CANARY WHARF
GROUP PLC

NQ.PA.09

North Quay
Environmental Statement
Non Technical Summary

Trium
July 2020

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INTRODUCTION

1 Canary Wharf (North Quay) Ltd (part of Canary Wharf Group and hereinafter referred to as 'The Applicant') is seeking Outline Planning Permission (with all matters reserved) for the redevelopment of an area of land in the London Borough of Tower Hamlets located to the to the south of Aspen Way and north of Crossrail Place (Figure 1). In addition, the Applicant is submitting an application for Listed Building Consent in connection with the Outline Planning Application, for works relating to a listed quay wall which lies beneath the Site.

2 The Site covers a total area of approximately 3.28 hectares and falls within the administrative boundary of the London Borough of Tower Hamlets (hereinafter referred to as 'the Site').

3 The Site is mostly cleared, having previously been used as a works site for the construction of the Canary Wharf Crossrail Station and an over station retail development which is located immediately to the south of the Site in West India North Dock. There are however some temporary uses onsite, namely the Tower Hamlets Employment and Training Service, WorkPath, and advertising structures which will be demolished as part of the Outline Planning Application. The most southerly area of the Site consists of part of the West India North Dock. The Site location is shown on Figure 1 and Figure 2.

4 The Site has a current planning permission from January 2007, referred to as the '2007 Consent'. The 2007 Consent comprised two office towers with a link building between them. The scheme also included three lower levels to provide retail, car parking and servicing below ground. New access roads were proposed into the Site from Aspen Way on the east side of the Site and from Hertsmere Road on the west side of the Site. The 2007 Consent was implemented in 2017. The associated Listed Building Consent for works relating to a listed quay wall and false quay was also implemented in 2017. In April 2017, applications were submitted for a major office-led, mixed use scheme at the Site. The 2017 Proposed Scheme's application was however withdrawn by the Applicant before determination.

5 This document is a Non-Technical Summary of the findings of the Environmental Impact Assessment (also referred to as EIA) which are reported on in the Environmental Statement. This Non-Technical Summary has been prepared to explain the new mixed use development that is being applied for under the Outline Planning Application ('Proposed Development'), the likely significant beneficial and adverse environmental and socio-economic effects of the Proposed Development and the measures proposed to mitigate or avoid adverse impacts and protect the environment. The Environmental Impact Assessment has identified the effects that could arise during the enabling and construction works and when the Proposed Development is completed and in use.

6 As the Applicant is seeking Outline Planning Permission, specific details are not set out as to how the Proposed Development will come forward in regards to the scale, layout, design and appearance of the buildings. Instead three documents are provided which are referred to as the 'Control Documents' which define and describe and limit/control the Proposed Development that is brought forward as part of Reserved Matter Applications. The Control Documents are – (1) the Development

Specification; (2) the Parameter Plans; and (3) the Design Guidelines.

7 Within the Outline Planning Application, the Applicant is also seeking flexibility in which different use types would come forward to meet the needs of the future market. Therefore, a range of uses have been provided within the Development Specification, which include retail, residential, hotel, serviced apartments, student accommodations, business use / office space, community and sui generis uses.

8 The Environmental Statement has been prepared in accordance with the relevant regulations relating to Environmental Impact Assessment, in particular the Environmental Impact Assessment Regulations (Town and Country Planning (Environmental Impact Assessment) Regulations 2017 as (amended in 2018)).

Figure 1 Site Location

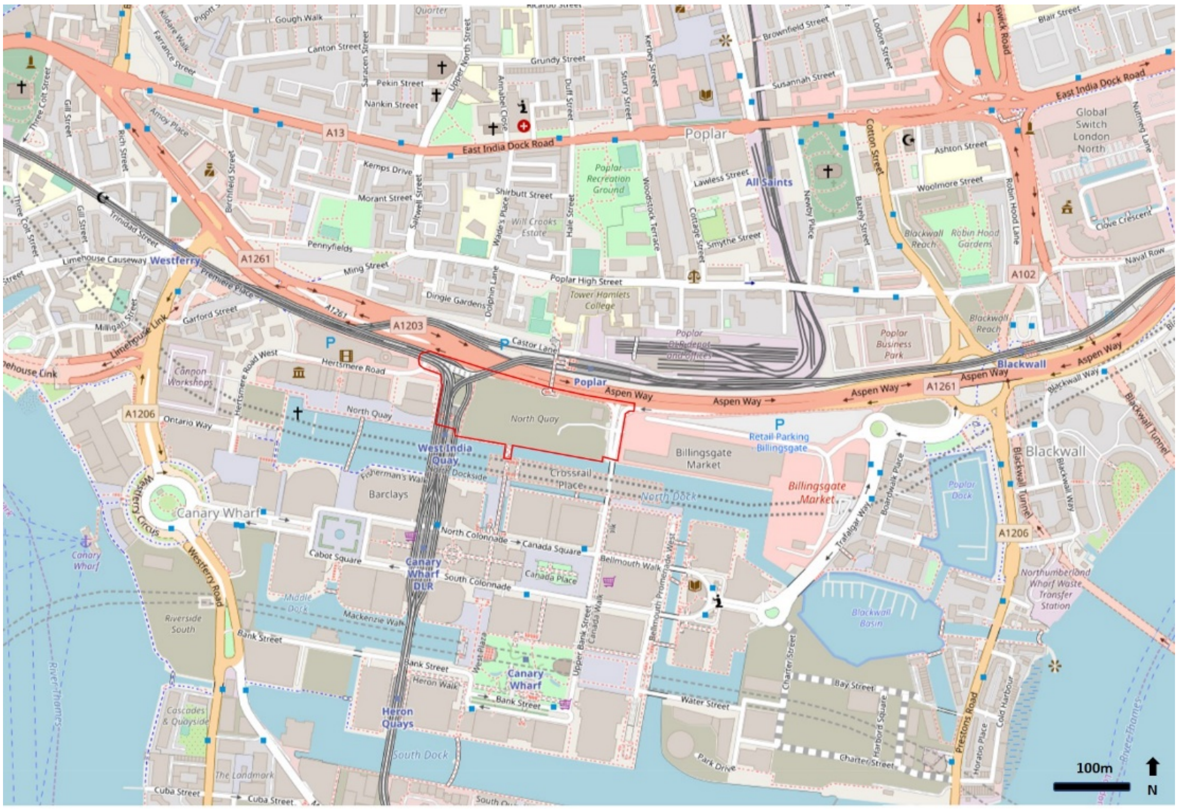
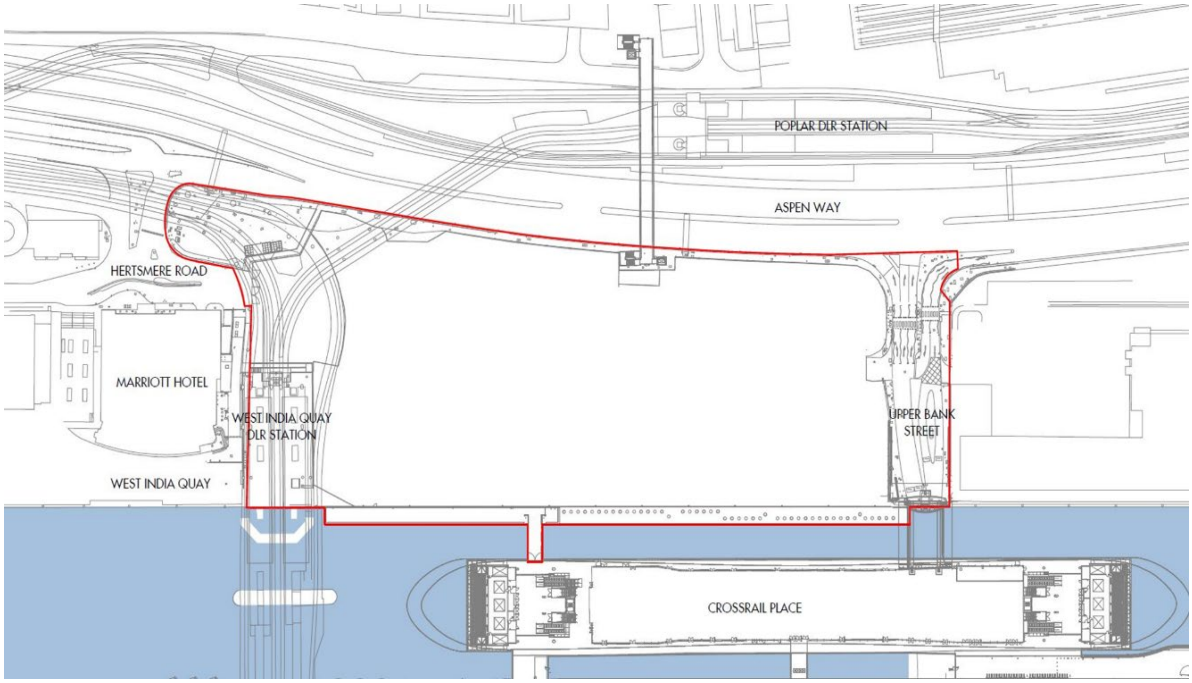


Figure 2 Site Boundary



Purpose of the Environmental Impact Assessment and Non-Technical Summary

9 An Environmental Impact Assessment is a process that allows the beneficial and adverse (positive and negative) (and sometimes neutral) likely significant environmental effects of certain projects on the environment to be identified and reported upon. This is required by law and helps the local authority understand the likely significant environmental effects of a new development when they make their decision on whether to grant planning permission for it.

10 Measures to protect the environment, otherwise known as 'mitigation measures' have also been identified as part of the Environmental Impact Assessment process.

11 Trium Environmental Consulting LLP has undertaken the Environmental Impact Assessment for the Proposed Development and has prepared the Environmental Statement and this Non-Technical Summary document.

12 The Environmental Statement is made up of a number of documents and so this Non-Technical Summary provides an overview of the Environmental Statement in non-technical language.

ASSESSMENT METHODOLOGY

Scoping

13 One of the first stages of the Environmental Impact Assessment process is referred to as 'Scoping'. Scoping identifies the possible likely significant environmental effects of a development and the technical topics that need to be investigated further as part of the next stage of the Environmental Impact Assessment process.

14 As part of the 'Scoping' process, Trium Environmental Consulting LLP prepared an 'Environmental Impact Assessment Scoping Report' which explained the proposed approach to the Environmental Impact Assessment. This was issued to the London Borough of Tower Hamlets (who are the local planning authority) on 13th December 2019.

15 The London Borough of Tower Hamlets issued their opinion on the scope of the Environmental Impact Assessment on the 7th February 2020. Following the receipt of the Scoping Opinion a meeting was held on the 6th March 2020 with the London Borough of Tower Hamlets to discuss the following: the Applicant's responses to the Scoping Opinion; the technical 'topics' to be included in the Environmental Statement; the assessment methodology; and to generally reach agreement on the approach to the Environmental Impact Assessment. Following this meeting further correspondence was then held with the London Borough of Tower Hamlets and internal officers as relevant on specific technical points. The Environmental Impact Assessment has been undertaken in accordance with the Scoping correspondence and Scoping meeting with the London Borough of Tower Hamlets (with full details of Scoping correspondence provided in ES Volume 3, Technical Appendices, Appendix: Introduction and EIA Methodology).

Environmental Impact Assessment Technical Topics

16 Several technical topics have been considered as part of the Environmental Impact Assessment process. The below lists all the technical topics considered. For some technical topics, initial research identified that no significant environmental effects would be likely and, on this basis, no further work or detailed assessment in relation to these technical topics was necessary as part of the Environmental Statement. However, stand alone reports for these topics are submitted as part of the Outline Planning Application as required and are listed below where relevant. Where significant environmental effects were considered likely, further detailed studies have been undertaken as part of the Environmental Impact Assessment (these topics are annotated in **bold**):

- **Socio-Economics;**
- **Health;**
- **Transport and Accessibility;**
- **Noise and Vibration;**
- **Air Quality;**
- **Wind Microclimate;**
- **Daylight, Sunlight and Overshadowing;**
- **Light Pollution;**
- **Solar Glare;**
- **Water Resources and Flood Risk;**
- **Townscape and Visual Impact;**

- **Built Heritage;**
- **Climate Change;**
- **Greenhouse Gas Emissions;**
- **Major Accidents, Vulnerability and Natural Hazards;**
- **Enabling and Construction Works;**
- Geo-environmental (Ground Conditions, Groundwater and Land Take and Soils) (Geoenvironmental Preliminary Risk Assessment);
- Archaeology (Archaeology Desk Based Assessment)**;**
- Ecology (Ecological Impact Assessment);
- Aviation (Aviation Safeguarding Assessment);
- Television, Radio and Mobile Telephone Reception (Radio and TV Interference Assessment); and
- Waste (Site Waste Management Plan).

Impact Assessment Methodology

17 The environmental impact assessment process is undertaken in a number of stages, with each technical topic assessment following the same process.

18 Firstly, the 'baseline' is identified. The baseline considers the existing conditions of the area where the Proposed Development will be located and includes an analysis of both the Site itself and the surrounding area.

19 Within the baseline conditions, a number of key environmental and socio-economic aspects are identified, which are defined as 'receptors'. The sensitivity of the receptors to change is also identified.

20 Where an area is subject to widespread, planned change, and/or rapidly changing, a 'future baseline' is established for some topics. This future baseline makes reasonable predictions (based on published information and professional knowledge / experience) of the likely change that may occur, across the area.

21 Then the impact assessment is undertaken with the impact of the Proposed Development being identified and the size of the impact (impact magnitude) is considered against the receptors. Impacts are identified during the enabling and construction works and for when the Proposed Development is completed and in use.

22 As the Applicant is seeking Outline Planning Permission, specific details are not set out as to how the Proposed Development will come forward in regards to the scale, layout, design and appearance of the buildings. Instead the three 'Control Documents' define and describe and limit/control the Proposed Development that is brought forward as part of Reserved Matter Applications. The Control

Documents are:

- Parameter Plans (sets of development plans which define the scale, layout, access and circulation and distribution of Development Plots and use types across the Site, which the Proposed Development must come forward within);
- A Development Specification (a document which defines the maximum and minimum amount of development and land use classes that could come forward across the Site by setting maximum and minimum floor areas); and
- The Design Guidelines (a document that provides sets of rules and codes which establish the design principles and sets out the way in which the future detailed applications (called Reserved Matters Applications) can be brought forward).

23 Within the Outline Planning Application, the Applicant is also seeking flexibility in which different use types would come forward to meet the needs of the future market. Therefore, a range of uses have been provided within the Development Specification, which include retail, residential, hotel, serviced apartments, student accommodations, business use / office space, community and sui generis uses.

Assessment Scenarios

24 As flexibility is being sought by the Applicant through the Outline Planning Application, a number of assessment scenarios have been developed for the Environmental Impact Assessment when determining the effects of the Proposed Development. This is to ensure that a reasonable 'worst case' impact assessment is undertaken (in line with the relevant environmental regulations), and the likely significant environmental and socio-economic effects are identified and addressed.

25 The Assessment Scenarios considered in the Environmental Impact Assessment have been developed in accordance with the information presented within the Control Documents.

26 Using the Control Documents, five main assessment scenarios have been considered and assessed within the Environmental Statement:

- **Scenario 1 (Maximum Development Scenario)** - This scenario represents the maximum scale / height and maximum layout that the Proposed Development could be built out to, and largely relates to the massing based assessments;
- **Scenario 2 (Maximum Population Generating Scenario)** – This scenario represents the maximum floor areas (as set out within the Development Specification) of population generating uses i.e. residential and student accommodation. This scenario would bring forward the largest population and child yield. Under this scenario, the maximum amount of residential use is defined. This scenario is informed by the Land Use Parameter Plans, which identify the locations of potential residential uses;
- **Scenario 3 (Maximum Trip Generating Scenario)** – This scenario assumes that the maximum trip generating uses (as set out within the Development Specification) would be brought forward i.e. uses that would bring the most people in and out of the area at the AM and PM peaks and also increase trip generation on the surrounding road network, pedestrian

network and public transport. This scenario comprises the maximum amount of commercial and retail uses within the Development Specification, with the rest of the permissible floorspace allocated to serviced apartments;

- **Scenario 4 (Enabling and Construction Scenario)** – This scenario sets out the proposed indicative programme, expected works and associated key activities for the enabling and construction works. The construction information that forms the basis of the enabling and construction assessments is based on the Indicative Scheme to provide a realistic and reasonable worst case impact assessment of likely environmental effects in relation to the enabling and construction works (the total floorspace of the Indicative Scheme is within 100 m^2 of the maximum permissible site-wide floorspace – this difference would not materially alter the construction information presented); and
- **Scenario 5 (Indicative Scheme) –**The Indicative Scheme has been created to represent and show one possible way the Proposed Development could be interpreted/achieved and developed in accordance with the principles set out within the Control Documents, it is not a design template, nor is it being submitted for planning approval. The Indicative Scheme provides an understanding of a more proportionate and realistic impact of the Proposed Development on the environment, in comparison to the reasonable worst case scenarios tested for the flexible Outline Planning Application.

Table 1. Assessment Scenarios

	Scenario 1 - Max. Development Parameters	Scenario 2 - Max. Population Generating Scenario	Scenario 3 – Max. Transport Generating Scenario	Scenario 4 - Enabling and Construction	Scenario 5 - Indicative Scheme
Socio Economics		X		X	X
Transport and Accessibility			X	X	X*
Noise and Vibration		X (along with the Indicative Scheme used for Site Suitability)	X	X	X*
Air Quality		X (along with the Indicative Scheme used for Site Suitability)	X	X	X*
Greenhouse Gas Assessment			X	X	X
Daylight, Sunlight and Overshadowing (Solar Glare & Light Pollution)	X			X	X*
Wind Microclimate	X			X	X
Water Resources	X			X	X*
Townscape, Visual Impact and Built Heritage Assessment	X			X	X*

**Assessed but no effect scale or significance applied*

Site Suitability relates to the suitability (relevant to the technical topic) of the Proposed Development for the intended uses.

27 In addition to these five main scenarios, other scenarios have been developed for the Environmental Impact Assessment and assessed in relevant topic assessments, and are as follows:

- **Scenario 6 Maximum Residential and Minimum Employment Scenario** – this scenario draws from Scenario 2 in order to also assess a scenario which generates the minimum amount of employment generating floorspace that could come forward This considers the worst case scenario for employment generation within the site and surroundings, as well as the maximum population generating scheme;
- **Scenario 7 Minimum Residential and Maximum Employment**– this scenario applies the minimum residential floor areas / unit numbers which is zero and the highest commercial floor area, as set out in the Development Specification document to provide the fewest residential uses, which is considered a worst-case scenario for the assessment of housing provision, and for an assessment on the potential maximum employment benefits; and
- **Scenario 8 Maximum Parameters and Design Guidelines –** this scenario draws from Scenario 1, but also takes into account the Design Guidelines as a whole, as well as the site-wide maximum permissible floorspace set out in the Development Specification. This scenario therefore takes into account the controls set out within the Design Guidelines and Development Specification which limit the development of the maximum parameters, and provides the most realistic reasonable worst case massing scenario for the assessment of townscape and heritage.

Scale and Nature of Effects

28 The size of the impact and how sensitive a receptor is to the impact defines the scale of an effect.

29 For defining the scale of an effect, the following language is used: negligible; minor; moderate and major. Specific definitions are given in each technical chapter of Volume 1, Environmental Statement, but generally speaking the following criteria is used:

- ‘Negligible’ Imperceptible effect;
- ‘Minor’ Small effect;
- ‘Moderate’ Medium effect; or
- ‘Major’ Large effect.

