
CANADA WATER MASTERPLAN



Environmental Statement Non-Technical Summary

May 2018

Waterman Infrastructure & Environment

Contents

1. Introduction	1
2. The Existing Site and Surrounding Context	2
3. What are the Proposals?	3
4. Alternatives and Design Evolution	6
5. Approach and Environmental Impact Assessment Methodology	7
6. What are the Likely Environmental Effects and how would they be minimised?.....	8
6.1 Socio Economics.....	8
6.2 Transportation and Access	9
6.3 Noise and Vibration.....	10
6.4 Air Quality.....	11
6.5 Ground Conditions and Contamination	12
6.6 Water Resources and Flood Risk	13
6.7 Ecology	14
6.8 Archaeology (Buried Heritage).....	15
6.9 Wind	16
6.10 Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare	16
6.11 Townscape, Built Heritage and Visual	17
6.12 Cumulative Effects	18
7. What will happen next?	22

1. Introduction

This Non-Technical Summary (NTS) of the Environmental Statement has been prepared by Waterman Infrastructure & Environment Ltd ('Waterman IE') on behalf of BL CW Holdings Ltd (a subsidiary of British Land Company Plc.) ('the Applicant') in support of a hybrid planning application (part in detail and part in outline) for the comprehensive redevelopment of an area of land at Canada Water in the Rotherhithe and Surrey Docks area ('the Site') within the administrative boundary of Southwark Council.

The location of the Site is shown in **Figure 1**. The Site occupies an area of approximately 21.27 hectares (approximately 53 acres) and is bounded by Surrey Quays Road to the north, Lower Road (A200) to the west, Redriff Road (B205) to the south and Quebec Way to the east. The Site currently comprises the Surrey Quays Shopping Centre, former Harmsworth Quays Printworks and Surrey Quays Leisure Park, former Dock Offices Courtyard, former Rotherhithe Police Station, an area of Canada Water Dock and land at Roberts Close.

The redevelopment (hereafter referred to as 'the Development') will provide new retail, workspace, leisure and community floorspace along with residential dwellings. The Development will also provide significant, high quality public realm, including a new Town Square, a new High Street and a public park. The Development involves the demolition of all existing buildings and structures within the Site. The exception is the former Harmsworth Quays Printworks, where an option to retain or demolish the building is sought as part of the hybrid planning application.

An Environmental Impact Assessment (EIA) has been undertaken by Waterman IE to assess the environmental effects of the Development. The EIA is reported in an Environmental Statement (ES) which has been prepared to accompany the planning application. The ES describes the likely significant environmental effects of the Development. This document forms part of the ES and provides a summary of the ES in non-technical language.

2. The Existing Site and Surrounding Context

As indicated by **Figure 2**, the Site comprises two areas of land. The larger area of the Site is made up of predominantly retail, leisure and surface car parking. The smaller area of land (the Roberts Close site) is currently being used for storage of construction materials. Photographs of the existing Site are shown in **Figure 3**.

The Site comprises the following:

- Surrey Quays Shopping Centre including Tesco supermarket and a large area of surface car parking and petrol filling station;
- Former Harmsworth Quays Printworks, currently in temporary use as an entertainment venue;
- Surrey Quays Leisure Park and associated surface car parking;
- The former Dock Offices Courtyard;
- The former Rotherhithe Police Station;
- An area of Canada Water Dock; and
- The site at Roberts Close.

The majority of the Site was first developed on and occupied by the Surrey Commercial Docks from the mid-19th century to the late 20th century until the docks were no longer suitable to meet modern shipping industry requirements. After their closure the Port of London Authority and the London Borough of Southwark infilled large parts of the docks. The land was acquired by the London Dockland Development Corporation in the early 1980s leading to the subsequent construction of the Surrey Quays Shopping Centre and Surrey Quays Leisure Park.

A London Overground Line (LOL) railway tunnel runs beneath the surface car parking area to the west of the Shopping Centre. Two ventilation shafts associated with the railway tunnel are located within the car park. Canada Water Rail Station (serving underground and overground services) and Surrey Quays Rail Station (serving overground services) are both located within 50m of the Site. The London Underground Limited (LUL) Jubilee Line runs beneath the site at Roberts Close. Canada Water Rail and Underground Station is served by the LOL and Jubilee Line.

There is a mix of land uses surrounding the Site. These are made up of residential, retail, community, public transport infrastructure and open space and water, and include Russia Dock Woodland Local Nature Reserve and Southwark Park. In particular, the larger area of the Site is bounded by:

- Surrey Quays Road, Canada Water Dock, Canada Water Library and Church, land owned by Notting Hill Housing (currently under construction) and land owned by King's College London (currently under construction) to the north;
- Quebec Way to the east, together with housing at Quebec Quarter;
- Redriff Road (B205) to the south, with Greenland Dock located south of Redriff Road; and
- Deal Porters Way, Lower Road and residential properties off Lower Road at Hothfield Place, Hithe Grove and China Hall Mews to the west. Southwark Park is located to the west of Lower Road.

The Roberts Close area of the Site is bounded by:

- Our Lady of the Immaculate Conception Catholic Church to the north;
- Russia Dock Woodland and Stave Hill Nature Park Local Nature Reserve (LNR) to the east;
- Alfred Salter Primary School to the west; and
- Residential properties off Quebec Way to the south.

3. What are the Proposals?

A hybrid planning application, made up of 'Detailed' and 'Outline' Proposals, is being submitted for the comprehensive redevelopment of the Site. **Figure 4** presents the areas of the Site that relate to the Detailed and Outline Proposals.

The Outline Proposals set the principles of how development will come forward in the future and enables a flexible framework for delivery of the Development. These principles set out the amount and uses of development, but reserves the details of the following matters for future approval: access, scale of the buildings, external appearance, layout and landscaping. These would be subject to subsequent approval by Southwark Council at a later date through a number of reserved matters applications. In order to set out these principles, a series of Parameter Plans have been produced to provide the context for the subsequent detailed design. For instance, the Parameter Plans define the spatial extent of the buildings proposed, in effect, providing the maximum 'envelopes' within which the buildings would be built. These plans are accompanied by a Development Specification which details the type of uses, such as residential or retail, and amount of development being applied for. A Design Guidelines document sets out the guiding principles on how the detailed design of the Development would come forward in accordance with the Development Specification and the Parameter Plans.

The Detailed Proposals refer to areas within the Site where no details are reserved for future determination.

The Detailed Proposals comprise Plots A1, A2 and K1, and the Outline Proposals correspond to Development Zones B, C, D, E, F, G, H, J, L, M, N and P. The location of the Plots and Development Zones are shown on **Figure 5**. For the purposes of the EIA, together the Detailed and Outline Proposals comprise the 'Development'.

Tall buildings are defined in the Canada Water Area Action Plan as above 30m in height. Tall buildings within the Site are defined in three clusters:

- The largest and tallest cluster sits at the centre of the Site, within Development Zones D (proposed maximum height of 162m AOD), Development Zone F (proposed maximum heights of 124m AOD and 133m AOD) and Development Zone G (proposed maximum heights 105m AOD), adjacent to the area identified for tall buildings within the Canada Water Area Action Plan;
- At Development Zone A, i.e. Plot A1 (maximum height of 130m AOD) within the far northwest of the Site; and
- At Development Zones B (proposed maximum height ranging from up to 15m AOD up to 117m AOD) and Development Zone C (proposed maximum height of 117m AOD) within the far south of the Site.

For the Outline Proposals, basements would be located beneath all outline Development Zones, and beneath the Park between Development Zones F, G, H and J. For the Detailed Proposals, Plot A1 and A2 would include basements. There would be no basement at Plot K1.

The Development (Outline and Detailed Proposals) could provide a maximum floorspace of up to 731,488m² (excluding public toilets, parking and plant) and would include the following uses:

- Retail (Use Class A1 – A5);
- Workspace (Use Class B1);
- Hotel (Use Class C1);
- Assisted Living (Use Class C2);

- Residential (Use Class C3);
- Community Facilities (Use Class D1);
- Leisure / Cultural (Use Class D2);
- Night Club (Sui Generis);
- Student Accommodation (Sui Generis);
- Energy Centre (Sui Generis);
- Primary Sub-Station (Sui Generis);
- Multi-Storey Car Park (Sui Generis);
- Petrol Filling Station (Sui Generis);
- Transport Infrastructure (Sui Generis);
- Flexible Events Space (Sui Generis);
- Parking and Plant; and
- Public Toilets (Sui Generis).

The Development would also include the provision of an interim Petrol Filling Station (Sui Generis).

The Development would include the provision of a maximum 1,000 public town centre car parking spaces (including disabled parking) for the retail and leisure uses. These would be located beneath Development Zone G, accessed from Redriff Road, and within a purpose built multi-storey car park, to be located at the southern end of the proposed High Street, close to its junction with Redriff Road in either Development Zone C or E. There would be no car parking spaces for office uses, with limited provision for disabled users only. The Development would provide an average of 0.2 car parking spaces per residential units across the Site, including disabled car parking. Provision of residential car parking and car club spaces for the Outline Proposals would be reviewed in accordance with the site-wide Travel Plan as Reserved Matters Applications come forward. There are no car parking spaces proposed for Plot A1 or A2, however disabled on-street parking is provided outside Plot A2. Four disabled car parking spaces are proposed for Plot K1. Cycle parking spaces would be provided in line with the London Plan 2016 requirements.

