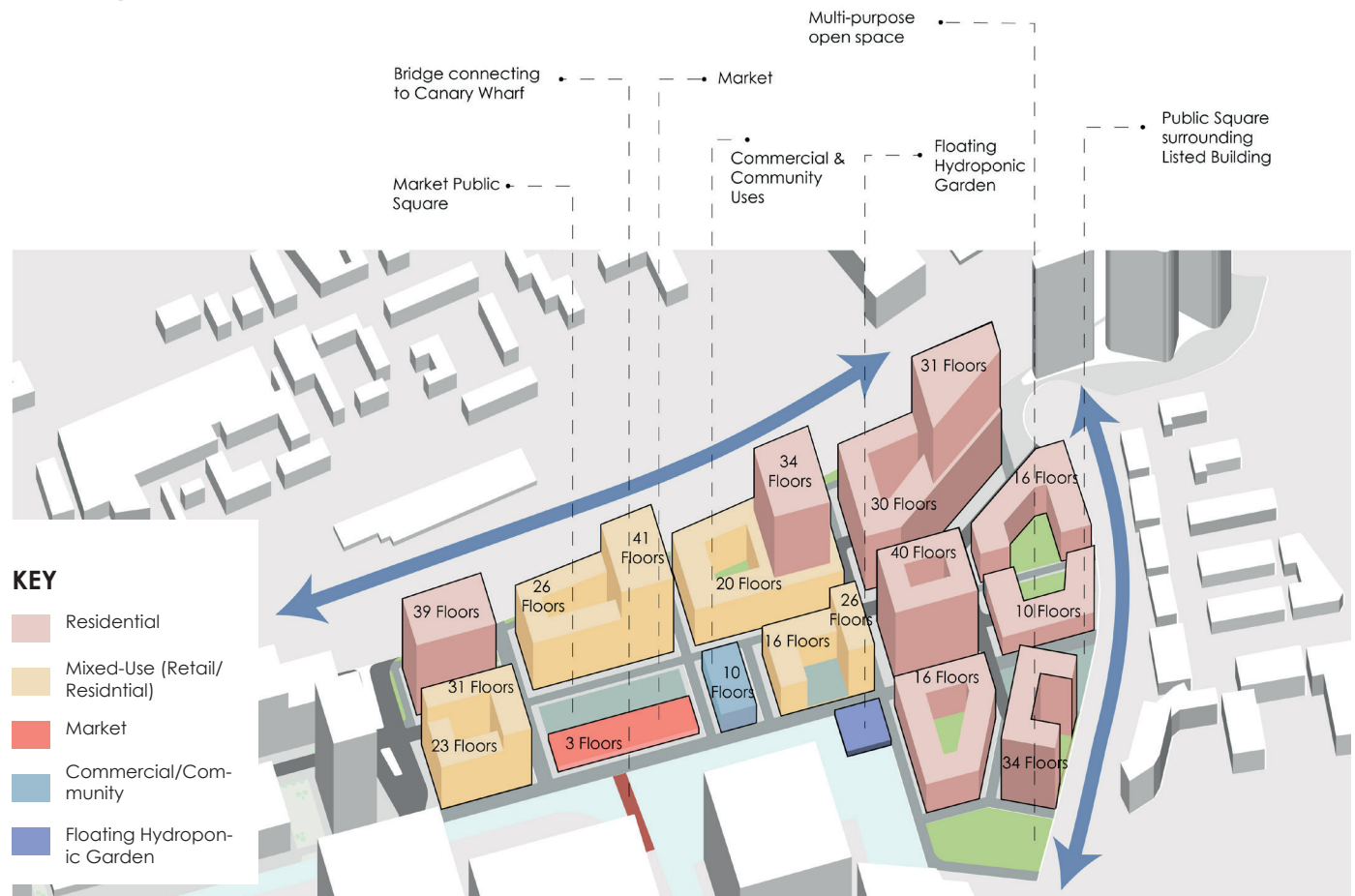


Figure 5.5: Proposed Land Use Map

Proposed Land Use

The types of uses proposed on the masterplan respond to the site's location and socio-economic profile to heal the community. The scheme shows a balance of uses including residential, retail, commercial/ community uses for small start-ups and co-working spaces and a number of public open spaces.

