LADBROKE GROVE

Project Flourish

Project Flourish – Ladbroke Grove

Environmental Statement – Non-Technical Summary

September 2023

Doc. Ref: 167-TRI006-Z-XX-DC-EC-RP-1200
Revision: P01

Project Flourish – Ladbroke Grove

Environmental Statement

Non-Technical Summary

Prepared for:

Ballymore (London Arena) Limited and Sainsbury's Supermarkets Limited

Date:

September 2023

Trium Environmental Consulting LLP
+44 (0) 20 3887 7118
hello@triumenv.co.uk
www.triumenvironmental.co.uk

This report has been prepared for the Client by Trium Environmental Consulting LLP with all reasonable skill, care and diligence and in accordance with the Client's particular and specific instructions. This report is issued subject to the terms of our Appointment, including our scope of Services, with the Client.

This report has been prepared for, and is intended solely for the use of, the Client alone and accordingly is personal to the Client. The Report should not be disclosed, exhibited or communicated to any third party without our express prior written consent. Trium Environmental Consulting LLP accepts no responsibility whatsoever to any third parties to whom this report, or any part thereof, is disclosed, exhibited or communicated to, without our express prior written consent. Any such party relies upon the report at their own risk.

Trium Environmental Consulting LLP disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the Services.

Trium Environmental Consulting LLP shall be under no obligation to inform any party of any changes or updates in respect of any matter referred to or contained in the Report.

This report is the Copyright of Trium Environmental Consulting LLP. Any unauthorised use or reproduction by anyone other than the Client is strictly prohibited.

CONTENTS

INTRODUCTION

1 Ballymore (London Arena) Limited and Sainsbury's Stores Limited (hereafter referred to as the 'Applicant') is seeking planning permission for the redevelopment of an area of land located within the Royal Borough of Kensington and Chelsea, shown in Figure 1 ('the site'). The development proposals (referred to in this document as the 'Proposed Development') are for construction of a new Sainsbury's Supermarket, up to 2,519 new homes, commercial and community floorspace and associated landscaping. The Applicant is seeking outline planning permission[1] for part of the site and detailed (full) planning permission[2] for the remainder of the site. This is referred to as a 'hybrid planning application'. The full description of development is set out below:

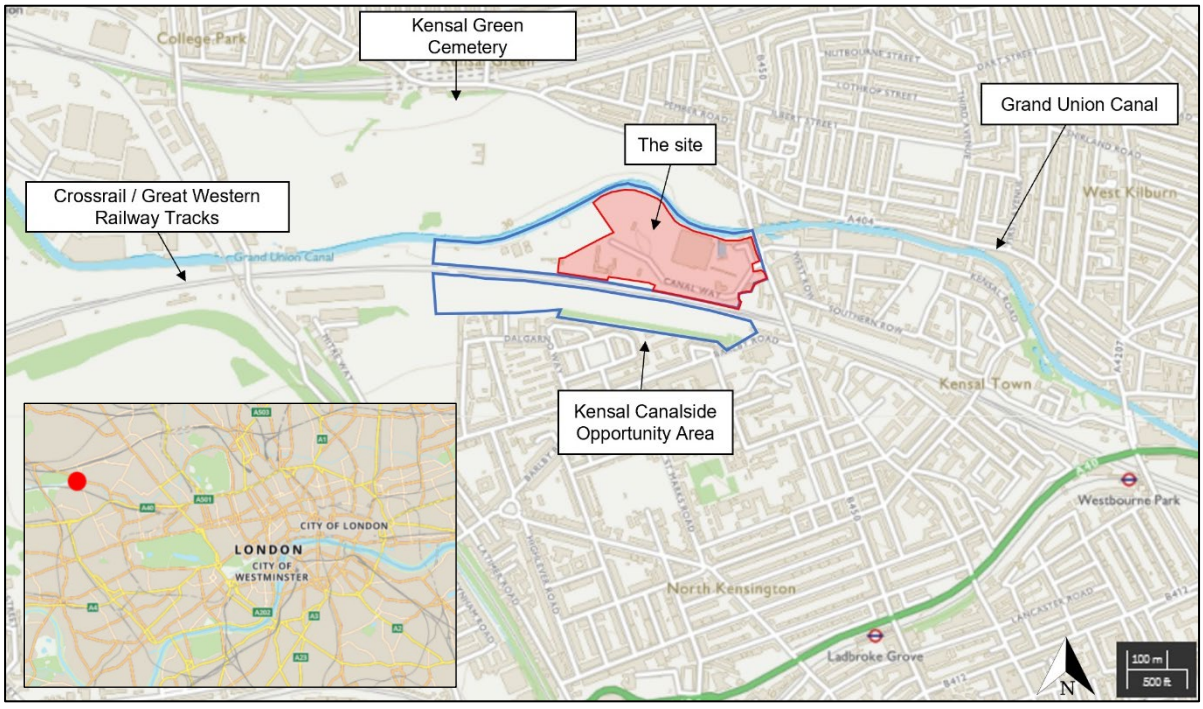
A hybrid application for the demolition of all existing buildings and structures to facilitate a mixed use development comprising residential, retail, commercial and community uses with associated infrastructure.