Vehicular access to the Development would be via the existing roads surrounding the Site, including Surrey Quays Road, Lower Road, Redriff Road, Quebec Way, and Roberts Close (for Plot K1), with new access points into the Site. Pedestrian access into the Site would also be provided at various points leading onto new public realm including the proposed New Brunswick Street, Dock Office Walk, Park Walk Place and Town Square (for the purposes of the Hybrid Planning Application working title street and place names are used). Significant areas of public realm and play space would also be provided within the Development.

As part of the Outline Proposals, a pedestrian boardwalk would be built across the western edge of Canada Water Dock, along with ecological enhancements in the Dock. This would involve re-profiling of the western edge of Canada Water Dock to maximise the water edge and create a varied wetland habitat to encourage biodiversity and protects / enhances the SINC designation.

Demolition of all existing buildings on Site is required to facilitate the Development. The exception is part of the former Harmsworth Quays Printworks where an option to demolish or retain is sought as part of the Outline Proposals.

With demolition likely to commence in 2019, it is estimated that the Development would be built-out over 14 years with the Development completed and operational in 2033.

Demolition and construction would be phased so that some existing operations of the Site would function

while construction is ongoing, and that once completed, components of the Development would be operational ahead of others being constructed. For instance, it is anticipated the Detailed Proposals would be completed and operational ahead of Development Zones corresponding to the Outline Proposals. The exact sequence of phasing for the Development has not yet been defined to retain flexibility in order to respond to prevailing market conditions.

During demolition and construction, the following sequence of activities broadly corresponds to each Development Zone or Plot under consideration:

- Site set-up and enabling works, including service diversion works where existing services exist;
- Demolition and clearance;
- Sub-structure works i.e. piling and foundations including basement excavation;
- Super-structure, envelope works and façade;
- Commissioning of building; and
- Fit-out and external works including landscaping and public realm.

A Framework Construction Management Plan (CMP) of the Outline Proposals has been prepared along with detailed CMPs for the Detailed Proposals (Plots A1, A2 and K1). The CMPs set out the measures and procedures for keeping interested parties informed of progress and forthcoming activities which may affect them and will include measures to minimise nuisance and disturbance such as those resulting from noise and vibration, dust, air pollution and traffic. The effectiveness of mitigation measures would be monitored as part of the CMP, for example continuous monitoring of construction dust, noise and vibration. In advance of the commencement of demolition and construction works for each Development Zone or Plot for the Development, detailed CMPs based upon the overarching Framework CMP would be submitted to, and approved by, Southwark Council.

4. Alternatives and Design Evolution

In line with the UK regulations which relate to EIA, the ES **Chapter 4 (Design Evolution and Alternatives)** provides a description of the main alternatives to the Development which were considered by the Applicant and a description of how the design of the Development evolved over time.

Guidance on the preparation of EIA suggests that it is good practice to consider 'alternative sites'. However, given the ownership and policy objectives for the redevelopment of the Site, the Applicant has not considered alternative locations for the Development.

EIA guidance also suggests that the option of doing nothing (the 'No Development' scenario) is considered in an ES. The 'No Development' scenario would entail leaving the Site in its current state. Although the Printworks is in use as a temporary entertainment venue, in the long term 'no development' on the Site would leave a significant part of the Site as vacant. Much of the rest of the Site is not an efficient use of space or pedestrian friendly and does not connect well to its surroundings. It is considered that under this scenario, the Canada Water AAP aims for redevelopment of the Site would not be realised leading to a number of missed opportunities for the Site.

Masterplanning of the Development commenced in earnest in 2014 and since this time the design has evolved in response to extensive public consultation, including meetings with residents adjacent to the Site boundary, consultation with Southwark Council, and other statutory consultees (such as the Environment Agency, Historic England, and Greater London Authority), together with the findings of environmental and other technical studies. Key environmental considerations in the evolution of the Development have included:

- London View Management Framework (LVMF) height constraints;
- Heritage setting effects to Southwark Park and St Mary's Conservation Area;
- Daylight, sunlight and overshadowing effects to neighbouring residential properties including Surrey Quays Road, Hothfield Place, Lower Road, Brunswick Quays and Canada Estate, and to neighbouring schools, places of worship and public spaces;
- Wind microclimate;
- Retention of as many trees with a Category Grade of A (trees of high quality and value) or B (trees of moderate quality and value), and retention of trees adjacent to the Prince of Orange Walkway;
- Clustering of taller buildings and a mix of building heights which generally taper at the edge of the Site to respond to the scale of neighbouring properties;
- Improvements to existing transport infrastructure such new junctions, new cycling and pedestrian facilities and the potential for a secondary entrance to Surrey Quays Rail Station;
- Improvement to connectivity within the surrounding area;
- Green links running through the Development connecting Southwark Park with Russia Dock Woodland via the Park;
- Structural constraints associated with building above the London Overground tunnel;
- Sustainable Urban Drainage solutions and opportunities;
- Ecological enhancements to Canada Water Dock;
- Relocation of the Tesco supermarket within the Development; and
- Effects to sensitive receptors.

5. Approach and Environmental Impact Assessment Methodology

EIA is a process which aims to ensure that the likely significant environmental effects of a proposed development are given due consideration in the determination of a planning application. Effects can be beneficial (positive) or adverse (negative). In accordance with the relevant legislative requirements and best practice guidelines, the EIA was undertaken using established methods and assessment criteria. This involved visits to the Site, along with surveys, data reviews, consultation with relevant statutory authorities, computer modelling and specialist assessment undertaken by a team of qualified and experienced consultants.

The first stage of the EIA process involved undertaking a 'Scoping Study'. The purpose of the study was to identify the potentially significant environmental effects associated with the Development and therefore provide the focus or scope of the EIA. The Scoping Report which presented the findings of the Scoping Study was submitted to Southwark Council to support a request for their 'Scoping Opinion'. Southwark Council issued their formal Scoping Opinion on 27th April 2018. Prior to this, Southwark Council issued their draft Scoping Opinion on 16th January 2018, which was discussed at a meeting. The formal Scoping Opinion did not change the scope of the assessment set out in the draft Scoping Opinion.

It was agreed with Southwark Council that the EIA would need to include an assessment of the following environmental topics:

- Socio-Economics;
- Transportation and Access;
- Noise and Vibration;
- Air Quality;
- Ground Conditions and Contamination;
- Water Resources and Flood Risk;
- Ecology;
- Archaeology (Buried Heritage);
- Wind;
- Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare;
- Townscape, Built Heritage and Visual Impact Assessment; and
- Cumulative Effects.

Each of the above topics are addressed in the ES, with a chapter dedicated to each topic (with Townscape, Built Heritage and Visual Impact Assessment effects presented as a separate ES volume due to its size). In each chapter, a description of the assessment methodology is given together with the relevant environmental conditions on and adjacent to the Site and the likely significant effects of the Development. The significance of likely effects is graded on a scale as either insignificant, minor, moderate or major (note, this NTS does not include this terminology of effects as its purpose is to present the findings of the ES in non-technical language). Each chapter also describes a range of measures that would be incorporated to avoid, reduce, or offset any identified likely adverse effects, and / or enhance likely beneficial effects. Such measures are referred to as 'mitigation measures'. The resulting effects (known as 'residual effects'), following the implementation of mitigation measures, are also described. The ES reports effects for both the Development as a whole and the Detailed Proposals in isolation.

Effects were generally similar between the two and therefore for clarity, this NTS does not distinguish effects between the Development and the Detailed Proposals in isolation unless otherwise stated.

6. What are the Likely Environmental Effects and how would they be minimised?

6.1 SOCIO ECONOMICS

As set out in Chapter 7 of the ES, a socio-economic assessment has been undertaken using a wide range of information sources. These sources include a detailed review of planning policies, guidance and standards and population Census data. A quantitative (measured by quantity) approach was undertaken where possible, with certain assessments such as community safety undertaken qualitatively (measured by quality) using professional judgement.

The Social Regeneration Charter, submitted in support of the planning application, sets out the Applicant's commitment to supporting local employment and training initiatives. Tree Shepherd (who are an independent enterprise and business support service) will support existing businesses and residents to plan for their future and to access the opportunities that will be created by the Development.

As noted previously, the Site predominantly comprises retail and leisure uses with associated surface car parking. The Site currently supports approximately 1,380 jobs. There are no existing residential land uses within the Site, although there is a total resident population of 27,200 in the surrounding local area.

During demolition and construction, the Development would provide economic benefits to the local area during the duration of the 14-year demolition and construction programme, and it is estimated that there would be a monthly average of 1,400 Full Time Equivalent over the duration of the 168-month construction of the Development. The loss of existing jobs at the Site as a result of the Development would be temporary as once completed, the Development would generate additional new jobs from the new retail, leisure, hotel and workspace floorspace proposed, with approximately 12,350 to 17,200 jobs under Scenario 1 (Maximum Residential and Minimum Employment) or approximately 22,870 to 30,930 jobs under Scenario 2 (Minimum Residential and Maximum Employment).

The provision of up to 338,500m² of residential floorspace in the outline component along with 21,580m² of residential floorspace in Plot A1 and 7723m² of residential floorspace in Plot K1 in the detailed component, up to 35,700m² assisted living floorspace and up to 50,300m² of student accommodation floorspace as part of the Development would significantly contribute to the housing target of Southwark Council. The Detailed Proposals propose 270 new homes, which would include 60% for private sale, 35% for social rent and shared ownership (split by 70% social rent and 30% shared ownership), and 5% for discounted market sale or rent. The level of affordable housing and mix of tenures to be provided throughout the remainder of the Development is to be subject to viability and determined when approval of reserved matters for relevant development plots is sought.

It is estimated that the Development would have an additional resident population of between approximately 3420 to 6700. An increased residential population on-site would result in increased demand for school places and health services. Measures in the form of a planning obligation will be used to help to increase future capacity and ensure school place and health care provision is sufficient.