The yellow blocks indicated mixed uses including residential and retail. The location of the blocks are along the main road. Retail uses will be located on the ground floor levels of the buildings creating active frontages whilst also encouraging more users to this area of the site.

There are predominantly residential uses to the east of the site, adjacent to an existing residential development.

From the map you can see that the heights of the building decrease to ensure light can travel through. There is a dedicated block highlighted in blue for commercial and community uses in which spaces can be rented out to small start-ups and as co-working spaces. The block is located along the waterfront next to the market.



Figure 5.6: Mixed-Use development with vibrant public realm

Building Heights

In order to optimise the potential of the site, the site will feature building heights ranging from 9m to 183m. This is important for creating a relationship with the existing developments. The aim is to make the Billingsgate site a central point to connect two different communities.

Billingsgate Market

We intend to retain part of the Billingsgate market, to conserve its historical value the building will remain as a market. The space will be offered to local small/medium sized businesses helping to build stronger ties to Poplar and to begin healing the community.

Hydroponic Garden

The floating hydroponic garden is located along the waterfront, which will provide the production and distribution of food for local communities.



Figure 5.7: Floating Hydroponic Garden

Land Use & Proposed Floor Space

Table 1: Residential

Block	Bace Area (sqm)	Storey	Total Floor (sqm)	TFS - Service Area (30%) (sqm)
A	1,325.08	39	51,678.12	36174.68
B	1,381.03	14	19,334.42	13534.09
C	1,728.69	40	69,147.6	48403.32
D	1,543.86	31	47,859.66	33501.76
E	1,758.6	16	28,137.6	19696.32
F	1,608.05	10	16,080.5	11256.35
G	1,453.51	40	58,140.4	40698.28
H	2,266.25	16	36,260	25382
I	1,238.34	34	42,103.56	29472.49
Total	14,303.41	240	368741.86	258119.30

Table 2: Mixed-Use

Block	Base Area (sqm)	Storey	Total Floor (sqm)	TFS - Service Area (30%) (sqm)
A	604.34	23	13,899.22	9,729.87
B	1,048.38	31	32,499.78	22,749.84
C	1,350.74	26	35,119.24	24,583.46
D	1,262.44	41	51,760.04	36,232.02
E	3,843.22	20	76,864.4	53,805.08
F	880.71	16	14,091.36	9,863.95
G	561.64	26	14,602.64	10,221.84
Total	9,551.47	183	238,837.28	167,186.09

Table 3: Commercial & Community Space

Block	Base Area (sqm)	Storey	Total Floor (sqm)	TFS - Service Area (30%) (sqm)
A	785.59	10	7585.9	5310.13
Total	785.59	10	7585.9	5310.13

Table 4: Market

Block	Base Area (sqm)	Storey	Total Floor (sqm)	TFS - Service Area (30%) (sqm)
A	1567.09	3	4701.27	3290.88
Total	1567.09	3	4701.27	3290.88

Table 5: Hydroponic Garden

Block	Base Area (sqm)	Storey	Total Floor (sqm)
A	620.13	1	620.13
Total	620.13	1	620.13

Table 6: Residential Tenure

	1 Bed	2 Bed	3 Bed	4 Bed
Total Floor Space (sqm)	77,436	129,060	25,812	25,812
Affordable (50%)	38,718	64,530	12,906	12,906
Market	38,718	64,530	12,906	12,906