The outline element of the scheme will include residential floorspace and ancillary residential facilities (Class C3) and non-residential floorspace comprising flexible commercial, community and sui generis floorspace (Class E / Class F2 / Sui Generis), the provision of new pedestrian and vehicular access, open space, landscaping, car and cycle parking and other associated infrastructure works with all matters reserved for future consideration.

The detailed element of the scheme will comprise a large retail store and ancillary facilities (Class E(a)), Commercial, Business and Service uses (Class E), Leisure floorspace (Class E(d)), residential facilities (Class C3), improvements to existing site access at Ladbroke Grove, provision of new pedestrian and vehicular access, internal roads and associated landscaping, car and cycle parking and associated infrastructure works including remediation.

2 The planning application boundary is shown in Figure 2.

Figure 1 Site Location

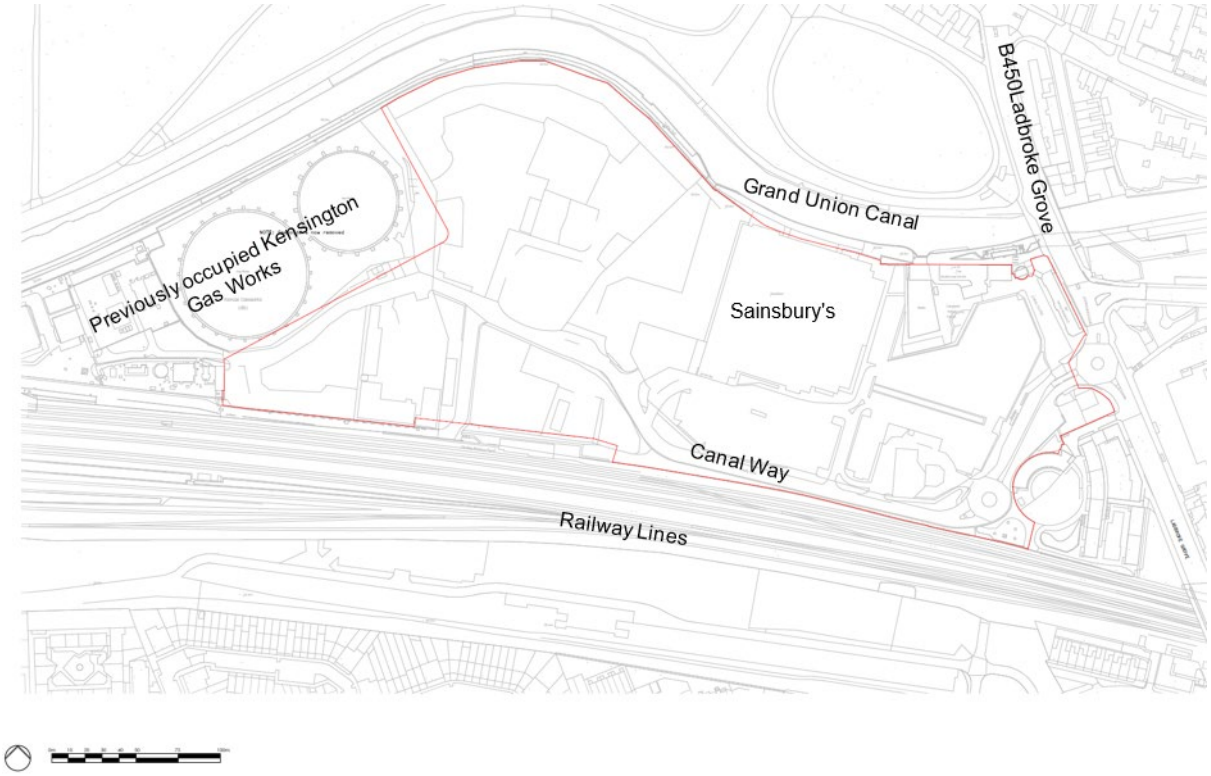


[1] *An 'outline' planning application seeks permission for an initial form of planning permission which agrees to a maximum amount of development within buildings of a maximum height and massing. The more detailed architectural design is then subject to a further (later) 'reserved matters' application.*
[2] *A 'detailed' planning application seeks permission for the detailed architectural plans which fixes the exact design, amount of development and appearance of the buildings.*

3 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 Proposed Development (that the Applicant is seeking planning permission for), the potential significant environmental effects of the Proposed Development and the measures proposed to protect and improve the environment. The Environmental Impact Assessment has identified the effects that could result during the demolition and construction works, and when the Proposed Development is completed and operational.

4 The Environmental Statement has been prepared in accordance with the relevant regulations relating to Environmental Impact Assessment[3].

Figure 2 Planning Application Boundary



Purpose of the Environmental Impact Assessment and Non-Technical Summary

5 Environmental Impact Assessment is a process that allows the beneficial and adverse (positive and negative) effects of certain projects on the environment to be identified and reported upon. This is required by law and helps the Council (in this case the Royal Borough of Kensington and Chelsea) understand the environmental effects of a new development when they make their decision on whether to grant it planning permission. Effects may also be described as 'neutral' where a change is noted but it is considered to be neither beneficial nor adverse.