Development Scenario 1a would generate the demand for 40,370m² of private amenity space and Development Scenario 2b would generate the demand for 24,390m² of private amenity space. It is not

possible to determine the requirement for communal amenity space at this time as most of the Development is in outline. The minimum amount of public open space within the Outline Proposals is 4.94 hectares. Within this space, there will be a 1.3 ha park surrounded and a 0.5 ha Town Square. Therefore, the maximum demand for amenity space and playspace in the two Development Scenarios could be met within the minimum areas as set out by the Parameter Plan. In addition, it is likely the actual amount of open space delivered by the Development would be more than proposed here and would create new open spaces for use by the wider local area. As such, there will be sufficient children's play space and open space within the Development. Provision of leisure facilities (including the leisure centre) and other community uses, such as health and education uses, would result in beneficial effects.

The design of the Development seeks to reduce the opportunities for criminal behaviour and would animate and activate the Site.

Overall, no significant adverse residual effects on socio-economic receptors have been identified during the construction and operational phases of the Development providing the proposed mitigation is put in place (such as CMPs), with beneficial significant effects identified on socio-economic receptors during the operation phases of the Development.

6.2 TRANSPORTATION AND ACCESS

As set out in Chapter 8 of the ES, and the Transport Assessment, an assessment of the transportation effects of the Development in terms of traffic, pedestrians, cyclists and public transport was undertaken. This has been based upon a range of information sources and includes a detailed assessment of future travel demand using baseline surveys and computer models developed by Transport for London (TfL) to study the operation of future transport networks in London.

The Site has a high level of accessibility to public transport, with two rail stations, Canada Water (Jubilee line and London Overground) and Surrey Quays (London Overground), and eight bus services that pass close to or through the Site. However, current pedestrian provision within the Site itself is poor, with the road layout predominantly designed to cater for car movements.

During demolition and construction, there would be temporary disruption to pedestrians, cyclists and road vehicle users at the Site when compared to the existing situation. Construction traffic accessing the Site would result in an increase in traffic using the local road network, in particular heavy goods vehicles. The roads most likely to be affected are Surrey Quays Road, Lower Road (A200), Redriff Road (B205) and Quebec Way (construction routes are to be confirmed with Southwark Council). It has been estimated that during the peak construction year of 2021, there would be 534 two-way vehicle movements per day (where one vehicle movement is based on a construction vehicle arriving and leaving the Site). Measures to minimise the disruption are set out in the Construction Management Plans (CMP), notably to encourage the scheduling of construction traffic in order to reduce movements on the highway network during peak periods.

A Framework CMP has been prepared for the Outline Proposals, and individual CMPs for the Detailed Proposals which would be finalised and agreed prior to commencing works on Site. The purpose of the CMPs is to put in place measures to mitigate any effects associated with relevant environmental issues, including demolition and construction traffic. The CMP (as well as implementation of a Construction Logistics Plan) would include measures such as the use of agreed appropriate routes for construction vehicles travelling to and from Site as agreed with Southwark Council and TfL; provision for loading and unloading of vehicles off the public highway; and keeping local residents informed of activities.

The completed Development would include the provision of a maximum 1,000 town centre car parking spaces (to include disabled parking) for the retail and leisure uses. This represents a reduction in public car parking on the Site of close to 50% despite the increase in the combined retail and leisure floor area.

There would be no car parking spaces for office uses, with the exception of a limited provision for disabled users. Provision of residential car parking for the outline proposals would be reviewed in accordance with the site-wide Travel Plan as the Development evolves but will be lower than the maximum standard of 0.3 spaces per home set out in the Canada Water Action Plan.

The Applicant seeks to deliver a highly sustainable development and as part of this, the Development aims to significantly improve the permeability of the Site by providing a comprehensive network of pedestrian and cycle routes. This will improve connectivity and travel choices for the surrounding communities as well as for residents, employees and visitors to the Development. An area in the southern part of the Site (Development Zone B or N) has been set aside to accommodate an entrance to a new ticket hall at the northern end of Surrey Quays station that as well as enhancing the capacity of the station will mean that users of the London Overground service will not have to cross Lower Road. A Framework Travel Plan (FTP) has been prepared as part of the planning application, to encourage the use of sustainable transport when travelling to and from the Development.

There would be an increase in the number of people travelling to and from the Site using public transport compared to the existing situation. This additional demand in public transport would be inherently mitigated to reduce the adverse effects by proposed public transport improvements, including station upgrades and bus mitigation measures.

An upgrade to the junction of Surrey Quays Road and Redriff Road would be required as a result of the redistribution of the public car parking spaces at the Site. A series of new vehicular access points would also be provided around the Site.

6.3 NOISE AND VIBRATION

As set out in Chapter 9 of the ES, the noise and vibration effects of the Development have been established in accordance with published guidelines and included a comprehensive baseline monitoring survey at the Site. The assessment used computer modelling based on a 2017 baseline monitoring survey, existing and future traffic flow data and the proposed layout of the Development. Where specific details of the Development are not yet known (e.g. the end users of the non-residential elements of the Development), a qualitative assessment was undertaken based on standard noise and vibration criteria.

The baseline noise survey found the noise climate to be dominated by road traffic noise from the surrounding road network, with noise from distant aircraft, train passages on the LOL tunnel, and human activities (such as school children and users of the Surrey Quays Shopping Centre) also contributing to the overall levels. A noise survey was also undertaken during a festival incorporating live music, food and drink and creative stalls at the former Harmsworth Quay Printworks, a temporary entertainment venue on the Site. A vibration survey was undertaken to measure LOL train movements. The LUL Jubilee Line tunnel underneath the Site was considered too deep to materially affect future occupants and as such vibration monitoring was not undertaken at this location at Plot K1.

Demolition and construction works would include activities that would be likely to increase noise levels and potentially cause vibration within and immediately adjacent to the Site (particularly demolition activities, breaking activities and piling). In particular, when activities are occurring closest to the Site boundary, this could result in temporary effects on occupants in surrounding properties, including residents. Construction traffic noise is not expected to be significant and would be managed through the CMP.

The implementation of noise and vibration control and management measures through the CMP during demolition and construction would help to reduce noise disturbance to occupants of existing and future properties. Such measures would include using low-noise machinery and equipment, enclosing and screening machinery, using low-vibratory foundation methods and the use of appropriate hoarding to the

required height and density. Demolition and construction traffic is not predicted to result in significant noise increases on local roads and would be managed through the CMP.

Any items of fixed building services plant installed as part of the Development would have the potential to generate noise. Suitable noise level limits have therefore been proposed to ensure that noise from plant does not cause disturbance to existing receptors in the surrounding area or future occupants of the Development.

The assessment has shown that noise break-out from non-residential uses should not cause noise disturbance to existing receptors in the surrounding area or future occupants within the Development provided the building fabric provides adequate sound insulation and appropriate measures are in place with regards to management of outside and servicing areas.

The Detailed Proposals may be occupied prior to demolition and construction of the former Harmsworth Quays Printworks, and as such, there is potential for noise from events at the temporary entertainment venue to affect the amenity of occupants of the Detailed Proposals. However, predicted noise levels at the Detailed Proposals were below the environmental noise levels during the daytime and night-time periods and therefore no effects on residential amenity is therefore anticipated at the Detailed Proposals as a result of events at the former Harmsworth Quays Printworks.

6.4 AIR QUALITY

As set out in Chapter 10 of the ES, the air quality within the administrative boundary of Southwark Council exceeds legal limits and, as a result, Southwark Council have designated the entire northern part of the Borough as an Air Quality Management Area (AQMA). The Site is located within this AQMA. An AQMA is designated where there is public exposure (e.g. residential properties) in areas exceeding the Air Quality Strategy (AQS) Objectives. An assessment was undertaken to determine the likely effects of the Development on local air quality. In addition to the AQMA, an area at Lower Road near to Surrey Quays Station has been identified by the Greater London Authority as an Air Quality Focus Area (AQFA). An AQFA is an area that has been identified as having high levels of pollution and human exposure.

A 12-month diffusion tube study to measure levels of baseline nitrogen dioxide (a gas in the air primarily caused by the burning of fuel) was undertaken by Waterman IE which found that the greatest source of potential air quality pollution at the Site is generated by vehicular traffic using Surrey Quays Road, Redriff Road and Lower Road. The results of the monitoring study are consistent with the latest monitored concentrations undertaken by Southwark Council.

The main likely effects on local air quality during the demolition and construction works would relate to the generation of dust. A range of measures to minimise or prevent dust would be implemented through the CMPs so that no significant dust effects would result. Such measures include dust suppression techniques such as water sprays, appropriate hoardings and ongoing air quality monitoring.

Computer modelling has been undertaken to determine the impact of exhaust emissions from construction traffic for the year of the peak construction activities. The modelling has shown the effect of construction vehicles associated with the Development would be insignificant for all pollutants assessed. All construction plant would meet the Emissions Standard set out in the 2016 London Plan and therefore the effect of construction plant emissions on local air quality would be insignificant.

Computer modelling has also been carried out to predict the contribution of heating plant emissions and future traffic related emissions arising from the operation of the completed Development and the likely resultant changes that this would bring about to local air quality. The results of the computer modelling demonstrate that with the Development in place, the air quality effect of the Development on occupants of

existing sensitive locations surrounding the Site or future residential users of the Development would be insignificant.