30 For defining the nature of a minor, moderate or major effect, the following language is used: ‘neutral’, ‘beneficial’ or ‘adverse’ in nature. Generally speaking these terms mean the following:

- ‘Adverse’ Negative effects to an environmental / socio-economic resource or receptor.
- ‘Beneficial’ positive effect to an environmental / socio-economic resource or receptor.
- ‘Neutral’ A neutral effect is one in which either there is no noticeable beneficial or adverse effect, or, in which the effect is considered neither beneficial nor adverse overall,

having made a ‘net equation’ judgment that takes into account both beneficial and adverse impacts.

31 Once the nature and scale of the effect has been identified, the assessment then determines whether the effect is considered ‘significant’ or ‘not significant’.

32 If a significant adverse effect is identified, measures are required to reduce or remove the effect; these measures are referred to as ‘mitigation measures’. Once the mitigation measures have been identified, the effect is re-assessed to understand whether the scale of the effect has changed because of the mitigation measures. All adverse effects, significant and non-significant, will be mitigated as far as possible.

33 Effects resulting from a combination of the Proposed Development and other surrounding development schemes are also assessed; in addition, the combination of several different effects from the Proposed Development on a single receptor are assessed as well.

34 All of the likely effects of the Proposed Development are reported within the Environmental Statement, and the likely significant beneficial, adverse and neutral residual effects (after mitigation measures) are specifically highlighted.

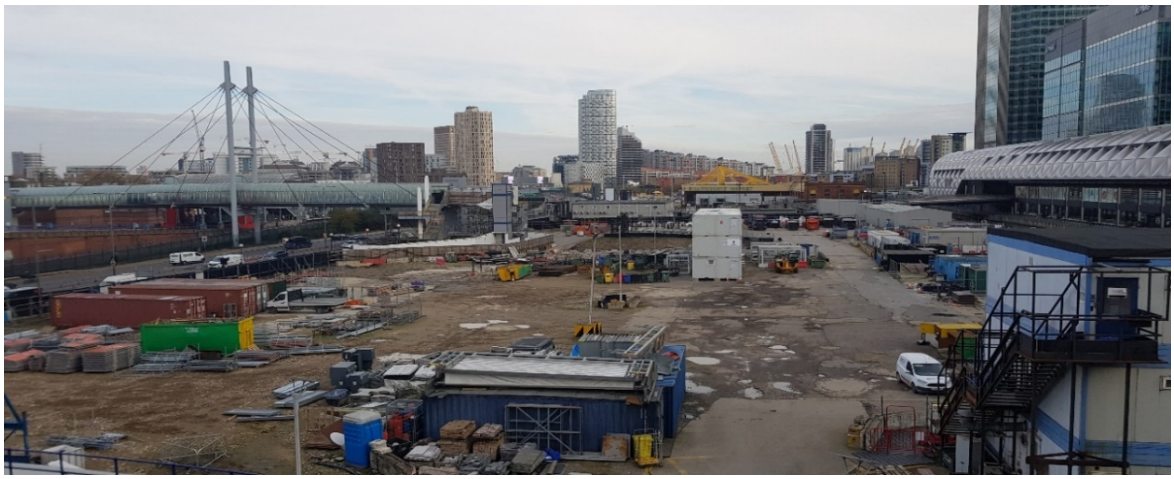
35 This Non-Technical Summary of the Environmental Statement is required to present a summary of the likely significant effects of the Proposed Development. The detail of the assessments and the results are reported upon in full within each relevant technical topic assessments of the Environmental Statement (**Volumes 1-3**).

THE SITE AND SURROUNDING AREA

Site Description

36 The Site is broadly rectangular in shape and currently comprises mostly cleared land (see Figure 3 below). The Site is bounded by Canary Wharf Crossrail Station and Crossrail Place to the south, Aspen Way (A1261) to the north, Hertsmere Road to the west and Billingsgate Market to the east. The West India Quay Docklands Light Railway station and Delta Junction are located on the western side of the Site and the Site also incorporates parts of North Dock, Upper Bank Street and Aspen Way.

Figure 3 Site Photos



View Looking east across the Site

View looking north across the Site

View looking west across the Site

Environmental Context

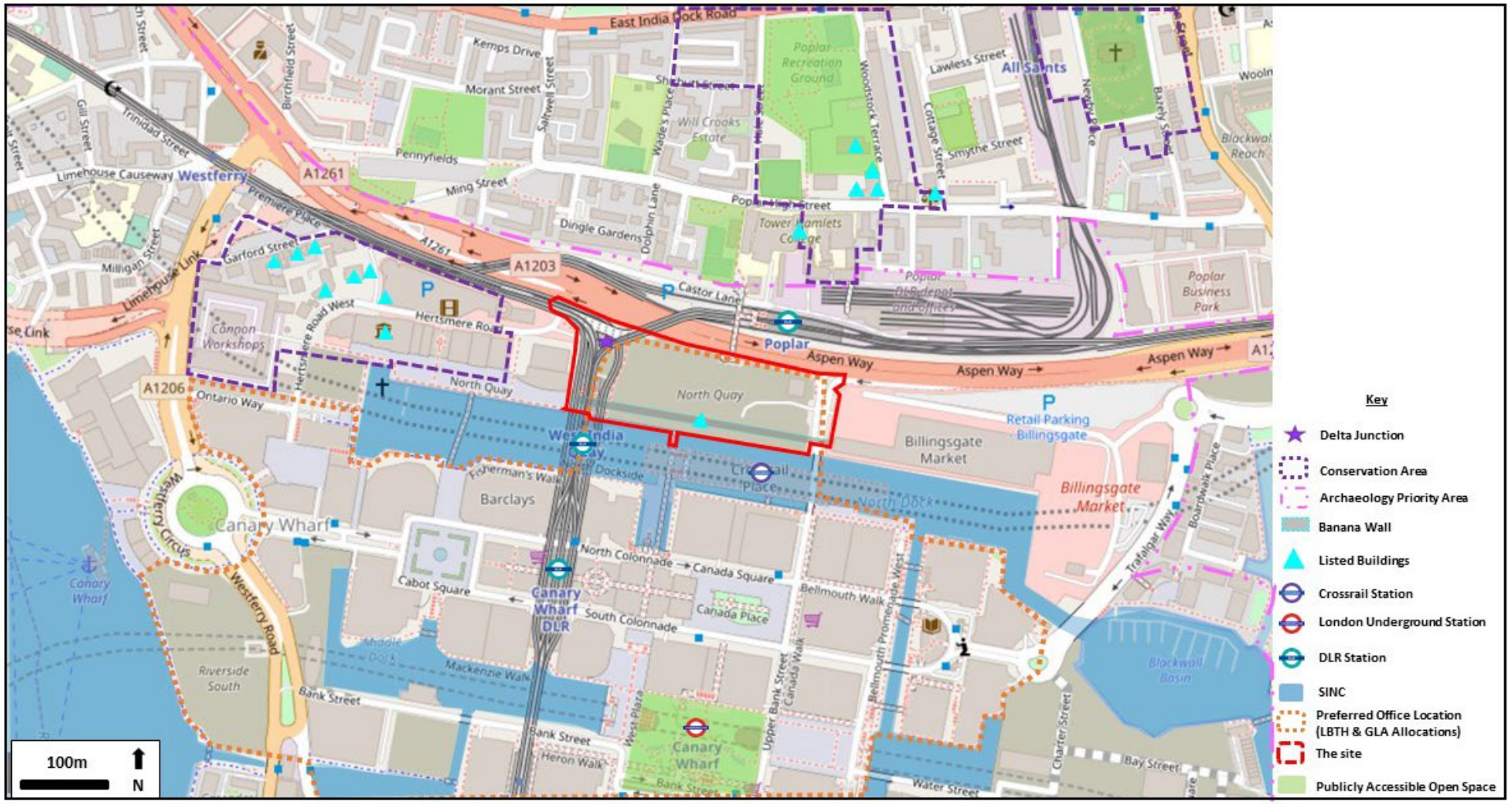
37 The Site and the surrounding area's main environmental features and designations are presented in Table 2 and shown in Figure 4.

Table 2. Outline of the Site and Surrounding Area's Environmental Context

Environmental Topic	Key features and designations
Air Quality	• The Site is located within an area which has been identified by the local authority as having air pollution levels which are, or are likely to, exceed national air quality objectives. The area encompasses the entire borough; • The closest air quality monitoring location to the Site is in Blackwall which is located approximately 1.10km northeast of the Site;
Archaeology	• The Site is located within an area where there is evidence indicating the potential for heritage assets of archaeological interest; • Grade I listed Late-Post Medieval/Modern West India Docks (Banana Wall) warehouse foundations are present below ground;
Ecology and Biodiversity	• A survey of the Site was undertaken to determine the potential for ecology on site. The survey identified the Site as being of low ecological value. With the exception of a small area of dock habitat, there are no notable habitats on Site; • The Site is not located within a 'sensitive area' (as defined in the Environmental Impact Assessment Regulations); • There are no statutory or non-statutory designated sites located on the Site. The closest Site of Importance for Nature Conservation (a non-statutory designation), West India Docks, is located directly adjacent to the Site;
Geoenvironmental	• The Site has a bedrock geology of Lambeth Group – clay, silt and sand and superficial deposits of Alluvium – clay, silt, sand and peat;
Noise and Vibration	• Existing noise sources to the Site include the West India Quay DLR station to the west of the Site, Poplar DLR station located north of the site, and the A1261 (Aspen Way) to the north;
Socio-Economics	• The local area is comprised of a variety of uses including office, retail, residential space and road and retail infrastructure; • Our Lady and St Joseph Catholic Primary School are located approximately 350m to the northwest; • The nearest GP Surgery (Bupa) is located approximately 200m to the south of the Site; • Nearby open spaces include Poplar Recreation Ground (approx. 350m to the northeast)) and Jubilee Park (approx. 400m to the south);
Traffic and Transport	• The Site has very good access to public transport with a range of modes in close proximity to the Site; • The closest bus stops to the Site are located on North Colonnade and Canada Square North respectively, accessible within 500m (less than a 6-minute walk) of the entire Site; • West India Quay DLR station is located west of the site and Poplar DLR station is located north of the site (past Aspen Way); • London City Airport is located approximately 4.45km east of the Site;

Environmental Topic	Key features and designations
	• Vehicular access to the site is achieved from Upper Bank Street east of the site. A new access road from Hertsmere Road to the west has been implemented as part of the 2007 Consent, although no access is currently permitted via this link; • The Site is well connected to the local and national cycle network. The closest of which is Cycle Superhighway 3 which runs from Barking to Tower Gateway, located approximately 200m to the north of the Site;
Townscape and Heritage	• The Site is not located within a Conservation Area (an area that is of special architectural or historic interest); however, there are several conservation areas in proximity to the site including West India Dock Conservation area, located approximately 450m to the west of the Site and St Mathias Church, Poplar located approximately 350m north of the Site; • The Site contains the Grade I Listed Banana Wall; • The Site is part of the Canary Wharf area of development which is dominated by a cluster of very large/tall commercial buildings, built over the last 30 years;
Water	• The majority of the Site is located within an area designated as Flood Zone 3 – area that benefits from flood defences with a small portion f the Site in Flood Zone 2'. Land and property in this flood zone would have a high probability of flooding without the local flood defences • The Site is not located in an area protected for the purposes of safeguarding drinking water quality; and • The Site is located directly adjacent to the West India Docks, which are designated as a site of importance for nature conservation.

Figure 4 Site and Surrounding Area Environmental Context



Sensitive Receptors

38 The things that could be affected by the Proposed Development i.e. 'receptors', that have been considered within the Environmental Impact Assessment are very varied and are identified in Table 3 and have been agreed with the London Borough of Tower Hamlets.

Table 3. Sensitive Receptors

Topic	Potentially Sensitive Receptor
Socio-Economics	• The construction industry and its employees • The local economy and labour market i.e. local businesses and economically active residents • Housing need within the borough • Primary schools • Secondary schools • Primary Healthcare facilities (GP surgeries) • Open space • Playspace • The Proposed Development could also introduce new residents to the Site which will be sensitive to socio-economic impacts
Transport and Accessibility	• Pedestrians • Cyclists • Public Transport Users • Road Users • Upper Bank Street / Aspen Way Junction • Hertsmere Road / West India Dock Road Junction • Aspen Way Footbridge
Noise and Vibration	• Existing and proposed residential properties • Billingsgate Market • New City College • Crossrail Place • Existing offices • Canary Wharf Marriott Hotel / 1 West India Quay
Air Quality	• Existing residential properties • Billingsgate Market • Horizon Building • Canary Wharf Marriott Hotel / 1 West India Quay • New City College • Introduced sensitive receptors including residential uses and residential amenity space
Greenhouse Gas Emissions	• Greenhouse gases contribute towards climate change, which is a global-scale cumulative effect to the atmosphere, but do not cause direct local or regional effects, therefore no specific receptor locations are assessed in the greenhouse gas assessment

Topic	Potentially Sensitive Receptor
Daylight and Sunlight	• Existing residential properties • Little St Matthias Preschool • New City College • Vietnamese Pastoral Centre • Shah Jalal Mosque Poplar
Overshadowing	• Public or communal amenity space • Private gardens • Little St Matthias Preschool • New City College
Solar Glare	• Sensitive viewpoints along the District Light Railway, Aspen Way and Upper Bank Street
Light Pollution	• Millwall and West India Dock Site of Importance for Nature Conservation • Existing residential within 1 West India Quay • Future Residential Receptors within the Site
Wind Microclimate	• The Site including proposed roads, thoroughfares, maintenance areas, pedestrian crossing waiting areas, ground level entrances, ground level public amenity space, terrace level public amenity space, roof level public amenity space, balcony level private amenity space • Existing off-site locations including waterway, roads, thoroughfares, railway station platforms and ground level entrances
Townscape Character Areas	A number of areas with distinct character and intrinsic qualities, which have been designated as Townscape Character Areas, are located within the area surrounding the site. These include: • Canary Wharf • Poplar • Limehouse and Westferry • Blackwall • Cold Harbour.
Views	Key short, medium and long-distance views to and from the Site
Water Resources	• Thames Water Utilities Limited Aspen Way Trunk Sewer • The Docks • Upper aquifer • Lower aquifer • Thames Water Utilities Limited primary supply pipeline from Aspen Way • Existing local population and infrastructure affected by a change in flood risk • Future occupants of the Proposed Development

ALTERNATIVES AND DESIGN EVOLUTION

39 The following sections of this Non-Technical Summary explain whether any alternative sites were considered, the option of not developing the site and the design process that has taken place.

Alternative Sites

40 No alternative sites have been considered by the Applicant. The Site provides an opportunity, in line with the London Plan and Local Plan (in particular the site allocation), to deliver the strategic vision for the area. The Site would provide a key development opportunity to contribute to the regeneration of an underutilised site, within a wider context of future development growth including Crossrail, and to provide the potential for greater and more varied offices, housing, retail and leisure opportunities. Additionally, the Site is owned by the Applicant, which is subject to an implemented planning consent, and therefore the Applicant did not consider alternative sites which are the property of a third party.

No Development Alternative

41 This refers to leaving the Site in its current state and not building the Proposed Development on this land.

42 The option of the No Development alternative was not considered appropriate, because as established in the London Plan and the Local Plan, the Site represents an opportunity to redevelop an underutilised area of land, to provide office, leisure, retail and housing uses as appropriate.

43 The No Development alternative would represent a lost opportunity to provide not only office and commercial space but also residential units to support in the London Borough of Tower Hamlet's housing aims, providing a mix of type and tenure (including affordable housing). Additionally, redevelopment of the Site will improve public realm and increase public accessibility in the surrounding area, such as the connection from Poplar to Canary Wharf.

44 Should the Site be left in its current status, benefits associated with regeneration (such as employment opportunities) would not be realised.

Alternative Schemes

45 The Site has a current planning permission from January 2007, referred to as the '2007 Consent'. The 2007 Consent comprised two office towers with a link building between them. The scheme also included three lower levels to provide retail, car parking and servicing below ground. The 2007 Consent was implemented in 2017.

46 The 2007 Consent does not comply with current planning policy or the current specific Site Allocation (4.9 – North Quay) set out within the LBTH Local Plan. The 2007 Consent does not adhere to the Applicant's design brief for the Site, or the development principles defined by this planning application's Control Document. In addition, this scheme does not meet the current market requirements.

47 In April 2017, applications were submitted for a major office-led, mixed use scheme comprising 4 buildings ranging from 30 to 67 storeys in height, which together with podium and basement

accommodation would provide offices, residential, serviced apartments, retail, and cultural / leisure floorspace, parking and servicing areas, and hard and soft landscaping. The 2017 Proposed Scheme's application was withdrawn by the Applicant before determination due to the loss of the scheme's anchor tenant. The 2017 Withdrawn does not adhere to the Applicant's design brief, nor meet the current market demands.

48 Given the reasons provided above, the 2007 Consent and the 2017 Withdraw Scheme have not been considered as reasonable alternatives or alternative designs within this ES.

49 No other possible alternative schemes were identified or studied by the Applicant.

Design Evolution

50 The design process has looked at various design options. The variations of the scheme have been developed in response to the consultation process as well as design development in response to the various environmental assessments.

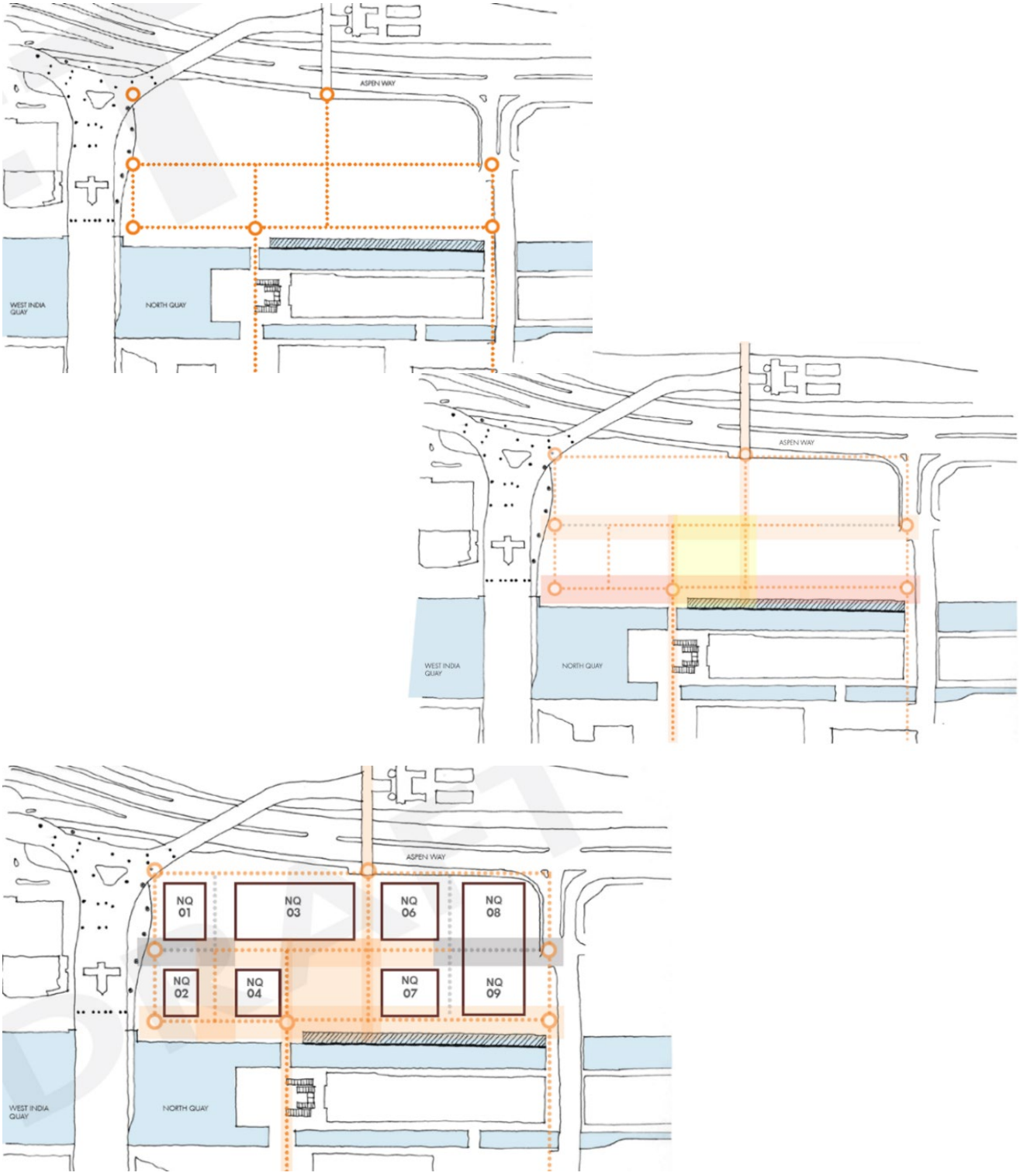
51 Key considerations during the design evolution of the Proposed Development included:

- Improving pedestrian connections in the surrounding area, particularly with regards to connecting the South Poplar community with the transport links and the district centre of Canary Wharf;
- Working with existing noise and air quality issues at the Site - Aspen Way, a busy road and major local source of traffic and air pollution runs along the northern boundary of the Site;
- Retaining the listed Dock Wall known as the Banana Wall which lies underground within the redline boundary;
- The townscape in the surrounding area and important views in regards to building height;
- Flood risk – the Site is located within both Flood Zone 3 (high risk); and
- Location of the Site and the heights in proximity to London City Airport.