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

7 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.

[3] *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended).*

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

THE SITE AND SURROUNDING AREA

9 The site covers a total area of approximately 7.6 hectares and is located within the administrative boundary of the Royal Borough of Kensington and Chelsea.

10 The eastern part of the site currently comprises a Sainsbury's Supermarket and associated car parking, two mixed-use buildings (The Boathouse and Canalside House), access road/ paths and a petrol filling station. A small memorial garden associated with the Ladbroke Grove Rail Disaster is located in the south-east corner of the site. The western part of the site contains areas of temporary buildings (offices), construction compounds, rail access routes, material and vehicle storage, car parking and associated access. There are two existing substations within the site.

11 The site is bound by the Grand Union Canal to the north, the B450 Ladbroke Grove to the east, a Department for Transport depot and railway lines to the south and industrial land, which was previously occupied by Kensington Gas Works, to the west.

12 Access to the site is achieved from Canal Way, which connects the site to the B450 Ladbroke Grove via a roundabout junction to the east.

13 Kensal Green Cemetery is located to the north of the site, on the other side of the Grand Union Canal, which is a Conservation Area, as well as a Registered Park and Garden and Site of Metropolitan Importance for Nature Conservation.

14 The Kensal Gasworks Site of Local Importance for Nature Conservation is located within the site boundary; however, this has largely been disturbed due to previous activity on the site, and therefore the former habitats present have largely been lost.

15 As shown in Figure 1 (the blue line), the site is designated within the London Plan (2021) as a major part of the Kensal Canalside Opportunity Area[4]. The site is also allocated within the Royal Borough of Kensington and Chelsea Adopted Local Plan (2019) as part of a wider opportunity area, under Policy CA1 – Kensal Canalside Opportunity Area. The Opportunity Area is made up of three parcels of land: The site which is subject to the Proposed Development; land to the west of the site owned by Berkeley St William Group (the 'St William Development'); and land to the south of the site (on the other side of the railway) owned by the Department for Transport (the 'North Pole Depot Site'). Planning applications have not yet been submitted for the St William Development or the North Pole Depot Site. The Opportunity Area typically consists of under-utilised land and is a prime location for redevelopment.

16 The surrounding area is primarily residential in nature, typically low rise, particularly to the north of the site but with varying heights and some taller buildings within the existing townscape, such as the 31 storey Trellick Tower to the east of the site.

17 Photographs of the site and surrounding area are presented in Figure 3 and Figure 4.

[4] Opportunity Areas are identified by the Mayor of London as key locations with potential for new homes, jobs and infrastructure of all types.

Figure 3 Aerial Photograph of the Site and Surrounding Area

Figure 4 Photographs of the Site and Surrounding Area

A – Sainsbury's Supermarket (looking north-west)
B – View from outside the Sainsbury's Supermarket delivery compound
C – Grand Union Canal (looking north-west)
D – Existing site entrance

ASSESSMENT METHODOLOGY

Scoping

19 One of the first stages of the Environmental Impact Assessment process is referred to as 'Scoping'. Scoping identifies the likely 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.

20 As part of the 'Scoping' process, Trium Environmental Consulting LLP prepared a 'Scoping Report' which explained the proposed approach to the Environmental Impact Assessment. Initially, a draft Scoping Report was submitted to the Royal Borough of Kensington and Chelsea on an informal basis to gain an initial agreement on the 'scope' of the Environmental Impact Assessment. A 'formal Scoping Report' was then issued to the Royal Borough of Kensington and Chelsea on 27th September 2021 for their formal agreement and any requests for additional topics to be considered (referred to as an 'EIA Scoping Opinion').

21 The Royal Borough of Kensington and Chelsea employed a separate EIA Consultancy (Waterman Environmental) to complete a review of the Scoping Report on their behalf. The Royal Borough of Kensington and Chelsea then issued their formal EIA Scoping Opinion on the 18th November 2021.

22 Subsequently, Trium Environmental Consulting LLP prepared a 'Scoping Report Addendum', which was submitted to the Royal Borough of Kensington and Chelsea on 4th May 2023. This outlined the amendments to the Proposed Development which had occurred since 2021 and confirmed whether the changes had any impacts on the proposed approach agreed through the 'EIA Scoping Opinion'. The Royal Borough of Kensington and Chelsea issued their 'EIA Scoping Opinion Addendum' on 19th June 2023, which agreed with the methodology outlined within the 'Scoping Report Addendum'.

23 The Environmental Impact Assessment has been undertaken in line with the EIA Scoping Opinion, as well as the EIA Scoping Opinion Addendum, and where there has been any alternative methodology, approach or assessment used, this has been explained and justification provided within the Environmental Statement.

Impact Assessment Methodology

24 The Environmental Impact Assessment process is undertaken in a number of stages, with each technical topic assessment following the same process, as shown in Figure 5. Potential environmental effects have been predicted using desk studies, environmental surveys, computer modelling and professional judgement, as set out within the assessment methodology section of each technical chapter within the Environmental Statement.