Whilst no mitigation is needed as the Detailed Proposals and the Development are predicted to have insignificant effects on local air quality, British Land is committed to adopting a range of measures to reduce impacts on air quality and promote health and wellbeing within the Development and wider area. In addition to the measures included within the CMPs, measures which are likely to have a benefit to the air quality include, but are not limited to:

- Creation of a new town centre, public and private amenity space. The mixed uses allow existing and future residents and visitors to use the services provided within the Development itself, reducing the need for users to travel outside of the Development;
- A Framework Travel Plan has been submitted in support of the Application. This document sets out a strategy for promoting sustainable modes of transport during the life of the Development and reducing the reliance on car use in the future. The provision of car parking in the Development will be reviewed in accordance with the site-wide Travel Plan as the Development evolves;
- Provision of a 'Green link' between Southwark Park and Russia Dock Woodland and Stave Hill Nature Park LNR, to include vegetation that can capture and filter air;
- Management of existing vegetation within the Canada Water Dock to be managed and restored to a wetland habitat, which includes vegetation (as reed beds and other emergent vegetation) that can capture and filter air;
- Transport improvements including an improved pedestrian crossing, minor kerb realignments and a series of new junctions to contribute to the Mayor of London and TfL "Healthy Streets for London" initiative;
- For residential parking, a minimum of 20% of the overall number of parking spaces will be equipped with electric vehicle charging facilities with a further 20% with passive provision;
- For retail parking, 10% of all spaces will have electric car charging points with an additional 10% passive provision for electric vehicles in the future;
- Zero car parking spaces for office uses, with limited provision for disabled users only;
- Promote reduction in private vehicles through an appropriate level of car club spaces being provided. The provision will be reviewed as the Development evolves through the Framework Travel Plan; and
- Cycle parking for the Outline Proposals will be provided in accordance with the minimum standards as set out in the Development Specification.

6.5 GROUND CONDITIONS AND CONTAMINATION

As set out in Chapter 11 of the ES, review of a desk-based study and historical intrusive ground investigations undertaken at the Site shows that ground and groundwater contamination is present on the Site due to historical uses. This includes lead, mercury, hydrocarbons (oil) and asbestos, with visual evidence for oil contamination in soils observed at the former Harmsworth Quays Printworks. Sediment samples were also collected from Canada Water Dock and sent for laboratory analysis, which were found to contain metals, hydrocarbons, volatile organic compounds and pesticides.

Further detailed ground investigations would be required across the entire Site to confirm the detailed mitigation required, which is likely to be completed as and when a Development Zone or Plot are brought forward for redevelopment. Mitigation will include clean up or removal of the contaminated material, known as remediation. The findings of the ground investigation, along with the assessment made in the overarching Remediation Strategy for the Development, submitted as part of the planning application,

would inform a detailed Remediation Strategy for each Development Zone or Plot as and when they come forward and would be agreed with the Environment Agency and Southwark Council.

During demolition and construction works, there is the potential for residents surrounding the Site to be exposed to residual contaminants disturbed within the soils and dust blown off the Site. These would be mitigated through measures implemented via the Framework CMP and detailed CMPs for Plots A1, A2 and K1.

Implementation of any remediation works necessary, adequate drainage and appropriate storage of hazardous materials and liquids on the Site during the construction works (via implementation of the CMPs) would minimise the potential for contamination reaching exposed shallow soils, groundwater and Canada Water Dock. It would be ensured that the re-profiling works at Canada Water Dock would not re-use contaminated sediments. Contaminated sediments would either be remediated to render it suitable for use, or removed and disposed from the Site.

Implementation of the CMP would minimise the potential risk to controlled waters and human health during the demolition and construction works. A Foundation Works Risk Assessment would also be prepared in consultation with the Environment Agency to establish the appropriate piling methodology to minimise contamination risks to the aquifers underlying the Site.

The Site and surrounding area suffered bomb damage during the Second World War and it is possible that unexploded devices could be encountered during excavation works. Appropriately qualified personnel present during below-ground works would detect any unexploded ordnance (UXO) present ahead of excavation, allowing for its appropriate management and disposal.

Across the Development, extensive basement excavation is proposed which would remove the majority of ground contamination. Hardstanding and structures of the completed Development would prevent direct contact between human health receptors and any residual material. Findings of the intrusive ground investigation to be undertaken at each of the Development Zones or Plots would identify the potential for any ground gas or vapour ingress, and inform appropriate protection measures.

Most new soft landscaping across the Development would be planted over the proposed basement. There would be no pathway between this landscaping and any residual ground contamination. Clean, inert imported soil would be used ensuring no contamination pathway would exist for future Site residents, visitors and users. All proposed soft landscaping would be managed appropriately with no allotments or private gardens and therefore future Site residents would not be in contact with any contamination via plant uptake.

Furthermore, the drainage system would be designed to incorporate drainage solutions such as interceptors, filters or silt traps to avoid the discharge of any fuels or oils. This would be particularly important for the proposed drainage outfalls to Canada Water Dock and Greenland Dock.

The above mitigation measures would result in a low risk of harm to human health and the wider environment following completion of the Development.

6.6 WATER RESOURCES AND FLOOD RISK

As set out in Chapter 12 of the ES, the Site is primarily located within Flood Zones 1 and 2 (low and medium probability of tidal flooding), with small fringe areas within Flood Zone 3 (high probability of tidal flooding). However, the Site is protected by the River Thames flood defences, and as such, the risk of flooding from the River Thames is considered to be low. The Environment Agency have confirmed that the Site is currently protected from overtopping of the defences in the future. In the very unlikely event of a breach (failure of the defences), part of the Site is predicted to experience flooding. To address this, the Development has been designed to ensure the safety of occupiers and users of the proposed buildings,

for example by raising finished floor levels of all residential accommodation and the majority of the non-residential accommodation above the breach level.

The effects of the Development upon water resources and drainage have been informed by a review of various information sources including those made available by the Environment Agency and Thames Water, as well as the results of Site investigations and surveys for ground conditions and contamination. A Flood Risk Assessment has also been prepared, which includes a drainage strategy, to accompany the planning applications and is included as part of the ES.

During demolition and construction, changes in the Site conditions have the potential to result in a temporary risk of surface water flooding. However, measures would be put in place to control surface water runoff from the Site in line with industry standards. Where appropriate, temporary drainage would be provided around the Site during the works when there is no on-Site drainage network in place.

Localised groundwater flooding could also occur during the excavation works required to construct the basements within the Development. Appropriate dewatering and disposal, using standard practices such as sumps and pumps, would be employed to prevent groundwater flooding of excavation areas.

A surface water drainage strategy for the Development has been developed, which includes measures to reduce water runoff from the Site and control the rate of discharge of this water to the local sewer network. Surface water runoff would discharge directly to Canada Water Dock and Greenland Dock and to the existing public sewer network where it is not possible to discharge to the Docks. Sustainable drainage (SuDS) methods would be used, including tree pit storage, rain gardens, swales, oversized pipes, below ground geocellular tanks and living roofs. In periods of low rainfall, the dock water level would be maintained by the pumping of groundwater. The drainage strategy is in accordance with policy requirements for a 1 in 100 year flood event and takes into account the likely future increase in rainfall owing to climate change over the lifetime of the Development.

The Development would introduce new land uses on the Site resulting in an increase in foul water (used water from toilets, sinks, showers washing machines etc) discharges from the Site. However, consultation with Thames Water has confirmed that the existing public sewer network has the capacity to accommodate the foul flows.

There would be an increased demand for water supply resulting from the Development, though the Plots A1, A2 and K1 can be accommodated within existing capacity. Future Zones will be subject to further modelling as they come forward. However, the implementation of water efficiency measures would be incorporated into the Development to minimise the demand as far as possible.

6.7 ECOLOGY

As set out in Chapter 13 of the ES, the majority of the Site is of limited ecological value. An exception to this is Canada Water Dock which forms part of Canada and Surrey Waters Sites of Importance for Nature Conservation (SINC) and is partially located within the Site. Russia Dock Woodland and Stave Hill Nature Park Local Nature Reserve (LNR) also lies adjacent to the north-east of the Site and Greenland Dock and St George's Wharf SINC is located south-east of the Site. Southwark Park is also close to the south-western Site boundary.

The ecological assessment is based on an ecological desk study and the results of the bat, breeding bird and aquatic survey reports, the majority of which were undertaken between 2017 and 2018, with bat surveys commencing in 2014. Following the results of the surveys, the assessment focuses on the potential effects to these designated sites and on the breeding birds associated with Canada Water Dock, as well as identifying any ecological enhancement opportunities for the Site itself.

Given their location within a highly urbanised environment, Canada and Surrey Waters SINC, Russia Dock Woodland and Stave Hill Nature Park LNR and Greenland Dock and St George's Wharf SINC are already subject to high levels of human disturbance and activity and the presence of lighting.

Habitats within Canada Water Dock includes woodland, standing water, bare ground, scattered scrub, reedbed and tall ruderal / ephemeral vegetation. Birds have been identified using Canada Water Dock for breeding, including mute swan, great crested grebe, moorhen, coot, mallard and reed warbler.

The CMPs would be implemented to ensure appropriate environmental controls to protect the designated sites and habitats and breeding birds within Canada Water Dock from dust, noise, vibration, surface water run-off and encroachment of construction vehicles. Furthermore, construction of the outfalls, boardwalk and ecological enhancements at Canada Water Dock would be undertaken outside of the breeding bird season to ensure there are no direct effects upon breeding birds. London Wetland Trust would be involved as advisors.

The inherent design of the Development would limit and, where possible, avoid light spill into sensitive ecological areas including Canada Water Dock. Increased human activities as a result of the pedestrian boardwalk and stepped seating within Canada Water Dock would result in increased levels of disturbance. However, subject to detailed design, the re-profiling works would be designed in such a way to ensure that appropriate buffer planting is put in place. The massing of the completed Development would also not result in any significant overshadowing effects on the designated ecological sites.