52 The design process looked at numerous different design iterations and options. Consultation and engagement with London Borough of Tower Hamlets and key stakeholders ((including the Greater London Authority, Transport for London, Historic England, Canals and River Trust, Environmental Agency and Thames Water Utilities Limited, as well as environmental testing and analysis was undertaken over a seven to eight-month period during the design evolution of the Proposed Development. The key considerations and design brief set the basis of the scheme with the design looking at different iterations and options as the evolution of the scheme progressed.

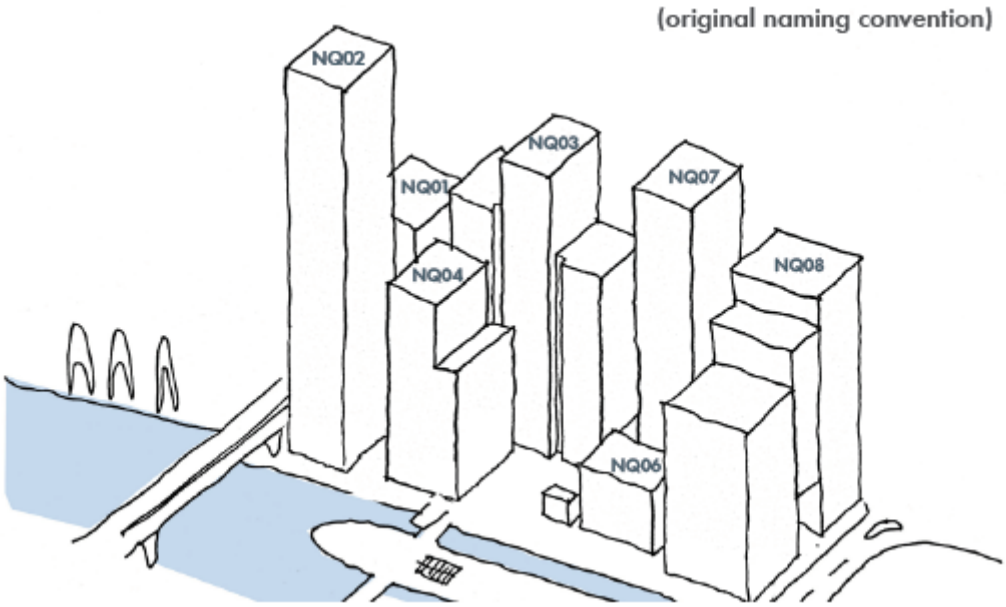
53 Initial site wide context analysis was undertaken looking at policy for the Site, links to Poplar, emerging adjacent development sites and the key constraints and opportunities. A focus was developed on the key arrival points, which developed into a network of streets and key public spaces and then indicative early design building locations (shown in in Figure 5).

Figure 5 Key Arrival Points, Network of Streets and Public Realm and Early Building Locations



54 Further plans and massing models were then developed for an emerging Indicative Scheme, based on the developing masterplan (Figure 6).

Figure 6 Option 1 – Early Indicative Scheme Massing

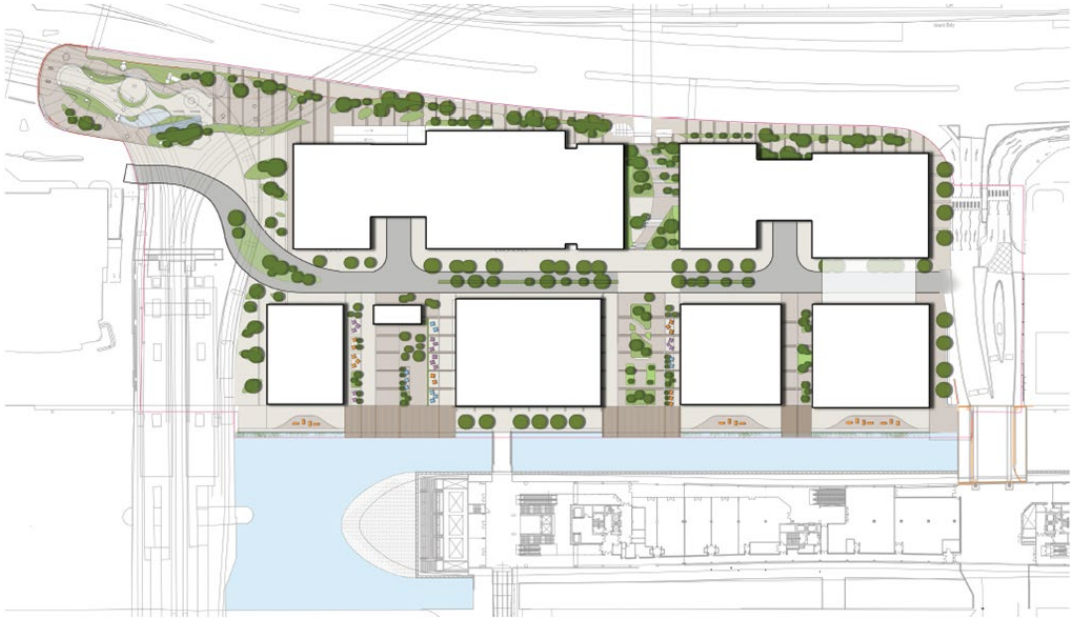


55 A design workshop was held in November 2019 which focused on the emerging public realm as well as playspace requirements if residential dwellings came forward as part of the Proposed Development. In particular, the existing air quality and noise pollution levels across the Site were considered and appropriate locations for play areas were highlighted. This aided the development of the emerging landscaping plans (Figure 7) which aimed to create various open and accessible spaces throughout the Site.

56 Additional analysis was undertaken on the area under the Dockland Light Railway lines to the north west of the Site known as the Delta Junction. Mitigation measures were considered and suggested to reduce air quality and noise pollution including noise screening barriers, green walls and locating publicly accessible areas behind these structures, to create an enhanced area of public realm which could also feasibly be used by older children (leading to the decision to make use of the urban environment by proposing a skateboard facility within the indicative landscaping proposals.

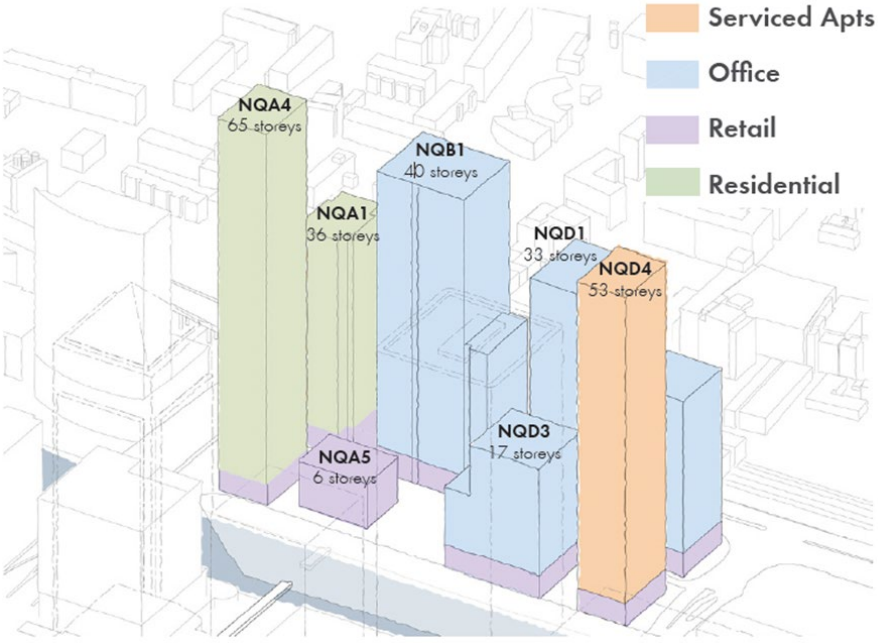
57 In response to requests from the initial pre-application meetings with the London Brough of Tower Hamlets further consideration was given to the design of the Parameter Plans, which were created around the Indicative Scheme. Initially the Site was split into five Development Zones, this was further split into eight Development Zones in December 2019 to include more of the Site to allow for works to made to improve the public realm and connectivity. These zones were further split into Development Plots to restrict the scale and massing of the Proposed Development so varying heights, widths and lengths of the buildings could be controlled.

Figure 7 Emerging Landscaping Plan



58 Following feedback from further pre-application consultations in 2019, further design work was undertaken and the Indicative Scheme was reworked to adjust a number of building plots, widen the emerging arrival space from Aspen Way Footbridge, Poplar Plaza, and to expand and study the area adjacent to the docks. In particular, the height of the north western building was reduced by 75m, a large central public square was created to the north of Crossrail Place and the inclusion of canopies above certain entrances as well as additional landscaping to reduce wind speeds throughout the Site. The final Indicative Scheme (which has been used within the assessments) is shown in Figure 8.

Figure 8 Final Indicative Scheme



59 These changes in the design of the Proposed Development were mainly in relation to public consultation, pre-application meetings with London Borough of Tower Hamlets and other relevant statutory consultees as well as due to environmental considerations to daylight, sunlight and overshadowing, wind microclimate, townscape and visual impact.

60 After the design of the Indicative Scheme was decided, works progressed to further develop the parameters for the Proposed Development through the Control Documents (Parameter Plans, Development Specification and Design Guidelines).

61 In discussion with the Applicant's technical team a number of key environmental and socio-economic design codes were incorporated into the Control Documents including:

- Setting massing restrictions such as a minimum height difference of 60m between the two western most buildings if both buildings were developed as residential based uses (residential, student accommodation, hotel, serviced apartments);
- A 20m height difference between all of the buildings developed on the Site (to create a varied skyline);
- If buildings come forward as residential based uses (residential, student accommodation, hotel, serviced apartments) there must be an 18m horizontal separation between the buildings;
- The amount and location of playspace for each age group to ensure space is provided for children of all ages in the correct locations;
- A commitment that playspace will be accessible by all residents to ensure no segregation according to tenure and location;
- A commitment to the Proposed Development being car-free with the exception of disabled persons parking;
- No right turn access to the Proposed Development for vehicles from Upper Bank Street;
- No residential dwellings at lower floor levels fronting onto Aspen Way (in relation to air quality levels);
- The incorporation of biodiverse roofs, vertical greening, rain gardens, bird/bat boxes; and
- As far as possible, development levels will be raised above flood levels. All residential dwellings to be located at and above the first floor level above the extreme tidal flood level.

62 The final arrangement and details of the scheme which forms the Proposed Development and the landscaping strategy is outlined below.

THE PROPOSED DEVELOPMENT

63 The Proposed Development applied for within the Outline Planning Application is for outline planning permission (all matters reserved) for the redevelopment of the North Quay site for mixed use comprising: Demolition of existing buildings and structures; the erection of buildings and construction of basements which will comprise the following uses; Business floorspace (B1); Hotel / Serviced Apartments (C1); Residential (C3); Co-Living (C4/Sui Generis); Student Accommodation (sui

generis); Retail (A1-5); Community and Leisure (D1 and D2); and other Sui Generis Uses.

64 The Proposed Development would also comprise of: any associated infrastructure including a new deck over part of the existing North Dock; the creation of streets, open spaces, hard and soft landscaping and public realm; creation of new vehicular accesses and associated works to Aspen Way, Upper Bank Street, Hertsmere Road and underneath Delta Junction; connections to the Aspen Way Footbridge and Crossrail Place (Canary Wharf Crossrail Station); car, motorcycle, bicycle parking spaces as well as relevant servicing; utilities such as energy centres and electricity substation(s); and other minor works incidental to the Proposed Development.

65 In addition to the Outline Planning Application the Applicant is submitting an application for Listed Building Consent, for works relating to a listed quay wall which lies beneath the Site. The works involve the stabilisation of listed quay wall and associated/remedial works as well as demolition/removal of the false quay.

66 As the Proposed Development is an Outline Planning Application, as discussed earlier, the parameters for the Proposed Development has been based upon a set documents referred to as the Control Documents which include: Parameter Plans, Development Specification and Design Guidelines which set rules in which the development can come forward.

67 In terms of the land uses proposed and the amount of development, the Outline Planning Application via the Development Specification, specifies the 'maximum' and 'minimum' (in some cases minimum is 0m^2) amount of development for each land use class proposed, as well as a total maximum amount of development across the entire Site. This builds in a degree of flexibility for the future detailed design of the outline components within a site wide maximum quantum.

68 The site-wide maximum total floorspace for the Proposed Development as set out within the Development Specification is 355,000 m^2 Gross Internal Area.

69 The maximum and minimum amount of area for each land use proposed as set out in the Outline Planning Application's Development Specification is shown in Table 4.

Table 4. Proposed Land Uses and Amount of Development

Land Use (Use Class)	Minimum Above Ground Floorspace GIA (m^2)		Maximum Above Ground Floorspace GIA (m^2)	Minimum Below Ground Floorspace GIA (m^2)	Maximum Below Ground Floorspace GIA (m^2)
Retail	Total 10,000	A1 – A5 5,000	20,000	0	5,000
Community			20,000	0	5,000
Leisure			20,000	0	10,000
Business	150,000		240,000	0	20,000
Hotel/Serviced Apartments	0		150,000	-	-

Residential	0	150,000	-	-
Co-Living	0	150,000	-	-
Student Housing	0	150,000	-	-
Other Permitted (Sui Generis)[1]	0	25,000	-	-
Ancillary[2]	0	No Maximum	0	0

70 The Proposed Development will provide up to a maximum residential C3 floorspace of 150,000m^2 GIA across a range of tenure types and unit sizes. There is flexibility in the Outline Planning Application for residential uses to come forward within the later detailed design stages.

71 The Proposed Development is split into eight Development Zones (Figure 9):

- NQ.A – Building Development Zone located to the west of the Site;
- NQ.B – Building Development Zone located to the north-west of the Site;
- NQ.C – Public Realm Zone located in the north of the Site;
- NQ.D – Building Development Zone located in the east of the Site;
- NQ.E – Public Realm Zone located in the centre and south of the Site;
- NQ.F – Public Realm Zone located along the southern boundary of the Site;
- NQ.G – Public Realm Zone along the western and north-western boundary of the Site; and
- NQ.H – Zone covers Upper Bank Street along the eastern and north eastern boundary of the Site.

72 Each of the above Development Zones are then further split into Development Plots shown in Figure 10. As the Proposed Development is being applied for in outline maximum parameters have been set for each of the Development Plots which are provided in Table 5.

73 The Maximum parameter building envelope for the Proposed Development is shown Figure 11. The maximum parameter building envelope would never be built out completely as the total amount of development would be limited by the Control Documents such as the maximum permissible floorspace across the Site.

[1] *Conference Centres, Casinos, Private Members Clubs, Nightclubs, Theatres, Launderettes (unless otherwise agreed with the Local Planning Authority)*
[2] *Ancillary floorspace comprising Business, Back of House, Enclosed Plant, Storage, Servicing, Car and Cycle Parking Areas, Energy Centres, Electricity Sub Stations etc.*