Figure 5 Stages of the Environmental Impact Assessment Process

ALTERNATIVES AND DESIGN EVOLUTION

25 Consideration has been given to the option of not developing the site, and alternative ways of developing the Sainsbury's Supermarket and residential buildings, including alternative locations and alternative designs. This process has been influenced by various environmental studies and discussions with a number of consultees, including the Royal Borough of Kensington and Chelsea and the Greater London Authority, and is reported in the Environmental Statement. The Environmental Statement and the Design and Access Statement submitted with the planning application explains this process in more detail, and a summary is provided below.

Not Developing the Site

26 Not developing the site would mean leaving the site in its current state. Not developing the site would not be desirable as it is currently considered brownfield land which is underutilised in its existing state. As described above, the site represents a large proportion of the Opportunity Area, with the potential to provide the greatest number of residential homes and other non-residential floorspace in order to meet an identified need within Kensington and Chelsea and within London. Not developing the site would mean the urban regeneration of the Opportunity Area would not be realised. The site represents an opportunity to deliver substantial housing, employment opportunities and public realm benefits to the area, which leads to other direct and indirect socio-economic benefits that would otherwise not be realised should the site be left in its current state.

27 As such the option of not developing the site has not been considered in further detail.

Alternative Sites

28 As the Applicant owns the site, and that the site is located in the Opportunity Area and has been identified for urban regeneration by the London Plan and the Royal Borough of Kensington and Chelsea Local Plan, alternative sites or locations for the Proposed Development have not been considered by the Applicant.

Alternative Designs and Design Evolution

29 During the process of designing the Proposed Development, no fundamentally different schemes or designs were identified or considered by the Applicant and the project team. Instead, the design of the Proposed Development has evolved to reflect the site constraints and opportunities, including key environmental considerations, and the outcomes following pre-application consultation.

30 Consideration was given as to whether the existing buildings on Plot 6, Canalside House and The Boathouse, should be retained rather than demolished. Canalside House and The Boathouse provide poor quality accommodation and perform poorly from an environmental perspective. Rather than retain these buildings, their uses would be re-provided within the Proposed Development which will be of the highest quality and low carbon design. The space currently occupied by Canalside House and The Boathouse would be utilised through the provision of a high-quality area of public open space (Ladbroke Gardens), benefitting both existing and introduced local communities.

31 The demolition of Canalside House and The Boathouse will be undertaken in line with circular economy principles with waste management targets to divert 95% of construction waste from landfill. This is proposed through the recycling of bricks and concrete from the existing buildings, as well as the potential re-use of suitable electrical equipment for use in the Proposed Development, for example.

32 The project team have worked extensively together to ensure that '*mitigation by design*' principles (where environmental effects are avoided through changes to the design) have been incorporated into

the evolving scheme, and so the evolution of the design has included, where relevant, consideration of environmental effects and issues. This is summarised below under the 'Design Evolution' heading.

Design Evolution

33 Following analysis of the site and the surrounding context, initial design options were explored to test the site layout and design in order to assist in determining the most appropriate design for the site. The key considerations during the design evolution of the scheme include:

- Rejuvenate a former brownfield site into a unique location that connects with its surroundings;
- Facilitate new connections between the site and the surrounding areas in the form of new pedestrian and cycle friendly bridges;
- Create a new neighbourhood that meets the needs of a new population as well as the existing population of the local area;
- Rationalise the land currently used to house a replacement Sainsbury's superstore and create space for much needed housing;
- Create a sequence of new public spaces that cater for residents and visitors and make positive connections to the local area;
- Celebrate the unique location and geography of the site and connect the cemetery and canal, the train track and Ladbroke Grove into a new place in North Kensington;
- Transport and accessibility through and into the site, particularly on the western side of the site where there is a low accessibility at present;
- The location of the site adjacent to the railway and the potential source of noise and air pollution associated with it, including the currently operating diesel trains that use this route;
- Positioning of the new Sainsbury's store at a new central location within the site; and
- Responding to the available information regarding the height and massing of the adjacent proposed St William Development.

Consultation

34 The design of the Proposed Development has evolved in response to consultation with the Royal Borough of Kensington and Chelsea, the Greater London Authority and other key stakeholders. During this consultation, the following key points were raised:

- **Density, Scale and Massing** – buildings within the Proposed Development need to be considered in response to context of the surrounding area, environmental testing, and viability;
- **Movement** – the movement strategy needed to ensure pedestrian focused connections to the wider area and better quality public realm within the site boundary;
- **Public Realm and Landscaping** – physical and mental wellbeing of all residents should be at the forefront of the design;
- **Sainsbury's Store** – the new store's configuration, position and integration of the new designs into the surrounding streetscape;
- **St William Development** – how the Proposed Development and the neighbouring St William Development planning applications could be brought forward in tandem;
- **Notting Hill Carnival** – how the proposal will accommodate the Notting Hill Carnival; and
- **Housing** – the quantum and position of affordable housing with the Proposed Development.

35 Consultation has also been held with the public and other neighbouring land uses, with consultation running from April 2021 to June 2023. The public consultation period initially centred around four public exhibitions which occurred in July and September 2021 and took place in the Sainsbury's car park. From May to June 2023, a Drop-in hub was set up at Canalot Studios, 222 Kensal Road, which allowed members of the public and other stakeholders to visit the hub to discuss the development proposals and meet the different members of the project team.