06 Development Context

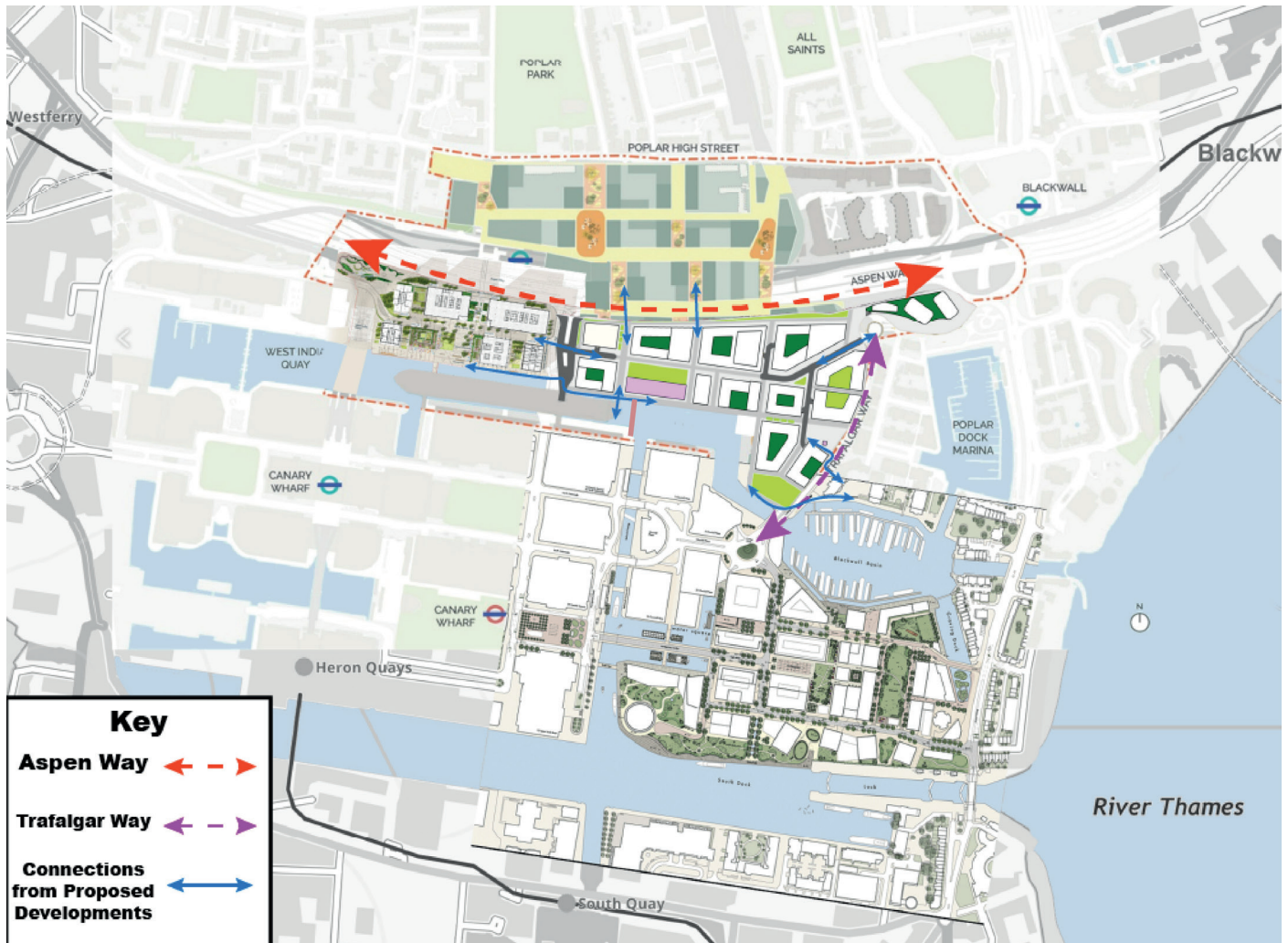


Figure 5.8: Development Context Map

New development is arising around the Billingsgate Market Site, which will help inform the layout and identify the pattern of street structure.

The Proposed development of North Quay is located to the left of Billingsgate market. North Quay is proposed to be a mixed use site offering residential units, business/ retail space and offices. The site connects well to existing transport infrastructure and will connect well to the Billingsgate Market.

The proposed development of Wood Wharf is a 23 acre site in Canary Wharf, London. It is currently under construction to provide offices, residential homes and retail space.

There is a proposed development in South Poplar which will create a raised deck and a bridge extending directly into our site.

We have identified patterns within these proposed developments, which will contribute to the form of Billingsgate Market block structure.

07 Masterplan



Figure 5.9: Final Masterplan

Placemaking Strategies



Street Network & Connectivity

- Safe, pedestrianized streets with natural surveillance.
- New, legible cycle routes
- Well-connected streets within the site and to the wider surroundings.
- Limited car access within the site
- Proposed bridge connecting to Canary Wharf.



Vibrant Public Realm

- Activate water frontages
- Integrate green network within residential areas
- Attractive public spaces that invite people to the site.
- Multi-purpose open space network.