Figure 9 Proposed Development Zones

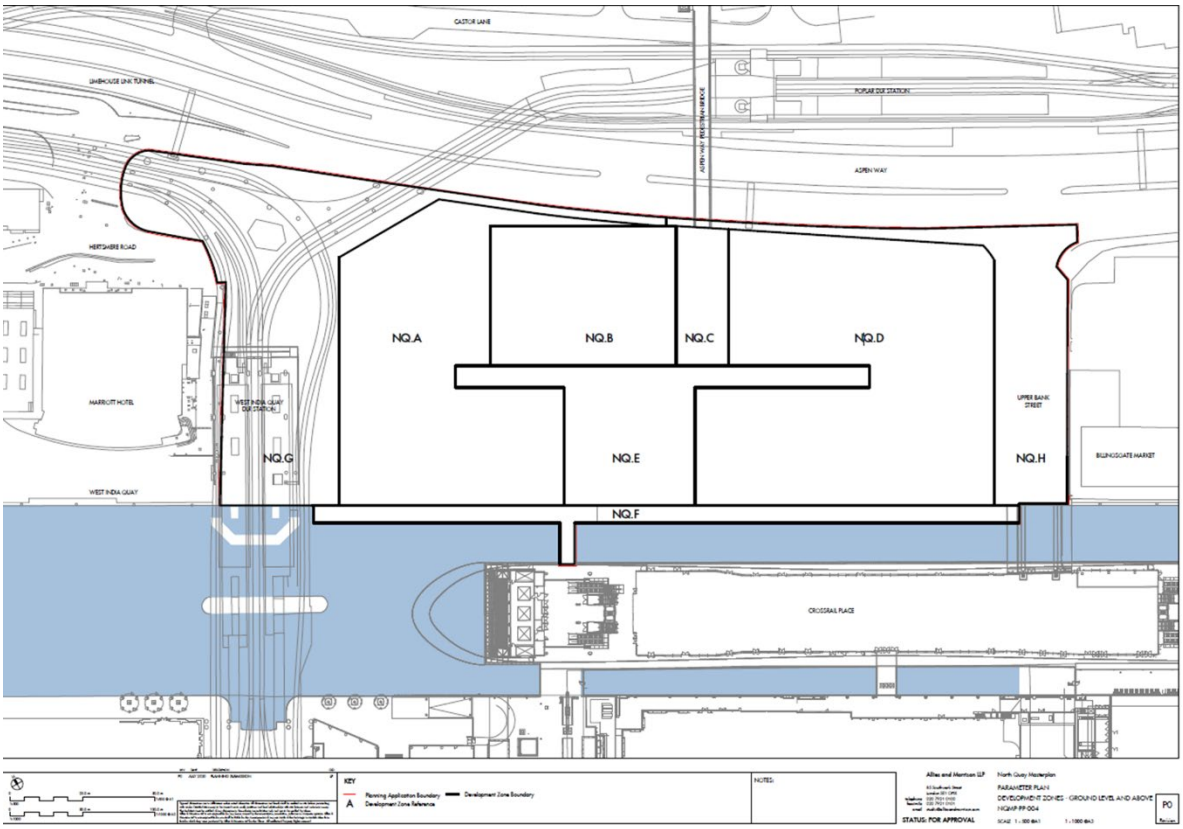


Figure 10 Proposed Development Plots

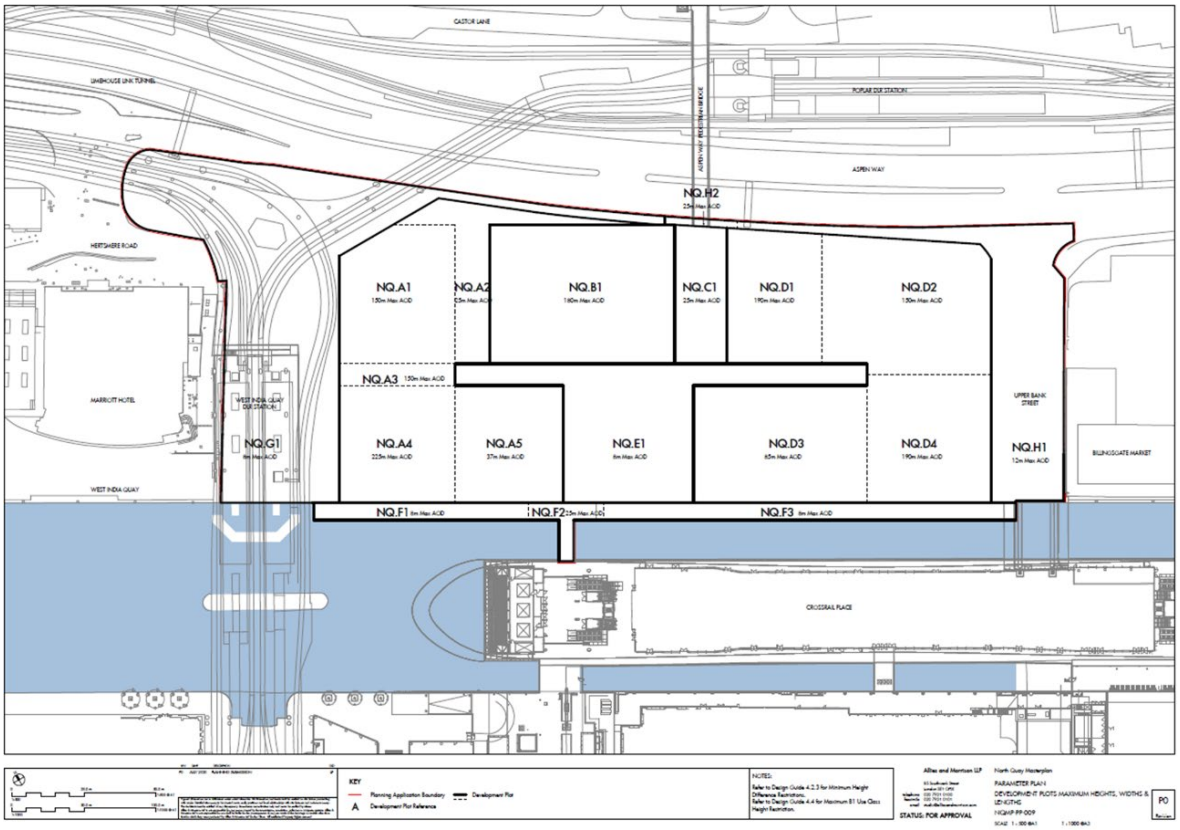
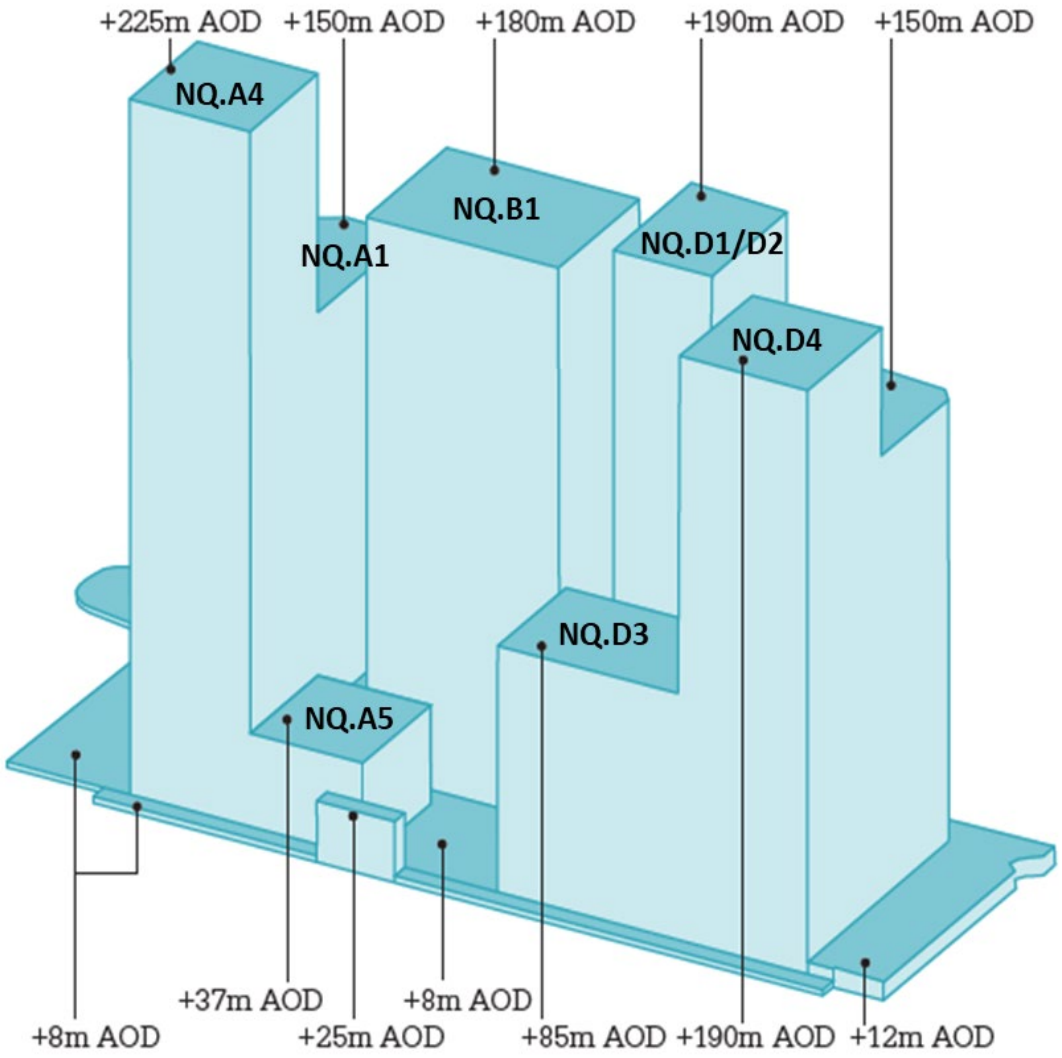


Table 5. Maximum Parameters of the Proposed Development Plots

Development Zone	Development Plot	Maximum Height (m) AOD	Maximum Length (m)	Maximum Width (m)
NQ.A	NQ.A1	150.00	48.00	40.00
	NQ.A2	25.00	84.00	56.50
	NQ.A3	150.00	40.00	5
	NQ.A4	225.00	40.50	40.00
	NQ.A5	37.00	40.50	37.50
NQ.B	NQ.B1	180.00	64.00	48.00
NQ.C	NQ.C1	25.00	48.00	18.00
NQ.D	NQ.D1	190.00	46.90	33.00
	NQ.D2	150.00	58.50	48.60
	NQ.D3	85.00	60.00	40.50
	NQ.D4	190.00	44.25	43.00
NQ.E	NQ.E1	8.00	142.50	48.00
NQ.F	NQ.F1	8.00	74.20	6.00
	NQ.F2	25.00	26.10	21.00
	NQ.F3	8.00	143.00	6.00
NQ.G	NQ.G1	8.00	185.00	117.00
NQ.H	NQ.H1	12.00	116.50	96.00
	NQ.H2	25.00	25.00	3.00

Figure 11 Maximum Parameters Model



74 The type of land use classes proposed for the Proposed Development respond to the Site's strategic location. Adjacent to the financial centre of Canary Wharf, with excellent transport links to the rest of London, and to the growing demand to make this part of the Isle of Dogs a fully-functioning, 'liveable' part of London, flexibility is sought to ensure that the Proposed Development can meet the future market demand.

75 The wide spectrum of uses applied for in the Outline Planning Application including office, residential, student housing, hotel rooms, serviced apartments, shops, restaurants, cafes and community spaces represent a variety of future activity and use in an area which can respond effectively to inevitable changes in future demand.

76 Given the outline nature of the Outline Planning Application, the scale and layout parameters of the Proposed Development has been defined, but the architecture and design of the buildings has not. The Proposed Development has been conceived as a group of buildings that may be designed by different architects to bring diversity and variety across the scheme. The architecture will use high quality materials and will respect their particular context and the Design Guidelines present specific

rules, codes and guidance on the future appearance of buildings.

Access

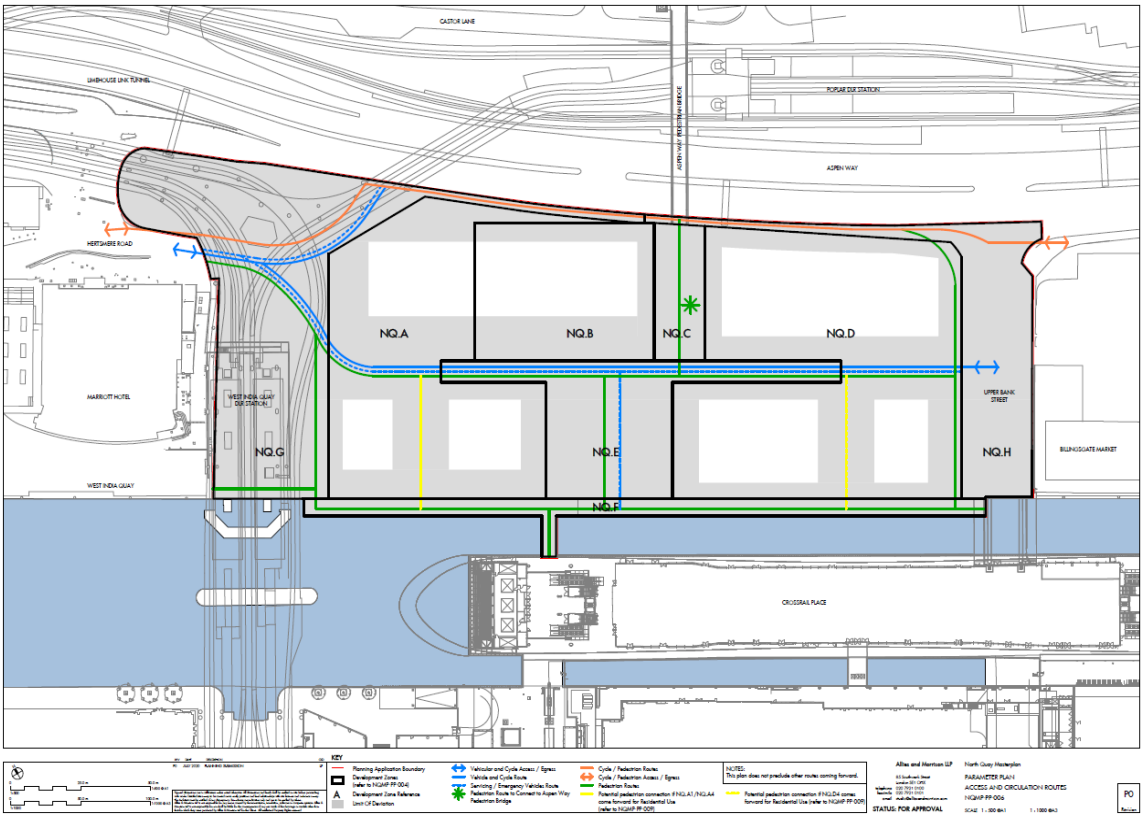
77 Visitors (e.g. residents and workers) arriving at the Proposed Development will be able to access the Site via a number of different routes.

78 The Proposed Development will improve access to two pedestrian bridges that connect the Site to the surrounding area as outlined below. Pedestrians can access the Site from the north via the Aspen Way Footbridge, a footbridge is also located the south of the Site providing access to the Site from Canary Wharf Crossrail Station.

79 Vehicle access to the Site will be from Aspen Way to the north of the Site, Upper Bank Street to the east of the Site and Hertsmere Road to the west of the Site. North Quay Way is a new street (east to west) through the centre of the Site which will provide access for servicing and drop off and will connect to the existing road network.

80 The Proposed Development will include a new pedestrian and cycle route along the northern boundary of the Site adjacent to Aspen Way. Key access and circulation routes are shown in Figure 12.

Figure 12 Access and Circulation Plan



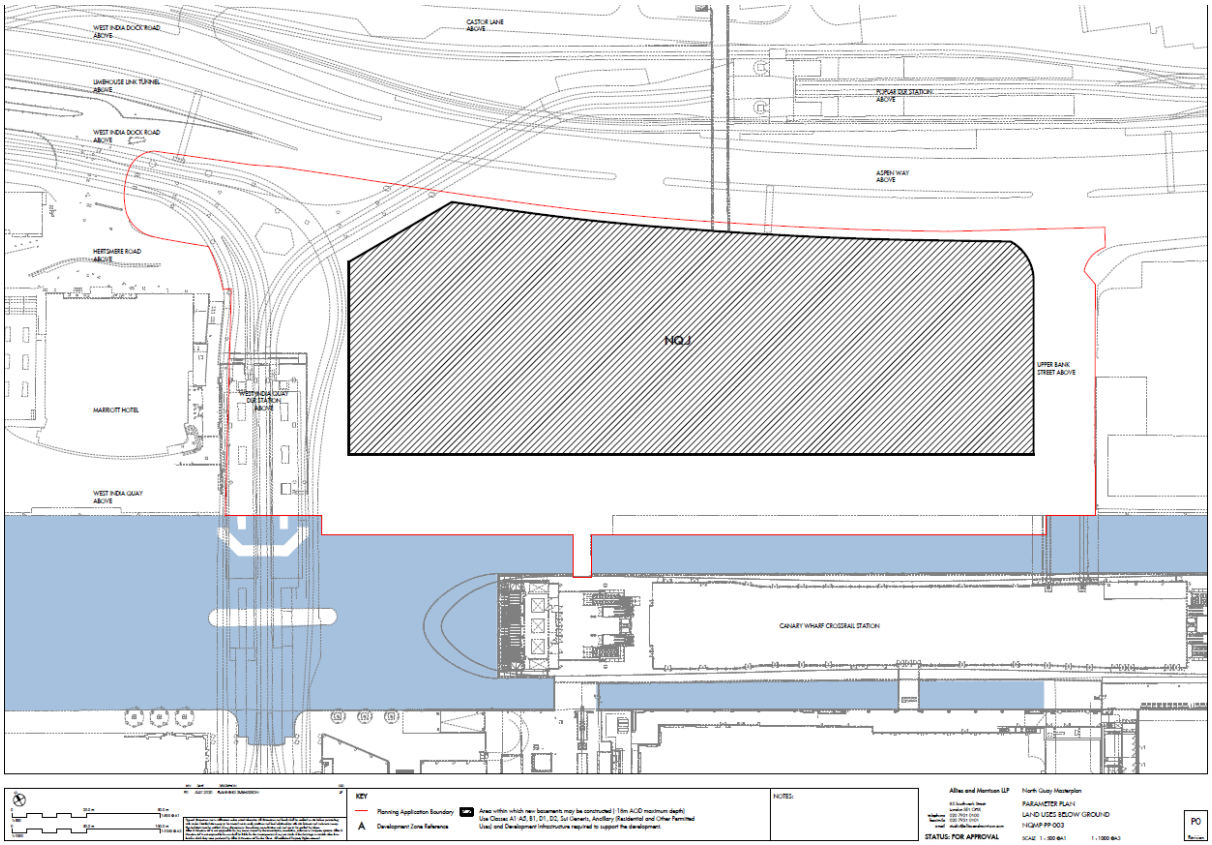
Basements

81 The proposed basement will have a maximum extent of -18m AOD and is shown in Figure 13. To provide the maximum amount of basement, a shared basement approach would need to be adopted for the Proposed Development, this would be accessed via a shared ramp from under the Delta Junction near Hertsmere Road to the west of the Site.

82 The following functions are supported by the shared basement:

- Large deliveries and collection;
- Cycle storage;
- Car parking;
- Waste storage and removal;
- Building and infrastructure plant;
- Estate management and storage facilities; and
- Retail storage/accommodation.

Figure 13 Maximum Basement Extent



Energy Strategy

83 The energy strategy has been based on the indicative scheme and has been designed to create a development that will have low energy demands. A distributed heat pump energy centre approach rather than a single energy centre is proposed. Ambient loop heat pump systems are proposed for residential building heating, hot water, and cooling. Photovoltaic panels would be provided above suitable roof areas that are not intended for occupant access or heat rejection plant.

84 The Proposed Development would include life-safety emergency generators, which would operate only under emergency situations and for routine testing.

Landscaping

85 Given the outline nature of the planning application, the landscaping proposals for the Proposed

Development have not been designed in detail. Figure 14 defines the areas and Development Zones specifically designated for public realm use. Landscaping proposals for the Indicative Scheme has been provided as shown in Figure 17 below.

86 The key areas of landscaping are set out in the Design Guidelines as follows and are shown in Figure 15:

- Quay Square – a main public space in the centre of the Site;
- The Quayside – public realm area on the dock side to the south of the Site;
- Dock Gardens and Garden Square – two smaller squares of public realm;
- The Delta – a public realm areas located in the north east corner of the Site;
- Poplar Plaza – a public space that is located in the north of the Site in which Aspen Way Footbridge is located; and
- Aspen Way Gardens – pockets of public space located along the northern boundary of the Site.