The Development would provide ecological enhancements, including tree planting along the Green Link to enhance the connection between Southwark Park and Russia Dock Woodland that combines habitat creation and biodiversity, creation of a varied wetland habitat along the western edge of Canada Water Dock, the use of locally native tree species or trees with a proven wildlife value, the incorporation of features for birds and bats, including bat boxes, a mix of green and brown roofs to encourage wildlife into the built environment, and a range of sustainable drainage systems. Furthermore, appropriate signage and interpretation boards should be installed for quiet enjoyment of wildlife. A Landscape and Habitat Management Plan would also be prepared as a condition to planning approval in order to maintain and enhance the conservation interest at Canada Water Dock in the long-term. The on and off-site tree planting proposed would meet tree canopy requirements by 2033.

6.8 ARCHAEOLOGY (BURIED HERITAGE)

As set out in Chapter 14 of the ES, an assessment of the effects of the works on the archaeological (below ground heritage asset) resource within the Site was undertaken. This was assessed qualitatively based on professional judgement using a desk study and review of historical archaeological fieldwork undertaken at the Site.

The Site does not contain any statutorily designated heritage assets, but does contain the courtyard associated with the Grade II listed former Dock Manager's Office and 1–14 Dock Offices. The Site does not lie within an archaeological priority area. The Site is therefore recognised as not being in an area of significant known archaeological interest or potential. With the exception of Plots A1 and A2 and Development Zones B, C, M and N, the entirety of the Site lies within the former dock ponds. Half of Plot K1 lies within the area of the former dock ponds. Although the presence of the former dock ponds would have largely removed archaeological remains from the Site, there is potential for buried heritage remains to be present beneath the Site below the level of the Docks. Previous archaeological investigation at the Site within the existing Surrey Quays Shopping Centre area (middle of the Site) has uncovered remains of post-medieval activity, remains of the infilled dock, and garden soils overlain by made ground deposits.

The likely effects of the Development on any potential archaeological remains are associated with the excavation of basements and piled foundations. Accordingly, archaeological mitigation has been

proposed in the form of a phased archaeological evaluation programme during the excavation works, which would take place following initial geoarchaeological borehole evaluation undertaken prior to clearance and demolition. The archaeological mitigation would be secured by means of an appropriately worded planning condition with an approved Written Scheme of Investigation.

There would be no likely effects on archaeological assets once the Development is complete and occupied.

6.9 WIND

As set out in Chapter 15 of the ES, an assessment of the likely wind conditions as a result of the Development and the suitability of these in terms of pedestrian comfort has been undertaken. The assessment has been informed by appropriate meteorological data and wind tunnel testing.

The meteorological data for the Site shows that prevailing winds blow from the south-west throughout the year, which is typical for many areas of southern England, with the strongest winds during the winter season. There is a secondary peak from the north-east during the late spring and early summer. The winds from the north-east are not as strong as the prevailing winds from the south-west. The wind microclimate conditions throughout and surrounding the Site are generally as would be expected within an urban environment, ranging from acceptable for sitting use to leisure walking use during the windiest season.

During the design process of the Development, computer modelling was undertaken, the results of which were used to inform the design of the detailed Plots and the layout and spatial parameters of the Development Zones.

The phased demolition of the existing buildings would not be expected to have a significant effect on the wind conditions within, and immediately surrounding, the Site. As construction of the Development proceeds, the wind conditions of the Site would gradually change to the conditions of the Completed Development.

Although the Development would result in some increases in conditions, wind conditions would be suitable for their intended uses for the majority of the Site. During the windiest season, wind conditions range from suitable for sitting use through to car park / roadway use.

Wind effects on terrace and balcony spaces on Plot A1 will be addressed through the inclusion of potted trees, a pergola and canopy so that they are suitable for their intended uses.

Wind conditions would be windier than desired at the thoroughfare areas between Development Zone B and C, at the proposed Park Walk and Surrey Quays Place. As such, mitigation would be required in the form of the addition of canopies combined with vertical elements such as porous screening / trellises or trees and landscaping elements which will be developed as part of Site wide landscaping proposals in due course through reserved matters applications.

6.10 DAYLIGHT, SUNLIGHT, OVERSHADOWING, LIGHT POLLUTION AND SOLAR GLARE

As set out in Chapter 16 of the ES, an assessment has been made of the likely effect of the Development on the daylight, sunlight, overshadowing, and light pollution on neighbouring properties and amenity spaces near to the Site (including Canada Water Dock within the Site). A solar glare assessment has also been undertaken by identifying sensitive viewpoints for road and train drivers surrounding the Site. The technical analysis has been undertaken quantitatively via the creation of a digital three-dimensional model of the Site and surroundings, based on measured survey data. A total of 2,990 windows serving 1,744

rooms within 128 sensitive buildings have been assessed for existing daylight conditions, and 1,518 windows within 79 sensitive properties have been assessed for existing sunlight conditions. These windows and rooms serve 12 surrounding residential buildings, 2 student accommodation blocks (Landale House), 2 schools (Alfred Salter School and St John's Primary School) and 1 church (Our Lady of the Immaculate Conception Catholic Church).

The baseline conditions at the Site are characterised by the existing low-rise, low-density commercial and industrial buildings. The only publicly accessible amenity space located within the Site is the western portion of Canada Water Dock. The existing buildings within the Site are predominantly solid, clad with non-reflective materials. As such, there is limited opportunity for these buildings to reflect sunlight and so cause instances of solar glare. Furthermore, the existing buildings within the Site are located at a distance greater than 20m from the neighbouring properties, as such there is limited opportunity for these buildings to cause light pollution effects.

The potential daylight, sunlight, overshadowing, solar glare and light pollution effects relating to demolition and construction works will vary throughout the construction programme and gradually increase to the potential effects identified for the Completed Development.

In relation to daylight, 20 of the 128 buildings identified would not experience a noticeable alteration in the levels of daylight that it receives with the completed Development in place. Out of the remaining 108 residential receptors that do not meet the BRE 'base' criteria, 80 would meet the Alternative Target Values (as set out within Chapter 16 of the ES) and therefore the likely effects would be considered insignificant to minor adverse. The remaining 28 properties would experience noticeable effects.

In relation to sunlight, a total of 53 buildings out of the 79 identified would not experience noticeable alterations. It should be noted that, as part of the assessment, the outline elements of the Development were based on the maximum height, spatial extent and built form and therefore represent the worst-case.

In total 57 amenity areas were assessed for effects of overshadowing, of which 47 were gardens of private properties and 10 were public or communal areas of amenity. The majority of amenity areas would not experience noticeable alterations in overshadowing levels with the completed Development in place, with five private and two communal amenity areas experiencing overshadowing effects (14 and 19 Hothfield Place, 4 and 5 Hithe Grove, 2 China Hall Mews, and Blocks B1 and A4 Quebec Way).

The elements of the Development submitted in outline have not been included within the solar glare assessment as their façade details are not defined at this stage. Any potential solar glare effects can be mitigated at the reserved matters stage. In terms of the Detailed Proposals, a total of 28 viewpoints from 11 junctions on the nearby roads were assessed. The assessment considered the potential occurrence of solar reflections from the Development and proximity to a driver's line of sight. Six out of the 11 sensitive locations were considered to be insignificant.

The elements of the Development submitted in outline have not been included within the light pollution assessment as their internal layouts and façade details are not defined at this stage. Any potential light pollution effects can be mitigated at the reserved matters stage. In terms of the Detailed Proposals, the levels of light pollution caused by the artificial lighting system within the office spaces of Plots A1 and A2 on all neighbouring sensitive receptors are within the recommended guidelines on light intrusion levels. Light pollution effects on Canada Water Dock would be insignificant for wildlife and ecology.

6.11 TOWNSCAPE, BUILT HERITAGE AND VISUAL

As set out within Volume 3 (Townscape, Built Heritage and Visual Impact Assessment) of the ES, the Site is not within a conservation area; however, there are two conservation areas (St Mary's Conservation Area and Edward III's Rotherhithe Conservation Area) and a number of listed buildings near the Site

(including the Grade II listed Former Dock Manager's Office, whose courtyard is within the Site boundary), which all contribute to the local townscape character. The Site lies within, and either side of, the London View Management Framework (LVMF) view from Greenwich Park (Assessment Point 5A.2: The General Wolfe Statue).

In the visual assessment, the suitability of the design of the Development in its spatial location has been assessed using 52 different viewing positions, including 5 LVMF viewpoints and a sequence of views from London Bridge, which were selected in consultation with Southwark Council.

The likely significant effects on townscape character, the settings of above ground built heritage features and visual amenity would vary according to the nature of the demolition and construction works over time, with certain operations having more perceptible effects than others. Visible construction activities would be likely to form only small to medium features of most townscape views and in many instances, would be seen in combination with the existing buildings and other local construction activities. They are not, therefore, considered to be different or totally alien features within the existing urban context. With mitigation in place, including appropriate hoarding and following best construction industry standards, the demolition and construction effects would be insignificant.

The Development replaces low quality buildings which contribute little to the townscape with a high quality mixed-use Town Centre, with a series of streets and spaces with a distinct sense of place. The Development would have a high degree of pedestrian permeability and enhance links to the wider community, providing a new neighbourhood for London. The high quality of the architectural and urban design, enhanced permeability and connectivity and the creation of well defined, active street frontages and new public realm would significantly enhance the local townscape. The Development would have a distinctive character and sense of place, drawn from analysis of the specific location of the Site. The Development would not harm strategic or local townscape or visual amenity or the settings of designated heritage assets in the local area.