36 The scheme received support in principle whilst also raising questions in relation to a number of issues including affordability, the height and scale of the scheme, the impacts on the Canal Way/ Ladbroke Grove junction and the provision of landscape and open space.

37 The evolution of the scheme's design emerged in response to input from comments made during the consultation process as well as design development and the technical aspects of the scheme from environmental analysis.

38 The key responses to the public consultation supported the following inclusions into the design of the Proposed Development:

- **Affordable housing.** The Proposed Development will include a mix of affordable and market units. These homes will be suitable for families with three and four bedroom apartments available. They will include private balconies or terraces for every new home and have access to shared gardens.
- New **flexible retail and commercial spaces**, including a new Sainsbury's store plus opportunities to meet residents' aspirations for a variety of independent retailers and uses for public and commercial spaces. The Proposed Development includes a range of commercial unit sizes to attract a variety of retailers and thought has been given to the types of operators that could be attracted to the site.
- **High quality green spaces** including public green spaces will be maximised and designed to meet different needs such as social, quiet and play. Planting and trees are being introduced along all walking routes.
- **Wild areas of planting** are included as part of the landscape design enabling nature to take control of the space. Wildlife corridors will ensure the success of biodiversity across the site.
- **Sports and activity areas** have been included in the Proposed Development, such as a new multi-use games areas and other areas of play space for residents.

Key Environmental Considerations

39 The key changes in response to environmental constraints and opportunities included:

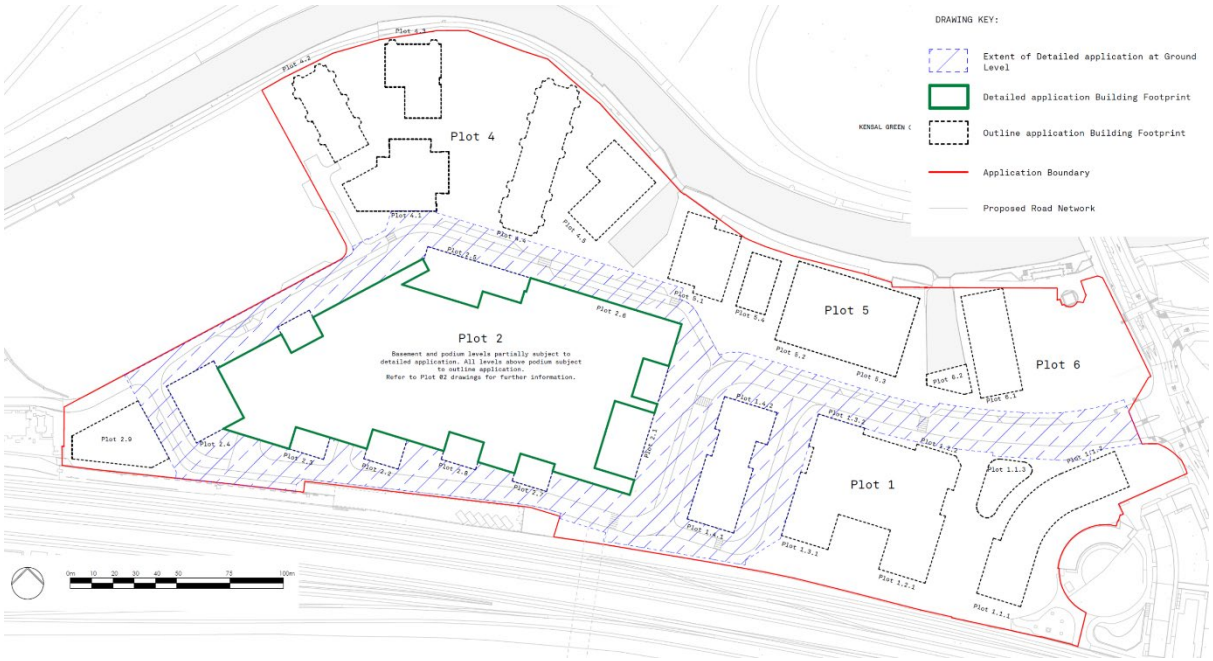
- **Built Heritage**: taller buildings have been set back from the Kensal Green Cemetery. The Ladbroke Grove Rail Disaster Memorial is also being retained as part of the Proposed Development with an improved setting;
- **Wind Microclimate**: the number of buildings on Plot 1 has been reduced to ensure larger spaces between each of the plots, to reduce channeling of the wind and allow for the addition of more landscaping. The introduction of additional buildings on the Plot 2 podium reduced wind speeds within this area. The position of the cycle lane between Plots 1 and 2 was also altered to reduce potential wind impacts, allowing landscaping to be moved closer to the building line of Plot 2;
- **Biodiversity**: green linkages have been incorporated into the Proposed Development along the Grand Union Canal frontage and through the site, to connect the railway line to the canal. A range of features to improve biodiversity and ecological value have also been incorporated into the design;
- **Noise and Vibration**: the Sainsbury's store has been located along the boundary close to the railway line, in addition to other massing, to act as a barrier, reducing the potential noise from the railway within the site;

- **Air Quality**: residential elements have been set back from the main road of Ladbroke Grove as the largest source of air pollution in the area;
- **Townscape and Views**: the height of the tallest buildings have been reduced, to ensure they are less prominent within the wider townscape; and
- **Daylight, Sunlight and Overshadowing**: the taller buildings of the Proposed Development have been positioned to ensure that areas of open and play space experience suitable levels of daylight and sunlight. The reduction in height also helped to improve daylight and sunlight conditions across the site and surrounding area.