Figure 14 Proposed Development Key Areas for Public Realm

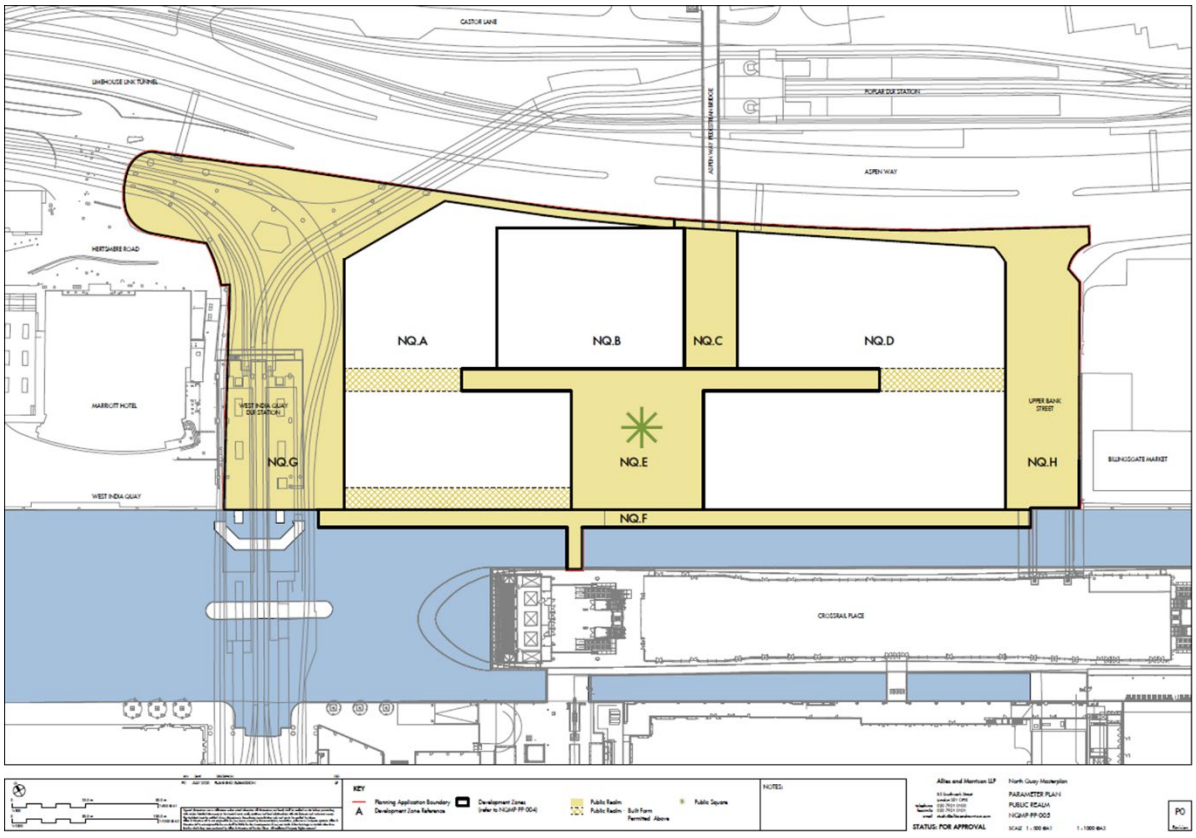
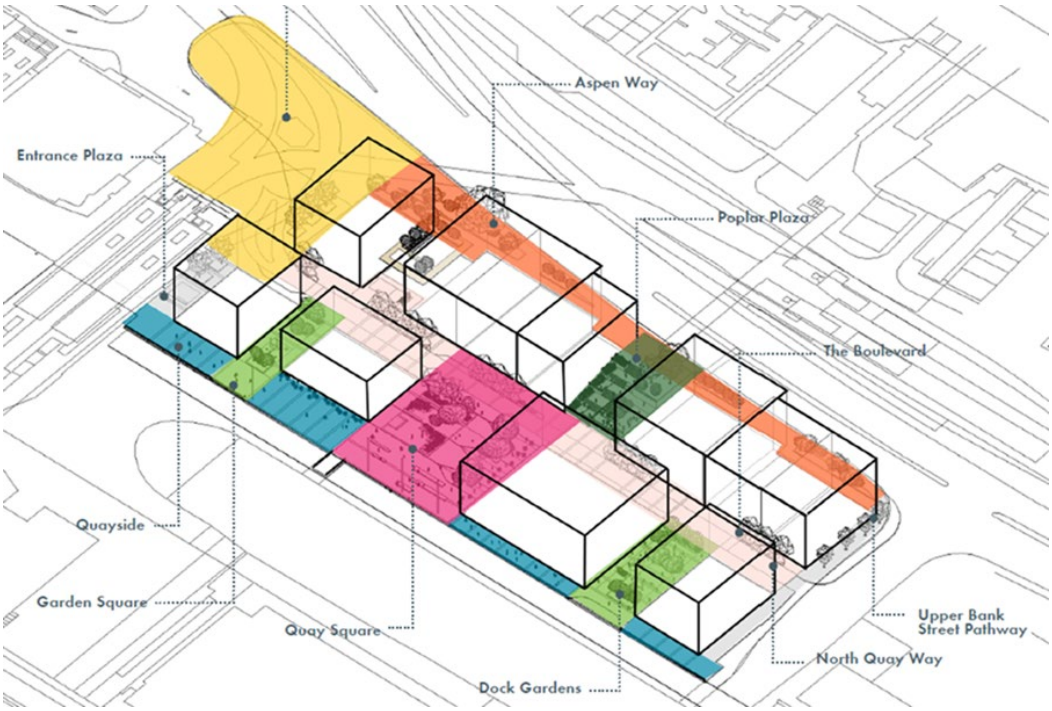


Figure 15 Public Realm Spaces



Servicing

87 The Proposed Development will have two main services infrastructure routes crossing the Site from west to east to allow for phasing and resilience of utilities and site services installations.

88 Route 1: At the north of Site allows connection to the main utility services in Aspen Way (water, drainage, telecoms etc). The services would be buried below ground under the soft and hard landscape including the combined cycle ways and pedestrian foot paths.

89 Route 2: Running through the centre of the Site to pick up all the southern buildings adjacent to the dock front. This would be in the form of a road box above the basement.

90 The central road route will be the designated route for any future heat network installation. Space will be allowed for the future installation of this heat network. At the end of the final phase of the development, the Site infrastructure network will form a loop around the Proposed Development.

91 Delivery and servicing access will be provided within the basement however, movements would be limited to a specific loading and goods handling area.

92 The loading area enables functions such as waste collection, plant replacement and large deliveries to be managed discreetly below ground thus maximising open space and amenity at street level as well as reducing visual clutter.

The Indicative Scheme

93 As discussed earlier, due to the outline nature of the planning application an illustrative scenario, referred to as the “Indicative Scheme” has been developed. The Indicative Scheme illustrates one way in which the Proposed Development could come forward under the maximum parameters and has been developed to provide clarity that a suitable development can be built out under this Outline

Planning Application.

94 The Indicative Scheme provides 7 buildings which range between 4 and 65 storeys and is shown in Figure 16. The buildings comprise NQ.A1 and NQ.A4 (predominantly residential uses), NQ.A5, NQ.B1, NQ.D1, NQ.D3 and, NQ.D4 comprising office, retail, residential and serviced apartments (Table 6).

95 Buildings NQ.A1, NQ.A4 and NQ.D4 are the three flexible live/stay buildings on-site, two of these buildings being residential (NQ.A1 and NQ.A4) and one of these buildings being serviced apartments (NQ.D4), which will range from 35 to 65 storeys. NQ.B1, NQ.D1 and NQ.D3 are the three office buildings of the Indicative Scheme and will range from 17 to 40 storeys. NQ.A5 is a small building for which will provide retail floor space for food, beverage and dining.

Figure 16 Indictaive Scheme Massing, Storeys and Land Use

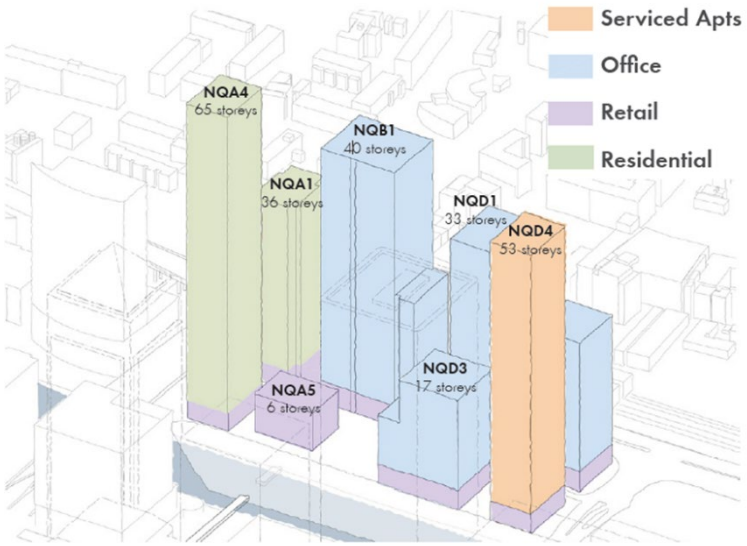


Table 6. Indicative Scheme Amount of Development

Land Use (Use Class)	Indicative Above Ground Floorspace GIA (m^2)	Indicative Below Ground Floorspace GIA (m^2)
Retail	13,681	0
Community	0	0
Leisure	0	0
Residential	84,736	0
Co-Living	0	0
Business	174,653	0
Hotel/Serviced Apartments	44,081	0
Student Housing	0	0
Other Permitted	0	0
Ancillary	9,730	28,047
Total Available Floorspace (m^2)	**354,928**	

96 Within the Indicative Scheme, Building NQ.A1 is designed to accommodate internal play spaces at Level 1 for 5-11 year olds and 12-18 year olds. The play spaces include quiet areas such as a library and reading stage with other more active areas including a trampoline, sand pit, balls pit and slide, table tennis and climbing wall. At Level 2, Building NQ.A1 accommodates internal play spaces for under 5 children. Areas include workshop, arts and crafts room and soft play. Within building NQ.A4 provision is made for a range of internal play space activities for residents at level 1 including a library, arts and crafts room and soft play areas.

97 The Indicative Scheme proposes a shared basement across the Site. The Indicative Scheme basement is typically 9m deep and is divided into 2 primary levels with some additional mezzanine space for cycle storage. In some areas, the second level is double height to accommodate the space required for refuse vehicles to lift/operate compactors.

98 The details of the Indicative Scheme landscaping proposals are based on the key elements and design guidelines for the Proposed Development's landscaping and is shown in Figure 17.

Figure 17 Indicative Landscaping Plan

ENABLING AND CONSTRUCTION

Anticipated Works and Programme

99 Enabling and construction planning is broad at this stage and the information presented as part of the Environmental Statement is based on reasonable assumptions made by professionals, appropriate to this stage of planning.

100 The enabling stage includes some minor demolition of the existing false quay and temporary buildings currently on site.

101 To assess the enabling and construction of the Proposed Development, an indicative construction programme has been used along with expected works and key activities. The information is based on an Indicative Scheme which provides a realistic and reasonable worst case assessment of likely

environmental effects from the enabling and construction works, as discussed earlier in this document.

102 The indicative programme of works on-site is expected to take approximately 8 years to complete. For the purposes of the Environmental Impact Assessment, commencement of works has been assumed to be at the end of 2021 with the Proposed Development becoming fully complete and operational by the end of 2029, with the potential for some buildings as uses to be operational by 2025 as the proposed Development is built out in phases.

103 The construction of the Proposed Development would likely be delivered in four phases (with some overlap between these phases) however this is based on the indicative construction programme. Delivery of the buildings in each phase would commence as follows:

- Phase 1: NQ.A1 and NQ.A4;
- Phase 2: NQ.A5, NQ.D3 and NQ.D4;
- Phase 3: NQ.B1; and
- Phase 4: NQ.D1.

104 General enabling and construction works will include:

- Site preparation;
- Set up of site offices and welfare facilities
- Demolition of existing on-site uses and the false quay;
- Construction of the new marine false quay and marine deck;
- Excavation and basement works;
- Construction of the buildings across the Site;
- Envelope and Fit Out works; and
- Landscaping works.

105 Discussions regarding demolition and construction logistics, and site and environmental management will be undertaken with the London Borough of Tower Hamlets and other relevant statutory consultees (such as the Environment Agency) before any enabling and construction works commence. Prior to the start of works on-site, a Construction Environmental Management Plan will be prepared and agreed with the London Borough of Tower Hamlets as a condition of any Outline Planning Permission. The Construction Environmental Management Plan will include a Construction Traffic Management Plan, Construction Logistics Plan and a Site Waste Management Plan. Specifically, these documents will explain how the works and the Site will be managed including environmental management and will secure the controls and mitigation set out in them.

106 The likely construction working hours are:

- 08:00 – 18:00 hours between Monday and Friday (with an additional one-hour period of mobilisation / demobilisation (comprising 'quiet works' which will be agreed with the London Borough of Tower Hamlets) at the start and end of the day);
- 08:00 – 13:00 hours on Saturdays; and
- No working on Sundays, Bank or Public Holidays (unless otherwise agreed with the London Borough of Tower Hamlets).

107 Should any works need to be undertaken outside of the above hours (excluding emergencies), approval will be sought from the London Borough of Tower Hamlets.

Road Vehicle Movements

108 The main route for deliveries to the Site would be via Aspen Way (A1261) using site entrances located off Upper Bank Street and Hertsmere Road. The deliveries are expected to peak at 4,000 per month which equates to 8,000 movements per month (i.e. 4,000 vehicles into the Site and 4,000 vehicles out). There is likely to be a maximum of 200 construction vehicles per day, totalling 400 daily movements, during this peak construction period.

ENVIRONMENTAL IMPACT ASSESSMENT

109 The following sections of this Non-Technical Summary present a summary of the Environmental Impact Assessments undertaken for each of the technical topics.

110 The tables at the end of each section only provide a summary of the likely significant environmental effects identified (rather than all effects including those that are not deemed to be significant). Further details can be found within the Environmental Statement (**Volumes 1-3**).

SOCIO ECONOMICS

111 The assessment undertaken has focussed on key social, economic considerations, specifically job creation, housing delivery, new residential population and indirect economic benefits (employee and household spending).

Enabling and Construction

112 During the enabling and construction period, approximately 1,635 temporary construction workers, per month, are expected to be generated over the duration of the eight-year construction period. This employment could be expected to include a broad range of job-types and occupations, both on-site as well as off-site. Whilst the generation of construction related employment is deemed to be beneficial, due to the size of the industry the increase is not expected to generate a noticeable change; as such the effect is not deemed significant.

113 The construction of the Proposed Development would also result in indirect benefits including supply chain effects and spending by construction workers within shops surrounding the Site. Whilst these effects are beneficial, they are not deemed to be significant.

Completed Development

114 As discussed within the Assessment Methodology section of this document, a number of scenarios have been assessed given the outline nature of the planning application; therefore, the effects range between the different scenarios.

115 Once the Proposed Development is complete and operational, a number of jobs will be generated as a result of the employment floorspace provided which is deemed to be a significant beneficial effect. The number of jobs will vary across the different scenarios assessed, with the Maximum Employment Scenario generating between 14,220-18,800 jobs, the Maximum Residential Scenarios would generate between 8,535-11,155 jobs and the Indicative Scenario would generate 10,320-13,380.

116 The Proposed Development would generate economic benefits for the local economy through indirect spending arising from new employees, residents and visitors. Spending will vary across the different scenarios assessed, with the Minimum Residential and Maximum Employment Scenario generating between £33.1-£43.8 million, the Maximum Residential and Minimum Employment Scenarios would generate between £36.6-£42.7 million and the Indicative Scheme would generate £69.3-£77.6 million. Under all scenarios, this would represent a significant beneficial effect.

117 The Maximum Residential (and Minimum Employment) Scenario propose delivery of 1,152 homes, whilst the Indicative Scenario proposes 702 homes. The additional homes proposed will contribute to achieving both local policy targets and those set out within the London Plan, resulting in a significant beneficial effect.

118 Under the Maximum Employment and Minimum Residential Scenario there would be no residential element proposed, and therefore no significant effects at any scale would occur with no homes being provided.

119 As a result of the homes proposed, the future population of the Proposed Development will place additional pressure on local schools and healthcare facilities, open space and playspace. However, mitigation measures including payments to the London Borough of Tower Hamlets will help the Council to expand and build new services in the local area. Following the implementation of mitigation, the effect on these services will not be significant.

120 Sensitivity tests were undertaken, testing a different level of affordable housing and a different housing mix, as well as testing the potential for co-living and student accommodation uses were assessed, in addition the scenarios and assessments described above. The tests considers the potential effects arising from the alternative tenures and products (student housing and co-living) being brought forward as the residential element of the Proposed Development. The sensitivity tests showed that the potential for other mix and tenures (which included an increase of the maximum homes which could be delivered to 1,264), and residential type uses, would create effects that fall within the range of effects for the main scenarios assessed and therefore don't materially alter the conclusions of the main assessments.

Likely Significant Effects

121 Table 7 summarises the likely significant residual socio-economic effects associated with the Proposed Development once mitigation has been applied.

Table 7. Summary of the Likely Significant Residual Socio-Economic Effects

Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
Completed Development		
Local Economy and Employment	Provision of floorspace resulting in additional employment. The number of jobs will vary across the different scenarios assessed: – Maximum Employment Scenario: 14,220 to 18,800 jobs (Major Beneficial Borough Level) – Maximum Residential Scenario: 8,535 to 11,155 jobs (Moderate Beneficial Borough Level) – Indicative Scheme: 10,320 to 13,380 jobs (Moderate Beneficial Borough Level)	**Major Beneficial (Local level)** **Moderate to Major Beneficial (Borough level)**
Local Economy	Additional spending:	**Moderate**

Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
	– By employees under the Maximum Employment Scenario; and – Employees and residents in the Maximum Residential Scenario and the Indicative Scheme	**Beneficial (Local Level)**
London Borough of Tower Hamlets Housing need/demand	Provision of up to 1,264 residential units in the Maximum Residential Scenario	**Major Beneficial (Local level)**
		Moderate Beneficial (Borough level)
	Provision of up to 702 residential units in the **Indicative Scenario**	**Moderate Beneficial (Local level)**

TRANSPORT AND ACCESSIBILITY

122 The assessment undertaken has reviewed the effects of the Proposed Development on roads and traffic, public transport, pedestrian and cyclist routes. The assessment has considered possible effects relating to: severance (being or the feeling of being isolated or separated from something); pedestrian and cyclist amenity, fear and intimidation; delay for drivers, pedestrians and cyclists; accidents and safety; public transport service capacity and delay.

Enabling and Construction

123 As a result of enabling and construction activities associated with the Proposed Development, there will be an increase in the number of vehicles on surrounding roads including Hertsmere Road, Upper Bank Street and Aspen Way. The daily increase in the number of vehicles in the surrounding area due to total construction traffic will be no greater than 3.7%.

124 Whilst the increase in traffic numbers is considered not significant, mitigation measures will still be implemented to ensure that effects are reduced as far as possible. Construction traffic mitigation measures, and how these will reduce potential impacts, will be set out in a Construction Logistics Plan secured through a planning condition. Consideration has also been given to the management of construction traffic and traffic routes within the Outline Construction Logistics Plan which forms part of the planning application.

125 Construction vehicles would enter and exit the Site via the A1261 Aspen Way/West India Dock Road using entrances located off Upper Bank Street and Hertsmere Road, this route avoids any local roads where the impact of construction traffic would be more pronounced.

126 As part of the Construction Logistics Plan, it is proposed that there will be no parking for construction workers on-site and so workers will be assumed to travel by non-car modes of transport, including

public transport. Where possible, staff on-site will be encouraged to travel outside of peak network times and would not be expected to have a material impact on public transport so the effect would not be significant.

127 Potential traffic and transportation related effects could arise causing temporary disruption to road users and pedestrians from vehicles entering and leaving the Site. These could include temporary footway closures and diversion of pedestrian and cyclist movements. No long-term road closures are anticipated and any disruption to pedestrian and cycle routes will be programmed as far as possible and be temporary. Agreement from the local highway authority will be sought, and measures implemented such as diversions and signage and so the effects are not deemed to be significant.

Completed Development

128 Redevelopment of the Site would enhance connectivity and permeability of the local area through the provision of new pedestrian and cyclists connections. This will result in significant beneficial effects in relation to 'Amenity, Fear and Intimidation' and 'Delay' of pedestrians and cyclists.

129 Whilst the Proposed Development will increase usage of the public transport network in the surrounding area, changes on bus services and river transport will be not significant. Whilst there is expected to be an adverse effect on the Jubilee Line, DLR and Elizabeth Line as a result of the Proposed Development, it is considered that the level of increase in passengers predicted could be adequately accommodated on the network. As such, the effect is not deemed to be significant.