The Development has been designed through a process of pre-application consultation with stakeholders (including a review by the Commission for Architecture and the Built Environment (CABE)) to respond positively, in scale and mass, to the existing townscape, including the local conservation areas and listed buildings.

Only 2 out of the 52 views were judged in the assessment to have adverse effects, where the Development is seen within and above the frame of Tower Bridge, however when all other aspects of setting (the surroundings in which a heritage feature is experienced) are taken into account the significance of Tower Bridge is preserved and no harm is caused. The heritage benefits of the Development include a revitalised and enhanced courtyard setting for the former Dock Office and an enhanced setting of the Bascule Bridge in Rotherhithe.

6.12 CUMULATIVE EFFECTS

As set out in Chapter 17 of the ES, two types of cumulative effects have been assessed in relation to the Development:

- Type 1 Cumulative Effects: The interaction of individual effects from the Development upon a set of defined sensitive receptors. For example, noise and dust during the demolition and construction works; and
- Type 2 Cumulative Effects: The combined effects arising from other reasonably foreseeable schemes (referred to as 'committed developments' within the cumulative assessment).

A number of committed developments have been identified within the vicinity of the Site. Each technical environmental topic has considered the cumulative effects of these schemes all taking place in

combination with the Development (both during construction and demolition works and once the Development is completed). The following committed developments were considered as part of the cumulative assessment through professional judgement and consultation with Southwark Council (refer to **Figure 5** for the location of the schemes):

- Canada Water Sites C & E (planning ref: 12/AP/4126);
- Mansion Wharf House, Former Landale House, Lower Road, London, SE16 2XG (planning ref: 13/AP/0999);
- Tower Bridge Business Complex (The Biscuit Factory), Clements Road (planning ref: 12/AP/2737);
- 252 Jamaica Road (planning ref: 15/AP/1074);
- Former Mulberry Business Park, Quebec Way (planning refs: 13/AP/1429 & 07/AP/2806);
- Mansion Wharf House, Former Landale House (planning ref: 13/AP/0999)
- Cannon Wharf Business Centre, 35 Evelyn Street (planning refs: DC/08/068523/X & DC/13/083737);
- Deptford Timber Yard (planning ref: DC/09/073189/X);
- Marine Wharf West, Plough Way (planning refs: DC/10/073437/X & DC/13/84296);
- Marine Wharf East, Plough Way (planning ref: DC/15/091087);
- Rear of Albion Primary School (Southern end), Albion Street (planning ref: 17/AP/1234);
- Chambers Wharf, Chambers Street (planning ref: 07/AP/1262);
- Convoys Wharf, Prince Street (planning ref: DC/13/083358); and
- Thames Tideway (planning ref: WW010001), a Nationally Significant Infrastructure Project (NSIP) which partly runs underneath the south of the Site.

The Site demolition and construction works in isolation would result in some temporary adverse interaction effects on future and existing residents and community facilities neighbouring the Development, occupants of completed phases of the work on Site and pedestrians, cyclists, road and public transport users. These interaction effects would be associated with noise and traffic due to the presence of a construction site. The interaction changes in daylight, sunlight, wind, light pollution and solar glare to neighbouring land uses would progressively change to that identified for the Development and committed developments once completed and operational. The Framework CMP, and detailed CMPs for Plots A1, A2 and K1, should improve all construction related effects as far as possible.

The likely significant Type 1 effects interactions during the demolition and construction and once the Development is operational are as follows. The Sensitive Receptors considered in the Type 1 assessment are set out below:

- **SR A** Former Dock Offices, Landale House and Orchard House;
- **SR B** Residential properties at Courthope House, Hothfield Place, Hithe Grove, China Hall Mews and Lower Road;
- **SR C** Osprey Estate;
- **SR D** Buchanan Court, Burhill Court, Burrage Court, Byards Court, Cabot Court and Elbourne Court;
- **SR E** Residential properties along Redriff Road (B205);
- **SR F** Residential Properties at Quebec Way;
- **SR G** Alfred Salter Primary School;
- **SR H** Our Lady of the Immaculate Conception Catholic Church (2 St Elmos Road) and St John's Catholic Primary School;
- **SR I** Canada Water Library;

- **SR J** Columbia Point, Canada Estate;
- **SR K** Montreal House;
- **SR L** Ontario Point;
- **SR M** Odeon Cinema, Surrey Quays;
- Sellar Development (Phase 1);
- Public and Communal Amenity;
- Canada and Surrey Waters SINC (Canada Water Dock) and Breeding Birds;
- Road Users;
- Economic Effects (Housing, jobs, additional spending, employment); and
- Built Heritage / Views.

Residential, Education, Social and Communal Sensitive Receptors

No Type 1 demolition and construction cumulative effects were identified at any of the sensitive receptors locations A to J or Public and Communal Amenity.

Minor to moderate adverse Type 1 cumulative effects on daylight and sunlight during operation of the development were identified at SR A, SR B, and SR E with minor to moderate adverse cumulative effects from daylight, sunlight and overshadowing at SR B and minor to major adverse cumulative effects on daylight and sunlight at Sensitive Receptor F. Major adverse to major beneficial effects were identified in relation to daylight and views at SR A. However only minor adverse cumulative effects on daylight and sunlight were identified at Sensitive Receptors H and J.

However, there are minor to major beneficial effects on views at Sensitive Receptors SR A, SR B, SR C, SR D, SR E, SR G, SR H and SR J as a result of the completed development. There would also be a major beneficial effect on the setting of the Listed former Dock Manager's Office and 1-14 Dock Offices at SR A and a moderate beneficial effect on townscape character at SR B, located within townscape character area 4 (Post war residential) and at Canada Water Dock.

Minor cumulative adverse effects were identified at the Sellar Development (Phase 1).

Minor to moderate adverse cumulative overshadowing effects on public and communal amenity in two components of Quebec Quarter, although minor beneficial wind effects were identified around proposed building entrance areas and moderate beneficial effects on the provision of public and communal amenity and play space was identified through the delivery of the development as a whole.

Ecological Receptors

Type 1 demolition and construction cumulative moderate adverse to moderate beneficial significant effects on habitats and breeding birds were identified during the redevelopment works at Canada Water Dock with the beneficial effects being seen through improvements to water quality through the remediation of any contamination present.

Minor to moderate significance cumulative beneficial effects to breeding birds and the Canada Water Dock were identified as a result of the maturation of the proposed landscaping and improved water quality. Improvements in the townscape around the dock is considered to have a major beneficial effect on the setting of the dock.

Road Users and Public Transport

No Type 1 demolition and construction cumulative effects were identified on road users.

Minor adverse to minor beneficial cumulative effects were identified. Minor adverse effects were identified to the local network including public transport with solar glare being noticeable at Canada

Street, Gomm Road, Surrey Quays Road and Rotherhithe Old Road. The beneficial effects are improved access to parking, access and servicing.

The Local, Borough and Regional Economy and Social Infrastructure Users

Type 1 significant cumulative effects from the operation were identified ranging from moderate to major beneficial at the local level, minor to moderate at the district / borough level and minor at the regional level in respect of demand for housing, employment and additional expenditure.

Overall, while a range of Type 1 cumulative sunlight, daylight and overshadowing effects were identified the same receptors would also benefit from improved housing opportunities, employment and local businesses would benefit from a major improvement in local expenditure as well as improved public and communal space within the development as well improved ecological areas.

Once the Development is operational, the main likely cumulative effects with the committed developments are:

- cumulative beneficial effects in relation to socio-economics, due to the creation of jobs within Southwark Council and London, and the provision of housing within the Canada Water opportunity area;
- cumulative beneficial effects on townscape, conservation areas, heritage assets, and views by positively contributing to the regeneration of the local area;
- cumulative adverse effect in relation to LVMF view from Primrose Hill to St Paul's due to the proximity of one of the towers in the consented development at Convoys Wharf;
- cumulative adverse effects in relation to transportation and access, due to the increase in trips on the local highway network, and the increase in trips on the public transport network at Canada Water and Surrey Quays stations and the local bus network;
- cumulative beneficial effects in relation to transportation and access on car and cycle parking supply within the wider area;
- cumulative beneficial and adverse effects in relation to noise and vibration, due to road traffic noise within the surrounding road network;
- cumulative beneficial effects on designated sites and the breeding birds and habitats in the local area;
- cumulative adverse effects on levels of daylight and sunlight on surrounding residential properties; and
- cumulative adverse effects on light pollution on the facades of the proposed plots within the Development.