THE PROPOSED DEVELOPMENT

40 The Proposed Development comprises of five development 'Plots' (Plot 1, Plot 2, Plot 4, Plot 5 and Plot 6), as shown in Figure 6 below. The ground floor and basements of the proposed Sainsbury's Store located within Plot 2, as well as the small units at ground floor for Commercial, Business, Service and Leisure use in Plot 2, and the primary and secondary access roads form the 'Detailed Element' of the Proposed Development. Plot 1, Plot 2 (the residential element above the new Sainsbury's store), Plot 4, Plot 5 and Plot 6 form the 'Outline Element' of the Proposed Development.

Figure 6 Site Plan



41 The Proposed Development comprises the following components:

- A new Sainsbury's Store;
- Up to 2,519 new homes, comprising a mix of Market, Intermediate[5] and London Affordable Rent[6] units;
- Commercial, community and leisure facilities, including the provision of a new Activities Centre;
- New pedestrian and vehicular access, internal roads, and improvements to the existing site access at Ladbroke Grove, including a new signalised junction;

[5] *Intermediate rent is a type of affordable home, with rents set below 80% of market rent. This includes discounted market rent and London Living Rent. Eligibility in London is restricted to households with incomes below £60,000.*

[6] *London Affordable Rent homes are rented by social landlords with rents capped at benchmark levels published by the Greater London Authority.*

- Creation of new public realm, open space, play space and amenities, including the provision of new parks in Plots 4 and 6 and the re-opening of a canal basin;
- Provision of long and short stay cycle parking and car parking provision.

Figure 7 The Proposed Development (Illustrative)

42 The Proposed Development will provide 20% affordable homes by unit (25% by habitable room).

43 The buildings within the Proposed Development will range in height, from a maximum of 36.5m to 136.4m (Above Ordnance Datum) (maximum of 98m above ground level), which is approximately 1 to 29 storeys.

44 The site will be accessed via a main entrance from Ladbroke Grove to the east. The primary route across the centre of the site will comprise the Avenue, which will connect Ladbroke Grove to the new Sainsbury's Supermarket entrance. There are currently seven bus route which have stops within the site. The Proposed Development will provide three bus routes to the centre of the site.

45 A total of 227 car parking space will be provided for the Sainsbury's Supermarket, within the basement of Plot 2, including 14 accessible spaces, nine parent and toddler spaces and 12 electric charging spaces. This will see the number of car parking spaces reduce by 42% (from 345). A total of 32 long-stay and 70 short-stay cycle spaces will be provided for Sainsbury's Store employees.

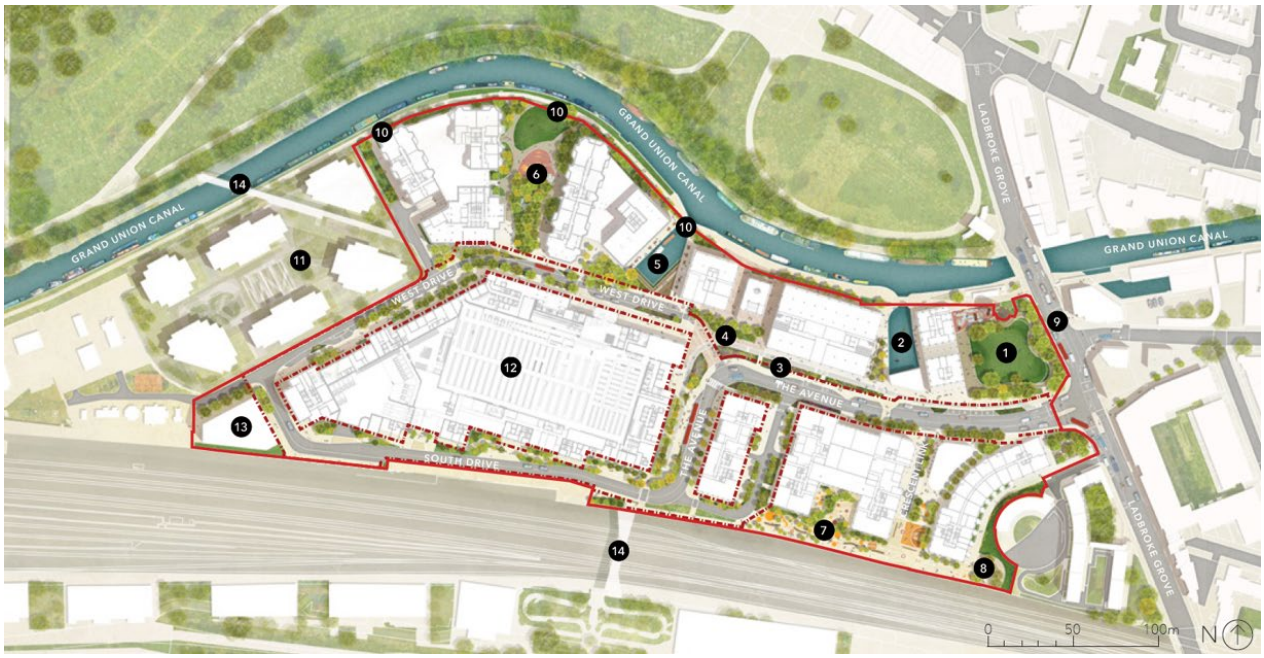
46 Car parking for the residential element of Plot 2 is also provided within the basement, which will provide 24 accessible spaces. Within the Outline Element of the Proposed Development, there will be up to 180 car parking spaces provided within the Plot 1 basement, up to 134 in the Plot 4 basement and seven on street car parking spaces.