130 Based on the maximum trip generation scenario, as a result of increased traffic flows along Hertsmere Road, there will be a significant adverse effect in relation to severance. In terms of mitigation, the completed Proposed Development will be subject to Residential and Framework Travel Plans, a Parking Design and Management Plan and a Delivery and Servicing Plan secured via planning conditions. These documents encourage further shifts towards more sustainable modes of travel and set out strict management protocols for reducing the impact of vehicles within the Proposed Development and surrounding highway network. Increased traffic flows to all other roads are deemed to have a not significant effect on severance.

Likely Significant Effects

131 Table 8 summarises the likely significant transport and accessibility effects associated with the Proposed Development once mitigation has been applied.

Table 8. Summary of the Likely Significant Residual Transport and Accessibility Effects

Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
Completed Development		
Pedestrians and Cyclists	Enhanced permeability and connectivity of the local area (to and through the Site) reducing 'delay' of pedestrians and cyclists.	**Moderate Beneficial Local**
	Severance along Hertsmere road as a result of increased traffic along the road.	**Moderate Adverse Local**
	Provision of new pedestrian and cycle connections through the Site is expected to create a more permeable and attractive place to travel to, from and through improving 'Amenity, Fear and Intimidation'.	**Moderate Beneficial Local**

NOISE AND VIBRATION

132 The assessment undertaken has focused on potential noise and vibration effects during enabling and construction (temporary sources), in particular construction road traffic (Heavy Goods Vehicles) and onsite works noise. Once complete and operational, the noise and vibration assessment considered noise and vibration effects associated with operational road traffic noise on surrounding roads and building services plant and site suitability for future users of the Proposed Development.

Enabling and Construction

133 The noise and vibration predictions have been based on reasonable worst-case assumptions and there will be opportunities for the contractor to reduce the noise impact experienced at the nearest noise sensitive properties. An outline of the noise and vibration mitigation measures that could be applied to reduce noise and vibration impacts are provided within the Environmental Statement (Volume 1), which would take into consideration Tower Hamlets' Code of Construction Practice. These measures include approval of a Construction Environmental Management Plan which will include appropriate noise and vibration management and monitoring measures, an agreed Construction Method Statement and agreement with the London Borough of Tower Hamlets noise limits. With these measures in place there will be no significant adverse effects during construction.

134 With mitigation in place, the majority of the receptors will not experience significant effects. However, there is expected be a temporary significant adverse effect in relation to noise during the early stage of the enabling and construction programme on the Canary Wharf Marriott Hotel / 1 West India Quay building and Canary Wharf Crossrail Station.

Completed Development

135 Once the Proposed Development is complete and operational, there will be not significant increases in noise levels at all receptors as a result of building services plant noise.

136 As a result of increased traffic flows on surrounding roads in the maximum transport generating scenario, there will be a small increase in noise levels (i.e. a not significant effect) at Canary Wharf Marriott Hotel / 1 West India Quay. All other receptors will experience a not significant increase in noise levels as a result of increased traffic.

137 The Proposed Development is considered to be suitable for its proposed uses.

Likely Significant Effects

138 No significant noise and vibration effects are likely to occur as a result of the Proposed Development.

AIR QUALITY

139 The assessment undertaken has considered the potential for both the construction works, and the operation of the Proposed Development, to result in air quality impacts. The key considerations of this assessment have been dust emissions and emissions from Heavy Goods Vehicles during the enabling and construction works, road traffic emissions once the Proposed Development is in use, and emissions from existing emissions sources for the site suitability assessment.

Enabling and Construction

140 Although the construction of the Proposed Development will lead to an increased number of heavy-duty vehicles on the roads, the increase will not have a significant impact on air quality at nearby sensitive receptors such as residential dwellings and schools.

141 Whilst the enabling and construction works will give rise to a risk of dust impacts (including on human health and ecological receptors) without mitigation, mitigation measures will be put in place to ensure that there are no significant effects. Mitigation measures will be written into a Dust Management Plan, likely to be included within the Construction Environmental Management Plan, which will include measures such as using water to damp down dust. This mitigation will be secured through an appropriate planning condition.

142 The assessment has identified that the Proposed Development will not cause significant air quality impacts during the enabling and construction works.

Completed Development

143 Road traffic emissions associated with the Proposed Development anticipated from the vehicle emissions in the maximum transport generating scenario, were assessed as having no significant effect on local air quality, and would not lead to the national air quality objectives being exceeded. As such, there is no requirement for mitigation beyond good design and best practice measures such as the production of a Framework Travel Plan which will encourage sustainable travel.

144 To minimise impacts to air quality, the Proposed Development includes proposals for pedestrian and cycle facilities (including cycle parking). These measures will encourage visitors to use public transport options to get to and from the Proposed Development.

145 The assessment has identified that the Proposed Development will not cause significant air quality impacts once completed and in use. Additionally, the Proposed Development will be air quality

neutral, as required for all new developments in London.

146 The Proposed Development has taken into account the principles of the 'Air Quality Positive' approach which includes a number of measures to minimises emissions and exposure of future occupants. Measures include the provision of only disabled blue badge parking spaces (all of which will have electric vehicle charging) and the construction of a green wall along Aspen Way.

147 Air quality for future residents and users of all areas of the Proposed Development are deemed to be acceptable.

Likely Significant Effects

148 No likely significant effects have been identified as a result of the Proposed Development.

GREENHOUSE GAS EMISSIONS

149 A greenhouse gas emissions assessment has been undertaken to assess the potential greenhouse gas emissions from the construction and operation of the Proposed Development. Greenhouse gases are gases in the atmosphere which have the potential to increase air temperatures.

150 All greenhouse gas emissions are described as significant in accordance with the relevant guidance for the assessment of greenhouses gases as part of the Environmental Impact Assessment process. This does not mean that the contribution of greenhouse gas emissions from the Proposed Development alone will equate to a likely significant effect; for the majority of development projects, the individual contribution to total greenhouse gas emissions (from local through to global scale) will be very small. However, the guidance recognises that the contribution of greenhouse gas emissions to climate change is a cumulative global issue, and as such it is important for developments of all scales to acknowledge the significance of any increases in greenhouse gas emissions, and that mitigation should be undertaken to address their occurrence.

151 Overall, the Proposed Development contributes a small amount to greenhouse gas emissions and will employ commensurate mitigation measures to ensure policy compliance and minimise its contribution to climate change where possible to ensure that likely significant effects associated with the Proposed Development itself are avoided. The greenhouse gas emissions resulting from the Proposed Development are very small in the context of local and regional greenhouse gas emissions, contributing 2.2% to borough-wide greenhouse gas emissions and 0.143% to London-wide greenhouse gas emissions.

152 Mitigation measures comprise reuse of material on site where possible, minimising waste to landfill and good practice measures to minimise energy use from construction activities all to be included with a Construction Environmental Management Plan. In addition, on-site measures to be lean, be clean and be green and ensure highly energy efficient buildings during the operation of the Proposed Development as well as carbon offsetting would be provided to help reduce overall site-wide greenhouse gas emissions. Many of the mitigation measures will be further defined during subsequent stages of detailed design.

153 The relevant guidance is clear that any greenhouse gas emissions might be considered significant,

but it is important to acknowledge that significant effects from climate change relate to cumulative global greenhouse gas emissions from all sources driving up atmospheric temperatures and do not relate to a direct effect resulting from a small additional greenhouse gas contribution associated with the Proposed Development.

Likely Significant Effects

154 No likely significant effects have been identified as a result of the Proposed Development.

DAYLIGHT, SUNLIGHT, OVERSHADOWING, SOLAR GLARE AND LIGHT POLLUTION

155 The daylight, sunlight and overshadowing assessment has considered current and proposed property developments which have the potential to be affected by the Proposed Development. Potential daylight, sunlight and overshadowing effects associated with the Proposed Development have been considered, including temporary changes during the construction works and permanent effects once the Proposed Development has been completed. Solar glare from the Proposed Development on nearby rail and road users, and light pollution on neighbouring properties has also been considered.

Enabling and Construction

156 During construction of the Proposed Development, the effects in relation to the daylight and sunlight amenity for the surrounding properties will vary and will almost certainly be less than that of the completed Proposed Development, given that the extent of building will increase throughout the construction phase, until the buildings are complete.

157 The impacts of the construction of the Proposed Development will steadily increase as the Proposed Development is built. It is therefore considered that the completed Proposed Development represents the worst-case assessment in terms of likely daylight, sunlight, solar glare and light pollution effects. As such, the assessment focused on the Proposed Development when complete and operational.

Completed Development

Daylight

158 A total of 88 buildings were assessed (consisting of 2,877 windows serving 1,214 residential habitable rooms) to determine whether significant changes in daylight levels would occur as a result of the maximum parameters of the Proposed Development (Maximum Development Scenario). Whilst a majority of the buildings assessed were residential, educational (Little St Matthias Preschool and New City College) and religious buildings (Vietnamese Pastoral Centre and Shah Jalal Mosque Poplar) were also assessed.

159 Of the identified receptors the majority would continue to achieve the recommended levels of daylight once the Proposed Development is complete and operational, or experience non-significant

reductions in daylight levels. The remainder would experience significant reductions in daylight levels, as listed below:

- Cruse House, Horizon Building, 1-8 Stoneyard Lane, New City College, and one building at 9-24 Stoneyard Lane.

Sunlight

160 The same 88 buildings were assessed (consisting of 1,115 residential habitable rooms) to determine whether significant changes in sunlight levels would occur as a result of the maximum parameters of the Proposed Development (Maximum Development Scenario).

161 Of the identified receptors a majority (78 buildings) would continue to achieve the recommended levels of sunlight once the Proposed Development is complete and operational, or experience non-significant reductions in sunlight levels. The remainder would experience significant reductions in sunlight levels, as listed below:

- Cruse House, 1 West India Quay, Good Faith House, 1, 3, 11 and 13 Dolphin Lane, Port East Apartments, 15 and 17 Dolphin Lane.

Overshadowing

162 The overshadowing assessment looked at both public and communal amenity areas in addition to private gardens.

163 Any additional shadows cast, as a result of the maximum parameters of the Proposed Development (Maximum Development Scenario), on the public amenity areas assessed (Green spaces serving houses on Pennyfields; Pennyfields Park; Playground of Our Lady & St Joseph Primary School; Play Area at Will Crooks Estate; Park Area at The Workhouse Leisure Centre; Sports Pitches at The Workhouse Leisure Centre; Poplar Recreation Ground; St Matthias Church Ground; Little St Matthias Preschool outside space; Public Bowling Green on Hale Street; and Public Park on Cottage Street) will not be noticeable to the users of these spaces.

164 In terms of private gardens, 124 gardens were assessed – 115 of which would not experience any noticeable overshadowing effects. The remaining nine gardens, 32C Ming Street, 2 Dolphin Lane, 48 and 49 Dingle Gardens, 34A Ming Street, 1, 3, 13 and 15 Dolphin Lane will experience significant adverse effects. The additional shadows cast on these nine private gardens as a result of the Proposed Development are deemed to be significant effects.

Solar Glare

165 In terms of solar glare effects, a total of 11 viewpoints along the DLR and nearby roads (Aspen Way and Upper Bank Street) were qualitatively assessed for the potential for solar glare effects to occur. Solar glare occurs when sunlight is reflected from a glazed surface. This can affect road users or train drivers as instances of solar glare are likely to cause significant visual impairment or distraction.

166 The duration and significance of any potential solar glare effects will depend on the building orientation, façade details including window size and location, balconies and cladding materials. Therefore, at this stage effects could range from not significant to significant adverse (significant).

167 Once each element of the Proposed Development has been designed in detail, further assessment with regards to solar glare will be undertaken at the Reserved Matters Application stage (including specific mitigation measures for each building as relevant).

Light Pollution

168 In terms of light pollution (i.e. the brightening of the night sky caused by artificial lighting), three sensitive receptors have been considered due to their close proximity to the Site: 1 West India Quay, Millwall and West India Dock Site of Importance for Nature Conservation and future residents within the Proposed Development.

169 Whilst there is unlikely to be a significant effect on 1 West India Quay, should the current proposals change and provide highly glazed office use along the western boundary of the Site, further assessment would be required at the RMA stage. There is the potential for light to spill on Millwall and West India Dock Site of Importance for Nature Conservation; however, any lighting of the quayside will be designed sensitively with this in mind and lighting levels will comply with the relevant guidance. With mitigation in place to ensure that lighting is designed sensitively, there will be no significant effects.

170 With the potential for highly glazed office buildings to be located in close proximity to residential buildings proposed as part of the scheme, there is the potential for significant light spill to reach residential windows. Therefore, at this stage effects could range from not significant to significant adverse. Further assessment will be undertaken at the RMA stage where highly glazed office buildings are proposed.

Internal Daylight, Sunlight and Overshadowing

171 A stand alone report submitted as part of the Outline Planning Application has assessed the potential for the Proposed Development to offer acceptable daylight and sunlight amenity for the enjoyment of future occupants and to provide guidance to be used during detailed design stages to ensure the design advanced at the Reserved Matters Application stage makes the most out of daylight and sunlight availability on-site.

172 The Proposed Development has the potential to provide residential accommodation and outdoor areas of amenity considered acceptable in terms of daylight, sunlight and overshadowing and the assessment and suggestions within the Internal Daylight, Sunlight and Overshadowing Report can be used to aid future designers of detailed plots in bringing forward designs with optimised levels of natural light.

Likely Significant Effects

173 Table 9 summarises the significant daylight, sunlight, overshadowing, solar glare and light pollution effects associated with the Proposed Development. It is important to note that many of the windows that experience significant losses in daylight or sunlight are situated beneath existing balconies, recessed balconies or other architectural features of the property which inherently obstruct daylight availability.

Table 9. Summary of the Significant Residual Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution Effects

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
• Cruse House; • Horizon building; • 1-8 Stoneyard Lane; and • New City College.	Moderate reductions in **daylight** received by four buildings as a result of the Proposed Development.	**Moderate Adverse**
• 9-24 Stoneyard Lane.	Major reductions in **daylight** received by one building as a result of the Proposed Development.	**Major Adverse**
• Cruse House; • 1, 3, 11 and 13 Dolphin Lane; • 1 West India Quay; and • Good Faith House.	Moderate reductions in **sunlight** received by seven buildings as a result of the Proposed Development.	**Moderate Adverse**
• 15 and 17 Dolphin Lane; and • Port East Apartments.	Major reductions in **sunlight** received by three buildings as a result of the Proposed Development	**Major Adverse**
• 32C Ming Street; • 48 and 49 Dingle Gardens; and • 2 Dolphin Lane.	**Overshadowing** in private gardens as a result of the Proposed Development.	**Moderate Adverse**
• 34 A Ming Street; and • 1, 3, 13 and 15 Dolphin Lane.	**Overshadowing** in private gardens as a result of the Proposed Development	**Major Adverse**
Future residents of the Proposed Development	Potential for significant **light spill** (**light pollution**) on future residents of the Proposed Development as a result of glazing reaching residential windows	**Negligible to Major Adverse**
Road and Rail Users	A total of 11 viewpoints on the DLR and nearby roads (Aspen Way and Upper Bank Street) are considered sensitive to **solar glare** from the Proposed Development. The effects could range from Negligible to Major Adverse (significant) for each of the viewpoints assessed.	**Negligible to Major Adverse**

WIND MICROCLIMATE

174 The wind microclimate assessment has focused on understanding whether any undesirable wind conditions would be created on Site and in the surrounding area as a result of the Proposed Development. Undesirable wind speeds may result in effects to pedestrian comfort and safety. Areas within and around the Site have been considered, including roads, thoroughfares, entrances,

ground floor amenity areas, terraces, roof levels, waterways and railway station platforms.

175 The assessment focussed on the 'Indicative Scheme' scenario as this provided the most representative scenario of the likely wind conditions and feasible mitigation options. Nevertheless the maximum parameters of the Proposed Development (Maximum Development Parameters Scenario), which is unlikely to be representative of the wind conditions within and around the future Proposed Development considering the site-wide maximum parameters could not be built out under the Outline Planning Application, was also assessed.

Enabling and Construction

176 As construction of the Proposed Development progresses, wind conditions at the Site would gradually adjust from those of the existing site to those of the completed Proposed Development, as described in the following section 'Completed Development'.

177 Windier conditions will be tolerable across the active enabling and construction Site as this area is not for typical pedestrian use. It is assumed that there will be restricted access (i.e. not accessible to the general public) across the Site during the enabling and construction works. As the area would not typically be for pedestrian use, windier conditions would be tolerable.

178 Mitigation measures will be put in place prior to the completion and occupation of the Proposed Development.

Completed Development

179 The Maximum Development Parameters scenario would have a range of conditions from sitting to walking which would range from suitable for the intended uses to some instances of wind speeds that would be unsuitable for the proposed use. The maximum development parameters scenario, would have significant adverse effects at the following locations:

- 24 ground level entrance locations during the windiest season;
- 2 ground level public amenity space locations in summer season;
- 6 terrace level public amenity space locations during the summer season;
- 12 roof level public amenity space locations during summer season;
- 1 off-site road location during the windiest season; and
- 6 off site ground level entrance locations during the windiest season.

180 With the implementation of indicative mitigation measures, the Indicative Scheme assessment showed that the Proposed Development would result in a number of beneficial effects in terms of pedestrian comfort levels, where wind conditions are one category calmer than required, across the Site (not significant). Wind conditions at on-Site roads would range from being one category calmer than required (not significant) to two and three categories calmer. Where wind conditions are two to three categories calmer this represents a beneficial effect (significant). All other locations would not experience a discernible impact on wind conditions.

181 There is the potential for instances of strong winds to occur at two locations (thoroughfares along

the southeast and southwest corner of NQ.D4) once the Proposed Development is complete (significant adverse effect). Strong winds represent a safety concern to cyclists and pedestrians and would therefore require further mitigation measures. Potential mitigation measures include additional localised screens, dense landscaping and scattered hard/soft landscaping which would be implemented and tested as relevant at the Reserved Matters Applications stage.

Likely Significant Effects

182 Table 10 summarises the likely significant wind microclimate effects associated with the Indicative Scheme. The likely significant effects of the Indicative Scheme with indicative landscaping and mitigation measures are presented below as this provides a scenario representative of the likely wind microclimate and feasible mitigation options. While the Maximum Parameter Model scheme would not be representative of a scheme which could be developed and no landscaping has been proposed.

Table 10. Summary of the Likely Significant Residual Wind Microclimate Effects

Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
Pedestrians and Cyclists	**Wind Microclimate – Indicative Scheme** Wind conditions at thoroughfares would exceed pedestrian safety limit by 15m/s at probe locations 168 and 180	Adverse – Significant

WATER RESOURCES AND FLOOD RISK

183 This assessment has considered the potential effects of the Proposed Development on flood risk and surface water runoff, including rate and water quality. The assessment also considered the potential effects of the Proposed Development on the capacity of the drinking water supply and foul and surface water drainage networks. Additionally, the potential impacts on the stability and maintenance of the dock wall structure were considered.

184 The Environment Agency's flood map for planning shows that the Site lies entirely within Flood Zone 3 (High Risk). However, the Site is located within an area that is protected from flooding by the River Thames Tidal Defences and the Thames Barrier. The majority of the Site has a very low surface water flood risk and it is not at risk of reservoir flooding.

Enabling and Construction

185 The operation of construction vehicles and general construction activities including piling activity could result in a reduction of dock water quality. However, a Construction Environmental Management Plan will be prepared in advance of the enabling and construction works and agreed with the London Borough of Tower Hamlets. It will set out a number of measures for the control of site drainage, reducing the risk of accidental spillages and the storage and handling of hazardous materials.