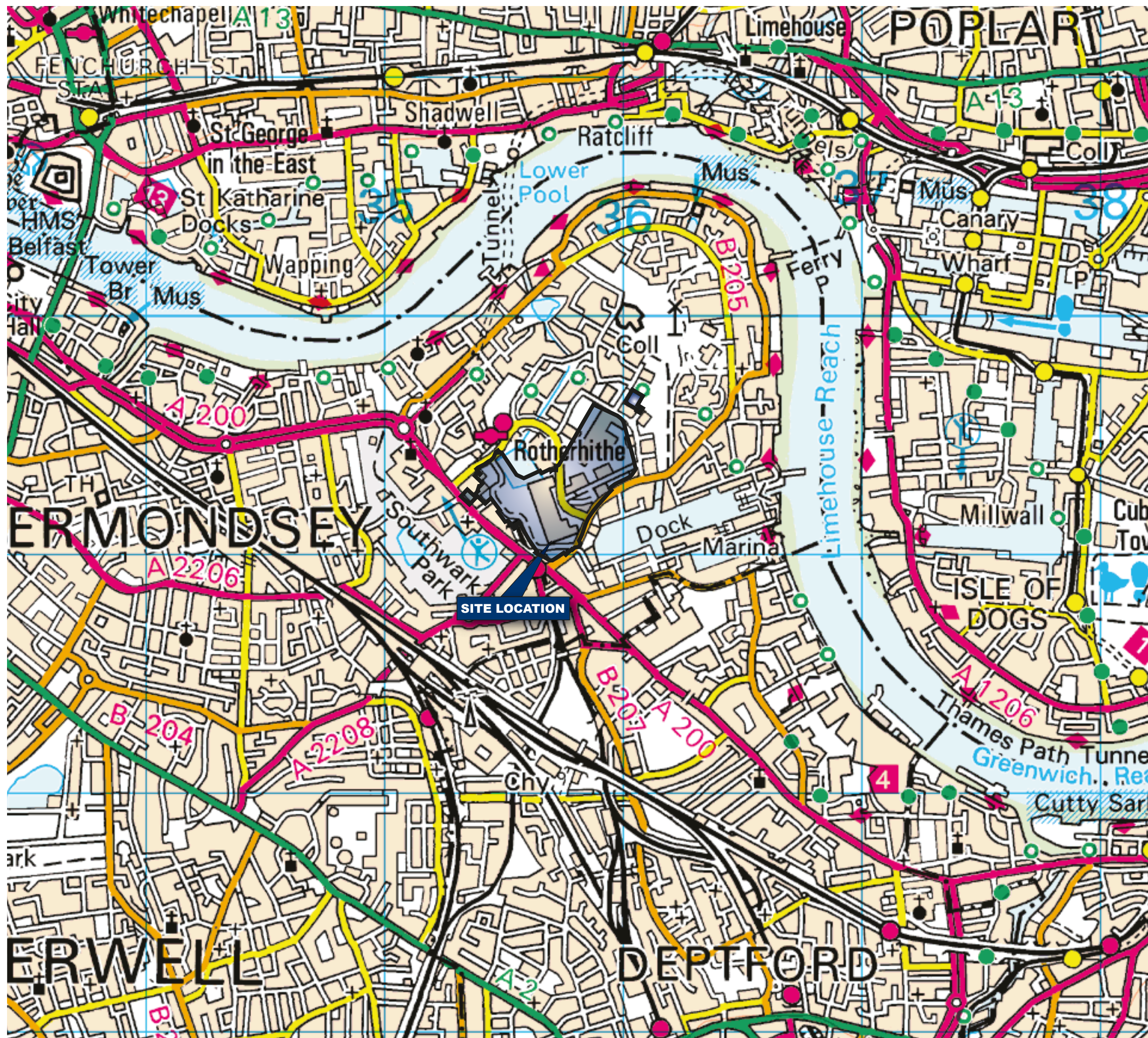
7. What will happen next?

Following the submission of the hybrid planning application, there would be an opportunity for any interested parties to comment on the proposals. The ES and a set of documents supporting the planning applications can be viewed on Southwark Council's website (<https://www.southwark.gov.uk/planning-and-building-control/planning-applications/comment-on-planning-applications>) and the Canada Water Masterplan website (<http://www.canadawatermasterplan.com>).

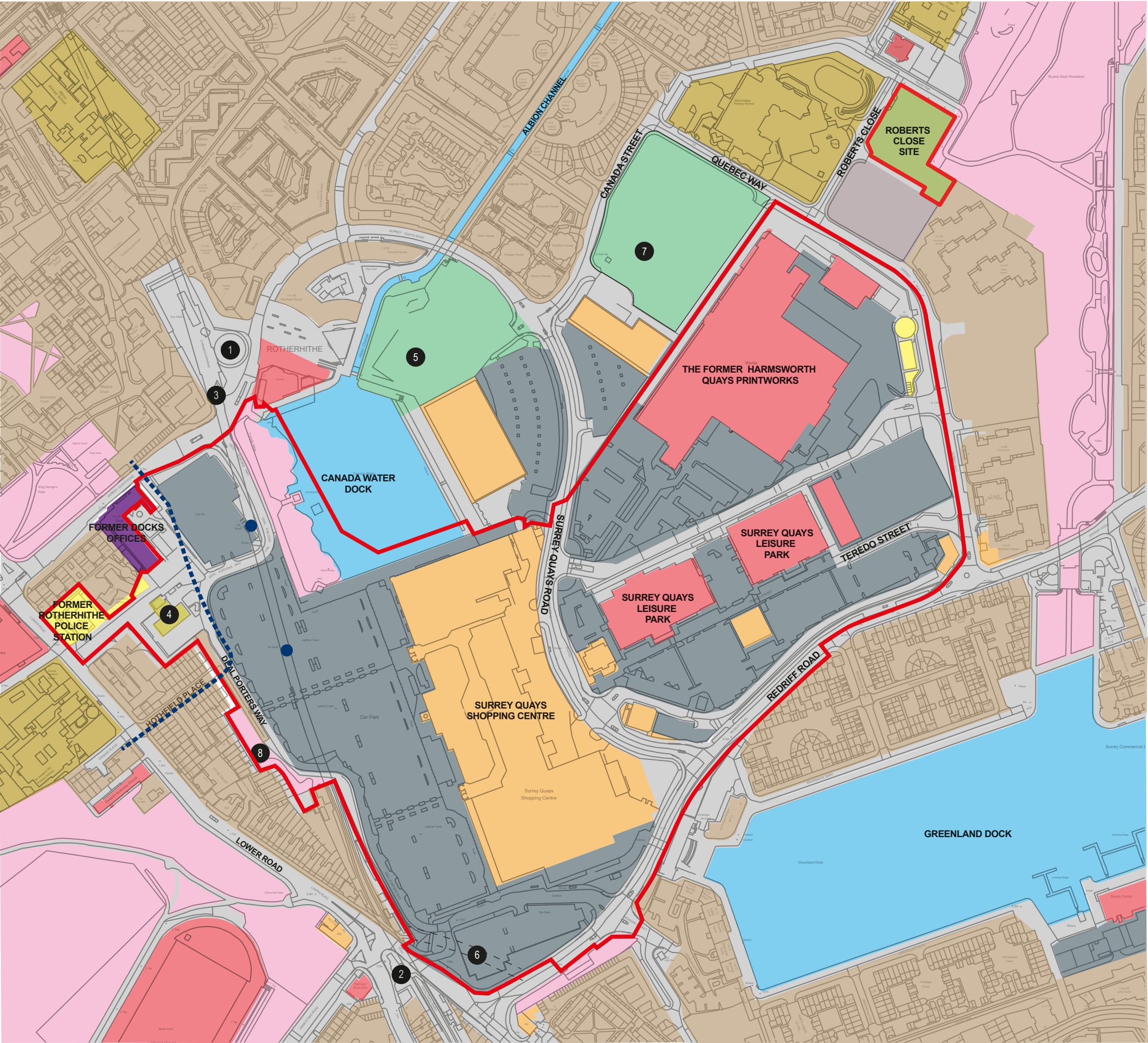
Copies of the planning applications and ES are also available at Southwark Council, and at the Canada Water Masterplan Hub.

Additional copies of the ES can be purchased from Waterman on request (contact details below). A CD version of the ES can be purchased at a cost of £25.

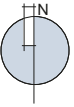
Waterman Infrastructure & Environment Ltd
Pickfords Wharf
Clink Street
London
SE1 9DG
Tel: 020 7928 7888
Email: ie@watermangroup.com



Project Details	WIE12886-101: Canada Water Masterplan
Figure Title	Figure 1: Site Location Plan
Figure Ref	WIE12886-101_GR_NTS_1A
Date	2018
File Location	Canada Water 2017 Scheme\Masterplan\WIE\101 Environment



- Planning Application Boundary
- Transport Infrastructure, Roadway, Pavement
 - 1. Canada Water Station
 - 2. Surrey Quays Station
 - 3. Canada Water Bus Station
- Residential
- Retail
- Education
- Community and Leisure
- Sui Generis
 - 4. Petrol Station
- Surface Water
- Car Parking
- Office
- Redevelopment
 - 5. Canada Water Sites C&E (Under Construction)
 - 6. Thames Tideway Tunnel (Under Construction)
 - 7. Former Mulberry Business Park (Cleared Site)
- Open Space / Woodland / Landscaping
 - 8. Area Adjacent to Prince of Orange Walkway
- Vacant Site
- Ventilation Shaft
- Medium Pressure Gas Main



Project Details	WIE12886-101: Canada Water Masterplan
Figure Title	Figure 2: Predominant Existing Land Uses
Figure Ref	WIE12886-101_GR_NTS_2A
Date	2018
File Location	Canada Water 2017 Scheme\Masterplan\WIE\101 Environment



Photo 1 View from Deal Porters Way of Canada Water Bus Station and Ontario Point



Photo 2 View of Canada Water Dock, Canada Water Library and Land owned by Notting Hill Housing