47 The Proposed Development will provide a variety of landscaping features, providing public and private open space for residents and visitors to the site, as well as biodiverse roofs. This will include the following key open spaces:

- Ladbroke Gardens: a new park at the front of the site which will provide space to accommodate a Notting Hill Carnival sound stage;
- New Wharf: a restored historical basin which will provide a spill out area and commercial uses surrounding the basin; and
- Canalside Park: a new public park for local residents and the wider community, with a new woodland and play space.

48 The illustrative landscaping plan for the ground floor level is shown in Figure 8.

Figure 8 Illustrative Landscaping Plan – Ground Level



Outline Planning Application Boundary

Detailed Planning Application Boundary

1 Ladbroke Gardens

2 Boathouse Basin + Water Activities

3 Raingardens

4 Denby Square

5 New Wharf

6 Canalside Park

7 South Terrace

8 Memorial Garden

9 Improved Road Layout + Widened Footways

10 Lowered Boundary Wall

11 Adjacent St. William Development

12 New Sainsbury Store

13 New Sports Centre

14 Potential Future Pedestrian/ Cycle Bridge Link

DEMOLITION AND CONSTRUCTION

Timing of the Construction Works

49 Construction of the Proposed Development is anticipated to be undertaken over a period of 11 years. Construction will take place across two continuous phases (shown in Figure 9). Phase 1 (Plots 2 and

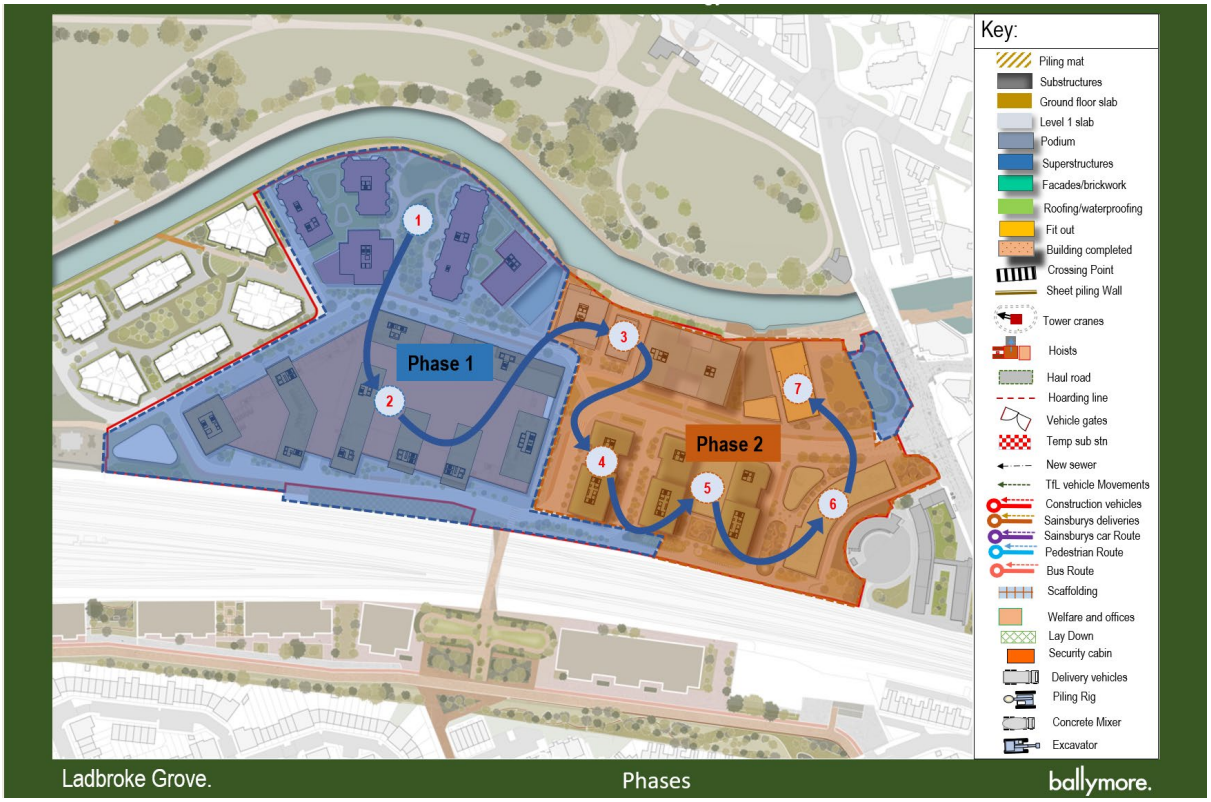
4) will begin in Quarter 1 of the first year of construction (Year 1) and will be completed in Quarter 2 of Year 6. Phase 2 (Plots 1, 5 and 6) will begin in Quarter 2 of Year 5 and will be completed in Quarter 4 of Year 11. Therefore Phase 1 will be completed and occupied whilst Phase 2 is still undergoing construction. The sequence of the construction works is shown in Figure 9.