186 In line with other developments in the Canary Wharf area, groundwater discharge generated by construction activity is likely to be discharged to the Docks. Depending on the composition of the discharge, there could be a not significant adverse effect on the Dock water quality. Whilst this effect would be temporary and not significant it has been addressed within the Preliminary Ecological Appraisal and would include mitigation measures such as controls for dust deposition and pollutant spillage.

187 Works undertaken to connect the Proposed Development to the public sewer will be designed and constructed taking into account Thames Water's requirements. This would ensure there would be no discernible effect on the public sewer. Additionally, the foul discharges produced during construction would be small in comparison to those during operation.

188 Construction works, specifically the construction of the foundations of the Proposed Development, will not affect groundwater flow or quantity due to their extent.

189 Due to the Sites previous uses such as housing temporary buildings, there is infrastructure in place to supply a temporary drinking water supply to the Site. Water demand during construction works would not be significant when compared to the demand of the Proposed Development. Therefore, there will be a not significant effect on the drinking water supply.

190 In terms of flood risk, if construction works led to damage of the existing Dock wall the flood protection of the Site and adjacent areas would be compromised. However, construction methods and the implementation of a monitoring strategy will ensure that piling works do not result in damage to the dock wall. Therefore, damage to the dock wall is very unlikely, meaning that the impact on the flood risk to the existing population and infrastructure will be very low.

191 Some construction activities, such as wheel washing, would increase the volume of surface water runoff from the Site in the short-term. However, the volume of water is likely to be small and therefore the effect on flood risk would be not significant. Precipitation falling on the Site would usually flow overland to the Docks to the south, or be picked up by road drainage in the north-east corner of the Site with some infiltrating the ground. During construction, the situation would be no different to the existing condition; therefore, there will a not significant effect on surface water flood risk as a result of the construction of the Proposed Development.

Completed Development

192 The key principle of the surface water drainage strategy for the Proposed Development is to discharge the majority of surface water runoff, falling on roofs and soft landscaping, directly to the Docks. Discharge of surface water to the Docks results in a direct, long-term, permanent, not significant beneficial effect in terms of water quality, due to the increased flushing and aeration of the dock water. Areas of green roof have been proposed as part of the Proposed Development. Green roofs are classified as 'extensive' or 'intensive'; whilst the former require little maintenance or artificial irrigation or the use of fertilisers, intensive green roofs have greater maintenance requirements and require the use of fertilisers. Runoff from the extensive green roofs will be discharged to the docks, whilst runoff from intensive green roofs will be discharged into the Thames

Water sewer along Aspen Way. Whilst there is the potential for contamination on the North Dock water quality, any effect is deemed not significant.

193 The basement perimeter wall of the Proposed Development will result in a reduction of water leaking from the docks into groundwater (within the Upper Aquifer). This is will result in a permanent not significant beneficial effect on the quantity of groundwater within the upper aquifer. As the basement construction will be restricted to the upper aquifer, there will be no impact on groundwater within the lower aquifer.

194 There is currently an existing false quay structure on site which will be demolished and replaced as part of the Proposed Development. The replacement marine deck structure will result in a loss of flood storage. However, the loss has been assessed as not significant by the Environment Agency. The proposed deck structure has been designed to span over the existing dock wall, therefore, no load is applied to the wall. Additionally, the basement secant wall will take load off the existing wall. Therefore, the structural integrity of the dock wall, in its capacity as a tidal defence, will be enhanced such that the effect on flood risk to the existing local population and infrastructure is assessed as not significant beneficial.

195 The existing dock edge will be raised as part of the Proposed Development. The raising of the Dock wall and incorporating flood wall and temporary barriers into the proposed flood strategy means that flood risk to the Proposed Development is being managed. As such the effect is not significant. However, the raising of the dock edge will improve long-term flood resilience for existing population and infrastructure. The effect is considered to be significant beneficial.

196 As part of the Proposed Development, a surface water drainage strategy would be implemented. This would reduce the rate of surface water run off through the promotion of infiltration and/or by storage from SuDS and landscaping such as blue roofs. This would result in a not significant beneficial effect on surface water drainage.

197 The Proposed Development will lead to an increase in water demand and foul drainage demand. Any increase in water demand will be reduced as far as possible by the incorporation of appropriate water efficiency/leakage detection at building level with low flow water fittings in non-residential buildings. Additionally, the Thames Water supply network will be reinforced to accommodate the Proposed Developments water demand. In terms of foul drainage, Thames Water have confirmed they have capacity within their existing network to accommodate the flows from the Proposed Development. As such there will be a not significant effect on the Thames Water strategic sewer network and drinking water supply.

Likely Significant Effects

198 Table 11 summarises the likely significant water resources and flood risk effects associated with the Proposed Development.

Table 11. Summary of the Likely Significant Residual Water Resources and Flood Risk Effects

Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
Flood risk to existing population and infrastructure	As part of the Proposed Development, the dock edge will be raised, improving flood resilience	Moderate Beneficial

TOWNSCAPE, VISUAL IMPACT AND BUILT HERITAGE ASSESSMENT

199 The assessment of townscape effects has considered how the Proposed Development will affect the character of the area. The assessment of the effects on built heritage has considered any impact of the development on designated and non-designated heritage assets (e.g. listed buildings and conservation areas). The visual assessment has considered the makeup and character of views, including both protected views (under the London View Management Framework) and views likely to be experienced by people within the surrounding area.

200 A total of five 'Townscape Character Areas' (geographical areas which are based on the dominant land use, building types, traffic and pedestrian movement, levels of activity and townscape quality) were considered to assess the range of ways the Proposed Development may affect the existing character and quality of the surrounding townscape.

201 The visibility of the Site and how the Proposed Development could alter this visibility from the identified visual receptors and supporting representative views was also considered. Typically, the visibility varies depending on visual receptors and the proximity of the views to the Site. A total of 45 views were considered to assess the range of ways the Proposed Development may affect the existing character and quality of the surrounding townscape.

202 The built heritage surrounding the Site includes listed buildings and conservation areas. Within 1km of the Site, 13 Conservation Areas were identified, the closest of which is the West India Dock Conservation Area to the west of the Site. There are no listed buildings or locally listed building above ground onsite; however, there is a listed dock wall which runs below ground through the Site which has been considered with the Archaeological Desk Based Assessment submitted with the planning application.

Enabling and Construction

203 During the enabling and construction of the Proposed Development there will be a number of temporary, adverse, significant effects in relation to townscape character areas, views and built heritage assets.

204 Other than the use of hoarding where appropriate during construction, no further mitigation is proposed as the visual effects of construction activity are unavoidable and commonplace in London.

The significant adverse effects identified with respect to townscape character areas, views and built heritage assets will be temporary and are necessary to deliver the scheme.

Completed Development

205 For each receptor, two assessments have been undertaken. The first assessment (the 'maximum parameters scenario) relates to the maximum parameters of the Proposed Development, providing a greater than maximum possible impact scenario for assessment (given that the maximum parameters exceed the site-wide total floorspace). The only Design Guidelines taken into account are a small number which relate to the appearance of buildings only. A second assessment (the 'maximum parameters and Design Guidelines scenario) takes into account both the maximum parameters and the Design Guidelines as a whole (as well as the Development Specification and the site-wide total floorspace it sets). As this is considered a more realistic assessment of the likely effect of the Proposed Development, it is this assessment which is taken forward as the 'residual effect' for each receptor and which is considered in the summary below.

206 Once the Proposed Development is complete 21 views will experience a significant beneficial effect. The Proposed Development would help balance the composition of the Isle of Dogs tall buildings cluster and, together with existing buildings to the south of the Site, it would help to suggest the location and alignment of the North Dock.

207 Whilst a significant adverse effect has been identified in relation to one view (of the Church of St Matthias), this is not considered to be the most important view of the Church and the overall extent of the adverse effect is considered to be small.

208 The Proposed Development would reinforce the existing character of Townscape Character Area A (Canary Wharf) within which it is located and would enhance its appearance and amenity value through its contribution to the legibility and composition of the existing tall buildings group, resulting in a significant beneficial effect. The Proposed Development would also recognisably add to an existing background layer of townscape formed by the tall buildings of Canary Wharf, as seen from Townscape Character Area B (Poplar), in addition to contributing to a more positive and connected relationship between Poplar and Canary Wharf, resulting in a significant beneficial effect.

209 The Site in its existing vacant state does not contribute to the heritage significance of the identified heritage assets, and detracts from the local context in which those heritage assets closest to the Site are experienced.

210 The Proposed Development would be consistent with the existing urban context of the wider surrounding area and would have a beneficial or neutral effect with regard to the setting of heritage assets, and would not cause any harm to their heritage significance.

211 Once the Proposed Development is completed and occupied, there would be seven significant effects – four of these effects would be beneficial with the remaining three being classified as neutral. All other effects are assessed to be 'not significant' and neutral. There would be no adverse effects.

Likely Significant Effects

212 Table 12 summarises the likely significant townscape, visual and built heritage effects associated with the Proposed Development.

Table 12. Summary of the Likely Significant Residual Townscape, Visual and Built Heritage Effects (maximum parameters and Design Guidelines scenario)

Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
Enabling and Construction		
Built Heritage	Enabling and construction works would have an adverse effect on the following built heritage assets: Quay walls, copings and buttresses to the Import and Export Dock at West Quay and West India Dock North; The warehouses and general offices at the western end of North Quay; St. Matthias Church; listed building groups (i) and (ii); West India Dock Conservation Area; St. Matthias Conservation Area.	**Moderate Adverse**
Views	Enabling and construction works would have an adverse effect on the following views: 12 (Narrow Street), 18 (southern end of Mile Park), 19 (Bartlett Park), 20 (Commerical Road/West India Dock Road/East India Dock Road), 22 (winter) (Poplar Recreation Ground), 23 (Trinity Gardens), 24 (All Saints Churchyard), 28 (winter) (Garford Street), 29 (Hertsmere Road), 33 (Poplar High Street), 34 (Poplar Dock), 36 (Aspen Way, east of the Site), 37 (Cordelia Street), 39 (Poplar High Street (central)), 40 (Poplar High Street (east)), 41 (Poplar High Street (west)), and 42 (Shirbutt Street/Hale Street).	**Moderate Adverse**
Views	Enabling and construction works would have an adverse effect on the following views: 21 (Church of St Matthias), 30 (Cannon Workshops), 31 (North Quay, western end), 32 (North Quay, southern side), and 43 (Upper Bank Street).	**Moderate to Major Adverse**
Townscape Character Areas	Enabling and construction works would have an adverse effect on the following Townscape Character Areas: Townscape Character Area A: Canary Wharf and B: Poplar	**Moderate Adverse**
Completed Development		
Views	The Proposed Development will have a beneficial effect on selected views of the Site: 12 (Narrow Street), 18 (southern end of Mile End Park), 19 (Bartlett Park), 20 (Commercial Road/West India Dock Road/ East India Dock Road), 22 (Winter) (Poplar Recreation Ground), 23 (Trinity Gardnes), 24 (All Saints Churchyard),	**Moderate Beneficial**

Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
	28 (Winter) (Gartford Street), 29 (Hertsmere Road), 33 (Poplar High Street), 34 (Poplar Dock), 36 (Aspen Way, east of site), 37 (Cordelia Street), 39 (Poplar High Street (central)), 40 (Poplar High Street (east)), 41 (Poplar High Street (west)), 42 (Shirbutt Street / Hale Street)	
	The Proposed Development will have a beneficial effect on selected views of the Site: 30 (Cannon Workshops), 31 (North Quay, western end), 32 (North Quay, southern side), 43 (Upper Bank Street)	**Moderate to Major Beneficial**
	The Proposed Development will have an adverse effect on one view of the Site: 21 (Church of St Matthias).	**Moderate to Major Adverse**
Townscape Character Areas	The Proposed Development will have a beneficial effect on two townscape character areas: • Townscape Character Area A: Canary Wharf; and • Townscape Character Area B: Poplar as a result of the Proposed Development.	**Moderate Beneficial**
Built Heritage	The Proposed Development will have a beneficial effect on selected built heritage assets: • Listed Buildings A - Quay walls, copings and buttresses to the Import and Export Dock at West Quay and West India Dock North; • Listed Buildings B - The warehouses and general offices at the western end of North Quay; • Listed Buildings Group i - West India Docks; and • West India Dock Conservation Area.	**Moderate Beneficial**
	The Proposed Development will have a neutral effect on selected built heritage assets: • Listed Buildings C St Matthias Church; • Listed building group iii Poplar High Street; and • St Matthias Church Poplar Conservation Area.	**Moderate Neutral**

CLIMATE CHANGE

The Impact of Climate Change on the Development

213 Climate change has the potential to alter the current environment. To consider how the environmental and socio-economic effects of the development might change under a different climate in the future, a future climate scenario has been developed using projections published by the Met Office. The projections consider the local climate effects arising from a series of different greenhouse gas emission scenarios (and the associated impacts to the climate).

214 As a result of climate change, several different environmental factors are likely to vary in the future. These include increase in average air temperatures, increase in yearly rainfall and sea level rise. Additionally, cloud cover could slightly decrease.

215 Each technical topic assessment reviewed the possible implications of a different climate in the future against the results and conclusions of the environmental impact assessment of the Proposed Development. They confirm that likely effects identified for the technical topics are not expected to change as a result of climate change.

216 Climate change could affect the daylight and sunlight assessment, in that the increasing level of cloud cover could affect the standard overcast sky conditions used in the daylight and sunlight assessments. While this may occur, it is not expected to significantly change the results and conclusions of the assessment in terms of size and significance of the effects. Climate change could lead to changing rainfall patterns with more intense storm events which could more frequently overwhelm drainage infrastructure and lead to more flooding events. However, the water resources and flood risk assessment has been undertaken with allowances for climate change and providing sufficient attenuation so no flooding is generated by increased storm events. The provision of flood risk measures have incorporated potential climate change impacts.

Climate Change Resilience

217 The design team has approached the design of the Indicative Scheme in order to reduce the energy demands. Numerous measures such as the use of high-performance building fabric, heat recovery and demand driven ventilation, energy efficient lighting with intelligent controls and the consideration of renewable energy technologies all aim to reduce energy emissions as far as possible.

218 In addition to all of these measures the resilience of the Proposed Development to climate change has been considered throughout other aspects of the Proposed Development as well. Maintainability and resilience to climate change would be an important consideration in plant species selection and ecological considerations at detailed design and has been taken into account in the indicative landscaping proposals. Flood risk and drainage measures such as the proposed promenade levels along the south of the Site and the proposed surface water drainage strategy have taken into account climate change modelling and potential increases in rainfall and storm events etc. thereby inherently factoring in climate change resilience into the design of the Proposed Development.

COMPARISON WITH THE INDICATIVE SCHEME

Socio-Economics

219 The only change to the significant effects when comparing the maximum residential and minimum employment scenario to the Indicative Scheme is that the maximum residential and minimum employment scheme will bring forward 1,152 residential units which will have a significant beneficial effect at both local and borough levels. Whereas the Indicative Scheme would bring forward 702 residential units which would have a significant beneficial effect at local level only.

Transport and Accessibility

220 The trips associated with the Indicative Scheme, which represents the type of mixed-use development which could come forward, are significantly lower than the (maximum trip generation) scheme assessed. Therefore, any effects on severance and delay are expected to be less noticeable with the Indicative Scheme.

221 The significant beneficial residual effects on delay, as well as amenity, fear and intimidation for pedestrians and cyclists associated with the 'Maximum Trip Generation Scenario would also be realised if the Indicative Scheme were to come forward.

Noise and Vibration

222 The Indicative Scheme has been used to evaluate enabling and construction works and the site suitability assessment.

223 The assessment of traffic flows and the potential for increasing noise levels has been completed using the 'maximum transport generating' traffic volume predictions, and sensitivity tested with the 'maximum population generating' scenario which generates less traffic. The 'maximum transport generating' predictions represent the largest increase in traffic flows and as such a reasonable worst-case. The Indicative Scheme traffic flows would be less than those assessed and therefore the impacts and effects are expected to be the same or less than those presented.

224 In addition, the 'maximum population generating' scheme would have an unnoticeable difference to the predictions presented and would not result in different effects being described.

Air Quality

225 The air quality assessment has considered the highest number of transport trips related to the maximum floor space for office use within the Proposed Development, and as such the impacts are considered conservative and the predicted impacts are therefore greater than what would be generated by the Indicative Scheme.

226 In addition, the air quality assessment has considered sensitive locations within the Proposed Development at a range of locations, which are based on the GA plans produced for the Indicative Scheme, but take account of the parameter plans for the Site and possible land uses that will be brought forward at future Reserved Matters Application stage. The locations of the receptors within the Proposed Development are therefore representative of the Indicative Scheme and do not identify any potential exceedances of relevant air quality objectives at the Site.

Greenhouse Gas Emissions

227 The GHG assessment is largely based on the Indicative Scheme, although worst-case assumptions have been made with respect to transport movements, which are based on a maximum transport generating scheme. Total GHG emissions from the Indicative Scheme will therefore likely be lower than those presented in this assessment, although the principles of mitigation set out in the assessment will remain the same and the overall conclusions of the assessment will not be affected.

Daylight Sunlight Overshadowing Solar Glare and Light Pollution

228 With the Indicative Scheme in place, significant effects continue to be seen, owing to the

undeveloped nature of the existing site, but much more light passes through the Site, between the gaps in the buildings.

229 The effects of the Indicative Scheme on daylight are therefore both less wide ranging with fewer adverse effects and less significant with those which continue to breach guidance seeing less of a reduction.

230 In terms of sunlight, a similar conclusion can be drawn as the number of adverse effects significantly reduces as sunlight reaches neighbouring properties between the buildings of the Indicative Scheme.

231 In relation to overshadowing, the conclusions are similar in that the number of neighbours with significant effects reduce from nine private areas of amenity to three, and the levels of sunlight retained are significantly better owing to the gaps now visible between buildings. This highlights the unrealistic and extreme worst-case scenario of assessing these maximum parameters.

Water Resources

232 The Indicative Scheme is likely to have a smaller potable water demand and foul discharge rate than the maximum parameters. Lessening the Proposed Development's impact on the TWUL Primary Potable supply and the TWUL trunk sewer located in Aspen Way.

233 The use class of the buildings has been selected so that the maximum possible water demand and wastewater discharge is considered within this assessment. The operational development is unlikely to have the exact use class combinations assumed, therefore the demand placed on TWUL potable network and TWUL trunk sewer for the indicative scheme will likely be less than considered in this assessment.

Wind Microclimate

234 Wind conditions were tested for the Indicative Scheme Design Model of the Proposed Development with Existing Surrounding Buildings and the Indicative Landscaping Scheme. These would be significantly calmer than those of the configuration which tested the Maximum Development Parameters Model of the Proposed Development with Existing Surrounding Buildings, especially in the immediate surrounding of the Site to the west and north-east.

235 Calmer wind conditions would also occur at the upper level amenity spaces in the Indicative Scenario, and fewer instances of strong winds exceeding the safety threshold would occur in this configuration compared to Maximum Development Parameters..