Photo 3 View of the western edge of Canada Water Dock



Photo 4 Surrey Quays Shopping Centre



Photo 5 London Overground Line ventilation shaft at SQSC Car Park



Photo 6 View of the former Harmsworth Quays Printworks from Surrey Quays Road



Photo 7 Former Dock Offices

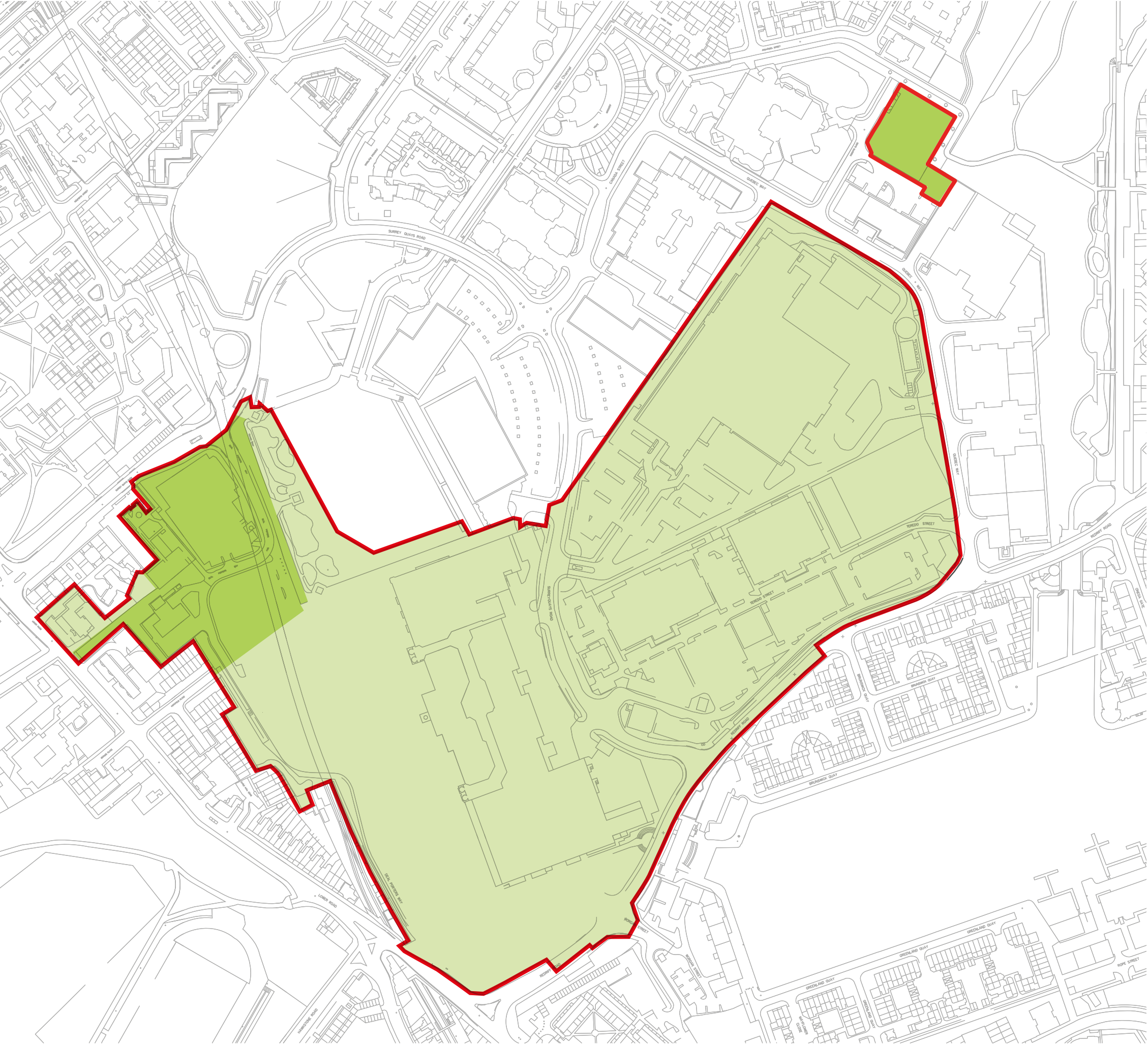





Photo 8 View of the Roberts Close site, looking south at the 24-28 Quebec Way development



Photo 9 View from Quebec Way of Quebec Quarter

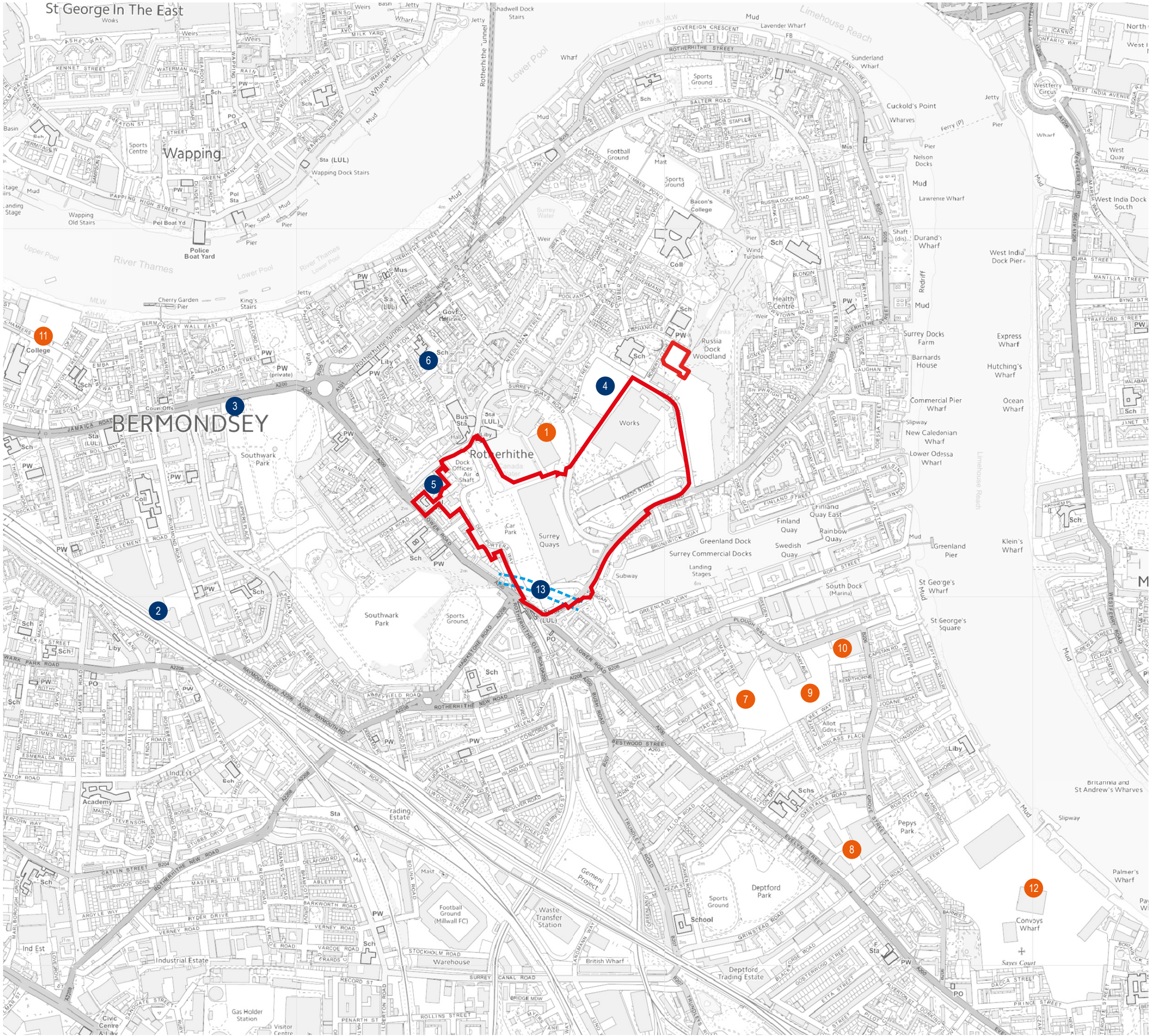
Project Details	WIE12886-101: Canada Water Masterplan
Figure Title	Figure 3: Selection of Photographs of the Existing Site
Figure Ref	WIE12886-101_GR_NTS_3A
Date	2018
File Location	Canada Water 2017 Scheme\Masterplan\WIE\101 Environment
www.watermangroup.com	



-  Planning Application Boundary
-  Outline Proposals
-  Detailed Proposals

Project Details	WIE12886-101: Canada Water Masterplan
Figure Title	Figure 4: The Development (Detailed Proposals and Outline Proposals)
Figure Ref	WIE12886-101_GR_NTS_4A
Date	2018
File Location	Canada Water 2017 Scheme\Masterplan\WIE\101 Environment





- Planning Application Boundary
- Construction Not Yet Commenced
- Under Construction

Committed Developments

- Canada Water Sites C & E (Sellar/Decathlon Site) (Under Construction)
- Tower Bridge Business Complex (Construction Not Yet Commenced)
- 252 Jamaica Street (Construction Not Yet Commenced)
- Former Mulberry Business Park (Construction Not Yet Commenced)
- Mansion Wharf House, Former Landale House (Construction Not Yet Commenced)
- Rear of Albion Primary School (Construction Not Yet Commenced)
- Cannon Wharf Business Centre (Under Construction)
- Crown, New Baltic, Park, Bridge and Victoria Wharves, bounded by Grove, Dragon and Evelyn Streets together with Oxestalls Road (Under Construction)
- Marine Wharf West (Under Construction)
- Marine Wharf East (Under Construction)
- Chambers Wharf (Under Construction)
- Convoys Wharf (Under Construction)
- Thames Tideway Tunnel (Construction Not Yet Commenced)
- Thames Tideway Tunnel (Below Ground)

Project Details	WIE12886-101: Canada Water Masterplan
Figure Title	Figure 6: Committed Developments
Figure Ref	WIE12886-101_GR_NTS_6A
Date	2018
File Location	\\s-incs\wie12886\101\08reports\01graphics\nts\issued figures

For further information please contact

freepost	CANADA WATER MASTERPLAN
telephone	020 7729 1705 (request the Canada Water Team)
email	team@canadawatermasterplan.com