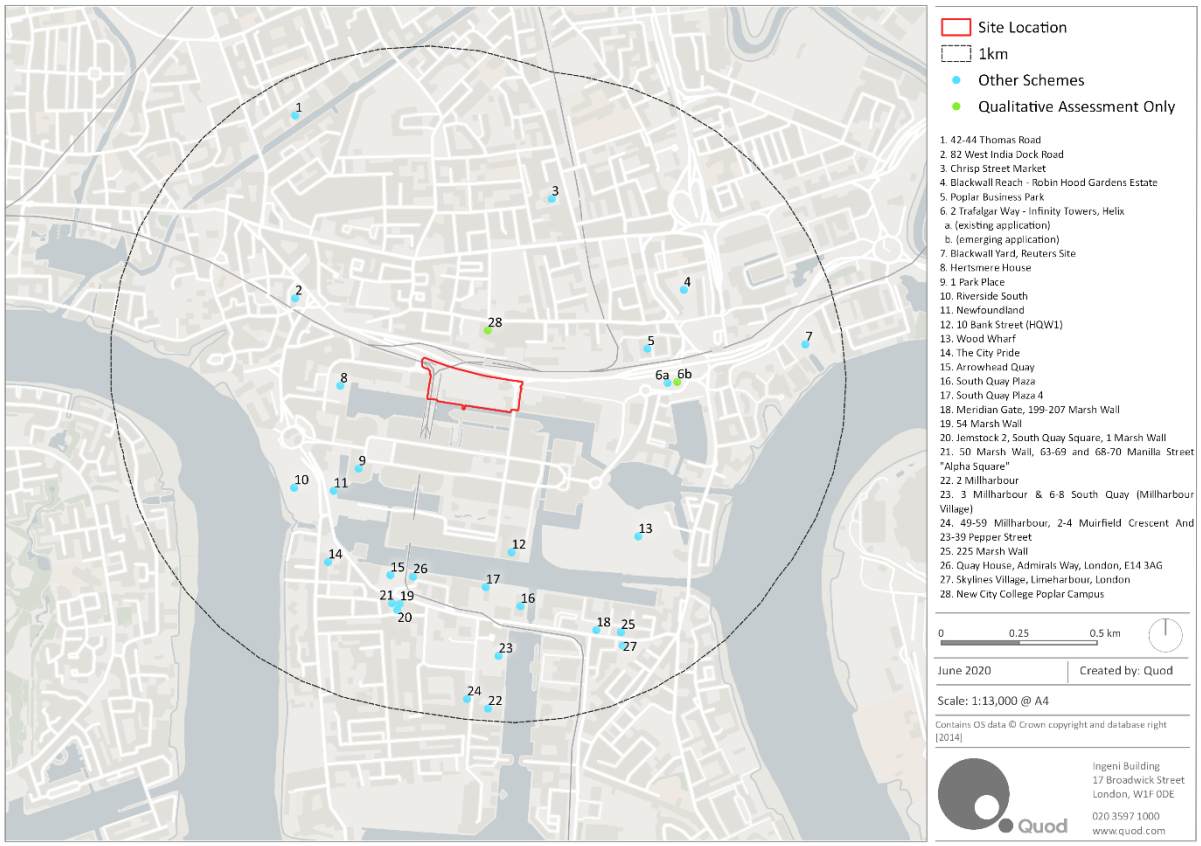
CUMULATIVE EFFECTS ASSESSMENT

236 A number of schemes (Figure 18) within the surrounding area have been considered in order to understand the impact of the Proposed Development in combination with these cumulative schemes:

1. 42-44 Thomas Road;
2. 82 West India Dock Road;

3. Chrisp Street Market;
4. Blackwall Reach – Robin Hood Gardens Estate;
5. Poplar Business Park;
6. 2 Trafalgar Way – Infinity Towers, Helix (an Environmental Impact Assessment Scoping Opinion Request has been submitted in 2020 for a revised scheme);
7. Blackwall Yard, Reuters Site;
8. Hertsmere House;
9. 1 Park Place;
10. Riverside South;
11. Newfoundland;
12. 10 Bank Street (HQW1);
13. Wood Wharf;
14. The City Pride;
15. Arrowhead Quay;
16. South Quay Plaza;
17. South Quay Plaza 4;
18. Meridian Gate, 199- 207 Marsh Wall;
19. 54 Marsh Wall;
20. Jemstock 2, South Quay Square, 1 Marsh Wall;
21. 50 Marsh Wall, 63-69 and 68-70 Manilla Street “Alpha Square”;
22. 2 Millharbour;
23. 3 Millharbour & 6-8 South Quay (Millharbour Village);
24. 49-59 Millharbour, 2-4 Muirfield Crescent And 23-39 Pepper Street, London, E14;
25. 225 Marsh Wall;
26. Quay House, Admirals Way, London, E14 3AG;
27. Skylines Village, Limeharbour, London; and
28. New City College Poplar Campus (Emerging scheme, no planning application has been submitted, only an Environmental Impact Assessment Scoping Opinion Request).

Figure 18 Surrounding Developments



Likely Significant Cumulative Effects

237 As identified earlier, the Proposed Development has been assessed in relation to a number of schemes in the surrounding area which have the potential to come forward.

238 No additional or different cumulative effects have been identified during the enabling and construction phase of Proposed Development.

239 There is potential for significant beneficial cumulative socio-economic effects to arise once the Proposed Development is complete in relation to additional housing provision and employment.

240 The New City College cumulative scheme, which has been qualitatively assessed as there is very limited details on the proposals for the site as no planning application has been submitted (only an EIA Scoping Request has been submitted to the London Borough of Tower Hamlets), would potentially significantly alter the effect of the Proposed Development in views from the north and in respect of Townscape Character Areas by obscuring the Proposed Development and introducing tall development closer to these viewpoints and Townscape Character Areas. Overall, the Proposed Development contributes a small amount to GHG emissions and will employ commensurate mitigation measures to ensure policy compliance and minimise its contribution to climate change where possible to ensure that likely significant effects associated with the Proposed Development itself are avoided. Many of the mitigation measures will be further defined during subsequent RMA applications. The IEMA guidance is clear that any GHG emissions might be considered significant,

but it is important to acknowledge that significant effects from climate change relate to cumulative global GHG emissions from all sources driving up atmospheric temperatures and do not relate to a direct effect resulting from a small additional GHG contribution associated with the Proposed Development. It is therefore concluded that significant effects arise as a result of cumulative GHG emissions from all sources, cumulatively, regionally and even nationally.

IN-COMBINATION EFFECTS / EFFECT INTERACTIONS

In-Combination Effects / Effect Interactions

241 In-combination effects / effect interactions are the result of interactions of effects on an individual receptor (e.g. when both noise and dust affect a particular residential property).

242 The assessment identified the potential following effects:

- Potential for in-combination effects or effects interactions during the enabling and construction phase of the Proposed Development have been identified as:
    - Temporary Adverse in-combination effects in respect of Noise, Dust, Daylight, Sunlight and Light Pollution. These effects or effect interactions apply to the existing residents of Canary Wharf Marriot Hotel / 1 West India Quay; and
    - Temporary Adverse in-combination effects have been identified in respect of Daylight and Sunlight reduction on residential receptors in the surrounding local area.
- Potential for in-combination effects or effects interactions when the Proposed Development is complete and operational:
    - Adverse in-combination effects in respect of Noise, Daylight, Sunlight and Light Pollution. These effect interactions apply to the existing residents of Marriot Hotel / 1 West India Quay;
    - Adverse in-combination effects on Daylight and Sunlight reductions at existing residential properties;
    - In-combination effects have been identified in respect of beneficial Water Quality effects and adverse Light Pollution effects. These effect interactions apply to the Millwall and West India Dock SINC;
    - Beneficial and Adverse in-combination effects to occur between beneficial amenity effects on pedestrians and cyclists and potentially adverse wind conditions; and
    - Beneficial in-combination effects relating to the provision of new employment and spending by residents and employees within the local area. These effects will interact with each other to enhance the local economy.

SUMMARY AND CONCLUSION

243 The redevelopment of the Site will provide a new mixed-use development within Canary Wharf which will include public and open space and improved public realm.

244 The Proposed Development would comprehensively redevelop the Site, providing generous public space, new pedestrian routes through the Site, and buildings of a scale and with an arrangement on Site that would positively reinforce the existing character of the area in which it is located, particularly in relation to Canary Wharf.

245 The Proposed Development is also likely to bring benefits and opportunity in the long-term, as well as the potential to act as a catalyst for regenerating the surrounding area, to those already living and working in the local area, as well as those future occupants within the Proposed Development.

246 No significant effects have been identified as a result of the enabling and construction works in respect of the following environmental topic areas covered by the Environmental Impact Assessment: socio-economics, transport and accessibility, air quality, noise and vibration, wind microclimate, and water resources.

247 **Significant adverse** effects during the enabling and construction works are limited to: daylight, sunlight, overshadowing and light pollution and temporary adverse effects in relation to townscape character areas and views.

248 Once completed and operational the Proposed Development would likely result in **significant beneficial** effects relating to socio-economics, transport and accessibility, townscape and visual impact, water resources and flood risk.

249 Once completed and operational the Proposed Development (cumulatively with other developments) would likely result in **significant adverse** effects relating to greenhouse gas emissions (when considering cumulative global contributions), daylight, sunlight, overshadowing, solar glare and light pollution, transport and accessibility, visual impact and wind microclimate.

250 The Proposed Development accords with the development plan at both the strategic and local level as a significant opportunity to provide the new homes, jobs, and infrastructure for the London Brough of Tower Hamlets and London.

251 The likely significant residual effects associated with the Proposed Development have been summarised in Table 13 below, with green cells denoting beneficial effects, orange cells donating adverse effects; and blue cells denoting neutral effects.

Table 13. Summary of Likely Significant Residual Effects

Topic	Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
Enabling and Construction			

Topic	Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
DAYLIGHT, SUNLIGHT, OVERSHADOWING, LIGHT POLLUTION AND SOLAR GLARE	Existing Neighbouring Properties	**Daylight** **Up to Moderate Adverse** Daylight alterations to four buildings: • Cruse House; • Horizon building; • 1-8 Stoneyard Lane; and • New City College. **Up to Major Adverse** Daylight alterations to one building: 9-24 Stoneyard Lane.	Up to Major Adverse* Local
		Sunlight **Up to Moderate Adverse** Sunlight alterations to seven buildings: • Cruse House • 1, 3, 11 and 13 Dolphin Lane; • 1 West India Quay; and • Good Faith House. **Up to Major Adverse** Sunlight alterations to three buildings: • 15 and 17 Dolphin Lane; and • Port East Apartments.	Up to Major Adverse* Local
	Private Gardens	**Overshadowing** **Up to Moderate Adverse** Overshadowing at the following private gardens: • 32C Ming Street; • 48 and 49 Dingle Gardens; and • 2 Dolphin Lane. **Up to Major Adverse** Overshadowing at the following private gardens: • 34 A Ming Street; and • 1, 3, 13 and 15 Dolphin Lane.	Up to Major Adverse* Local
	Future Residents	**Light Pollution** Potential for light spill on future residents of the Proposed Development as a result of glazing reaching residential windows.	Up to Major Adverse* Local
	Sensitive Viewpoints / Road and Rail Users	**Solar Glare** Up to Major Adverse potential for solar glare to sensitive viewpoints.	Up to Major Adverse* Local

Topic	Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
TOWNSCAPE, VISUAL IMPACT AND BUILT HERITAGE	Townscape Character Areas	Adverse effect on TCA A: Canary Wharf and B: Poplar as a result of enabling and construction works.	Moderate Adverse Local
	Views	**Views** **Moderate to Major Adverse:** 21 (Church of St Matthias), 30 (Cannon Workshops), 31 (North Quay, western end), 32 (North Quay, southern side), and 43 (Upper Bank Street). **Moderate Adverse:** 12 (Narrow Street), 18 (southern end of Mile Park), 19 (Bartlett Park), 20 (Commercial Road/West India Dock Road/East India Dock Road), 22 (winter) (Poplar Recreation Ground), 23 (Trinity Gardens), 24 (All Saints Churchyard), 28 (winter) (Garford Street), 29 (Hertsmere Road), 33 (Poplar High Street), 34 (Poplar Dock), 36 (Aspen Way, east of the site), 37 (Cordelia Street), 39 (Poplar High Street (central)), 40 (Poplar High Street (east)), 41 (Poplar High Street (west)), and 42 (Shirbutt Street/Hale Street).	Moderate Adverse to Moderate to Major Adverse Local
	Heritage Assets	**Heritage Assets** Quay walls, copings and buttresses to the Import and Export Dock at West Quay and West India Dock North; The warehouses and general offices at the western end of North Quay; St. Matthias Church; listed building groups (i) and (ii); West India Dock Conservation Area; St. Matthias Conservation Area	Moderate Adverse Local
Completed Development			
SOCIO-ECONOMICS	Local Economy and Employment	Provision of floorspace is likely to accommodate 14,220 – 18,800 jobs under the **Maximum Employment Scenario. (Major Beneficial Borough Level)**	Major Beneficial Local
			Moderate to Major Beneficial Borough
		Provision of floorspaces is likely to accommodate 8,535 – 11,155 jobs under the **Maximum Residential Scenario . (Moderate Beneficial Borough Level)**	Major Beneficial Local
			Moderate Beneficial Borough

Topic	Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
	Local Economy	Additional spending by employees under the **Maximum Employment Scenario**.	Moderate Beneficial Local
		Additional spending by residents and employees in the **Maximum Residential Scenario**	Moderate Beneficial Local
	LBTH Housing Need/Demand	Provision of up to 1,152 residential units contributing to policy targets in the **Maximum Residential Scenario**	Major Beneficial Local
			Major Beneficial Borough
TRANSPORT AND ACCESSIBILITY	Pedestrians and Cyclists	Enhanced permeability and connectivity of the local area (to and through the Site) reducing 'delay' of pedestrians and cyclists.	Moderate Beneficial Local
		Severance along Hertsmere road as a result of increased traffic along the road	Moderate Adverse Local
		Provision of new pedestrian and cycle connections through the Site is expected to create a more permeable and attractive place to travel to, from and through improving 'Amenity, Fear and Intimidation'.	Moderate Beneficial Borough
DAYLIGHT, SUNLIGHT, OVERSHADWOING, SOLAR GLARE AND LIGHT POLLUTION	Existing Neighbouring Properties	**Daylight** **Moderate Adverse** Daylight alterations to four buildings: • Cruse House; • Horizon building; • 1-8 Stoneyard Lane; and • London City College. **Major Adverse** Daylight alterations to one building: • 9-24 Stoneyard Lane.	Moderate Adverse – Major Adverse Local
		Sunlight **Moderate Adverse** Sunlight alterations to seven buildings: • Cruse House • 1, 3, 11 and 13 Dolphin Lane; • 1 West India Quay; and	Moderate Adverse – Major Adverse Local

Topic	Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
		• Good Faith House. **Major Adverse** Sunlight alterations to three buildings: • 15 and 17 Dolphin Lane; and • Port East Apartments.	
	Private Gardens	**Overshadowing** **Moderate Adverse** Overshadowing at the following private gardens: • 32C Ming Street; • 48 and 49 Dingle Gardens; and • 2 Dolphin Lane. **Major Adverse** Overshadowing at the following private gardens: • 34 A Ming Street; and • 1, 3, 13 and 15 Dolphin Lane.	Moderate Adverse to Major Adverse Local
	Future residents of the Proposed Development	**Light Pollution** Potential for light spill on future residents of the Proposed Development as a result of glazing reaching residential windows.	Negligible to Major Adverse Local
	Sensitive Viewpoints / Road and Rail Users	**Solar Glare** A total of 11 viewpoints on the DLR and nearby roads (Aspen Way and Upper Bank Street) are considered sensitive to solar glare from the Proposed Development. The effects could range from Negligible to Major Adverse for each of the viewpoints assessed.	Negligible to Major Adverse Local
WIND MICROCLIMATE	Pedestrians and Cyclists	**Wind Microclimate – Indicative Scheme*** Wind conditions at thoroughfares would exceed pedestrian safety limit by 15m/s at probe locations 168 and 180.	Adverse (Significant) Local
WATER RESOURCES AND FLOOD RISK	Flood risk to existing population and infrastructure	Raising of the dock edge as part of the Proposed Development will improve flood resilience	Moderate Beneficial Local
TOWNSCAPE, VISUAL IMPACT AND BUILT HERITAGE	Townscape Character Areas	There will be a Moderate Beneficial effect on: • TCA A: Canary Wharf; and • TCA B: Poplar as a result of the Proposed Development.	Moderate Beneficial Local
	Views	**Visual Impact** The Proposed Development will have a **Moderate Beneficial** effect on selected views of the Site: 12 (Narrow Street), 18 (southern end of Mile End Park), 19 (Bartlett Park), 20 (Commercial	Moderate Beneficial to Moderate to Major Beneficial Local

Topic	Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
		Road/West India Dock Road/ East India Dock Road), 22 (Winter) (Poplar Recreation Ground), 23 (Trinity Gardnes), 24 (All Saints Churchyard), 28 (Winter) (Gartford Street), 29 (Hertsmere Road), 33 (Poplar High Street), 34 (Poplar Dock), 36 (Aspen Way, east of site), 37 (Cordelia Street), 39 (Poplar High Street (central)), 40 (Poplar High Street (east)), 41 (Poplar High Street (west)), 42 (Shirbutt Street / Hale Street) The Proposed Development will have a **Moderate to Major Beneficial** effect on selected views of the Site: 30 (Cannon Workshops), 31 (North Quay, western end), 32 (North Quay, southern side), 43 (Upper Bank Street)	
		Visual Impact The Proposed Development will have a **Moderate to Major** Adverse effect on one view of the Site: 21 (Church of St Matthias).	Moderate to Major Adverse Local
	Built Heritage Assets	**Built Heritage – Listed Buildings** **Moderate Beneficial e**ffect to: • Listed Building A - Quay walls, copings and buttresses to the Import and Export Dock at West Quay and West India Dock North; • Listed Building B - The warehouses and general offices at the western end of North Quay; • Group i - West India Docks.; and • West India Dock Conservation Area	Moderate Beneficial Local
		Built Heritage – Listed Buildings **Moderate Neutral** effect to: • Listed Building C - The Church of St Matthias; • Listed building group iii Poplar High Street; and • St Matthias Church Poplar Conservation Area.	Moderate Neutral Local

Topic	Receptor	Description of Likely Significant Effect	Scale and Nature of Residual Effect
Cumulative Effects			
Socio Economics	Housing Provision in London Borough of Tower Hamlets	If all cumulative scheme were to come forward he effects on housing provision, the cumulative schemes are expected to bring forward an estimated additional 16,500 residential units.	Major Beneficial Local Level and District Level
	Employment in London Borough of Tower Hamlets	If all cumulative schemes were to come forward, they would generate up to approximately 73,500 jobs	Major Beneficial Local Level and District Level
Townscape, Visual Impact and Built Heritage	Townscape	The New City College cumulative scheme, which has been qualitatively assessed, would potentially significantly alter the effect of the Proposed Development in views from the north and in respect of TCA B by obscuring the Proposed Development and introducing tall development closer to these viewpoints and this TCA	Beneficial
	Built Heritage	The latest scoping submission scheme for 2 Trafalgar Way proposes three buildings up to a height of 46 storeys. Given the location of this site and the broadly similar (albeit somewhat greater) scale of development proposed compared to the consented scheme, the effects of the scoping scheme would not be significantly different in respect of the Proposed Development compared to that of the scheme considered quantitatively in the Built Heritage assessment.	Beneficial
Global	GHG Emissions	Increase in GHG emissions from the Proposed Development in combination with global emissions	Significant Adverse

252 The Environmental Statement is available for viewing on the London Borough of Tower Hamlets Planning Portal by using the following link: https://development.towerhamlets.gov.uk/online-applications/. To purchase the complete Environmental Statement, please contact Trium Environmental Consulting LLP, at hello@triumenv.co.uk or Tel: +44 (0) 203 887 7118.


TRIUM