50 The construction works are planned to commence with the construction of the proposed residential units on Plot 4, alongside construction of the new Sainsbury's Store and residential units above this. Once the new Sainsbury's store is complete and operational, demolition of the existing Sainsbury's Store and construction of Phase 2 will commence. The demolition and construction of the Proposed Development includes the demolition of Canalside House and the Boathouse Centre.

51 The anticipated core working hours for demolition and construction works are:

- 08:00 – 18:00 hours on weekdays;
- 08:00 – 13:00 hours on Saturdays; and
- No working on Sundays, Bank or Public Holidays.

Figure 9 Indicative Phasing Plan



Construction Traffic

52 Access routes to the site by Heavy Good Vehicles will be agreed with the Royal Borough of Kensington and Chelsea prior to the commencement of works. The main approach routes for construction traffic on the strategic road network are via the A5 Edgware Road coming from the M1, through onto Ladbroke Grove and onto Canal Way.

53 The anticipated average monthly number of vehicles accessing the site is expected to peak during July to August 2029, with a secondary peak in January 2033, when most construction activity will be occurring on site. This peak equates to 31 Heavy Good Vehicles per day.

54 The Grand Union Canal will be used to transport waste and materials to and from the site by barge, to reduce the number of construction HGV vehicles on the local road network.

55 With the existing Sainsbury's Store remaining on site until a new store has been constructed and opened, the on-site roads and customer car parking will be adapted to coincide with construction of new roads. The existing bus stops will remain during Phase 1 of the works but will be subject to alteration to facilitate Phase 2 and the construction of the new Sainsbury's Store.

ENVIRONMENTAL IMPACT ASSESSMENT

56 The following sections of this Non-Technical Summary present a summary of the environmental technical topic assessments that have been undertaken as part of the Environmental Impact Assessment and the likely significant effects.

57 The tables within each section provide a summary of the **Significant** effects identified (rather than all effects, including those that are not deemed to be significant). Significant adverse effects are shaded in '**orange**', significant beneficial effects are shaded in '**green**', and significant neutral effects are shaded in '**blue'** for ease of identification. Further details on all the effects considered can be found within the Environmental Statement (**Volumes 1-3**).

SOCIO-ECONOMICS

58 The assessment of socio-economic impacts has focused on effects that could arise during both the demolition and construction works, as well as once the Proposed Development is complete and operational. During the demolition and construction work, consideration has been given to impacts relating to construction employment and the displacement of existing businesses. Once compete and operational, consideration has been given to impacts relating to operational employment, local jobs and skills, local expenditure, the provision of new floorspace, housing, education, healthcare and open and play space.

Demolition and Construction

59 Construction workers will be required in order to complete the demolition and construction works, creating jobs in the construction sector. The Applicant is seeking to ensure that a proportion of the total jobs created go to residents of the Royal Borough of Kensington and Chelsea, endeavouring to create employment and training opportunities for local people. It has been assessed that approximately 1,035 jobs will be created annually as a result of the demolition and construction works, which is not a significant amount in the context of the construction industry and does not constitute a significant effect.

60 There are existing businesses on-site which would have to be relocated during the demolition and construction works: Canalside House Charities (which include 16 separate businesses), Euro Storage and Hampstead Estates. Canalside House Charities are likely to find new office space due to their small size, and upon completion of the Proposed Development they would be provided with the opportunity to move into the high-quality offices being delivered on-site. Euro Storage and Hampsted Estates only have a temporary occupancy arrangement on-site, therefore would not expect to remain on-site long-term. Due to the disruption to these businesses and the potential loss of income and jobs, the effect to existing businesses on-site is considered to be not significant.

61 There are existing residents on-site within the Boathouse Centre, which will be demolished as part of the Proposed Development. They would not be removed from the site, rather they will be relocated into new high-quality homes that are being provided. These residents will be moved into the new homes before the Boathouse Centre is demolished. This disruption to the existing residents is not considered to be significant.

Completed Development

62 Once complete and operational, the Proposed Development will provide additional jobs through the employment generating uses that are proposed. It has been estimated that approximately 640 to 995 additional jobs would be created by the completed Proposed Development, accounting for a loss of 75 existing jobs on-site. This increase in employment provision is not considered to be significant. Of these total jobs, 55-105 jobs are expected to go to residents of the Royal Borough of Kensington and Chelsea, as a result of the Applicant's commitment to maximise employment and skills opportunities for local residents. This effect on local jobs and skills is not considered to be significant.

63 Both the workers employed on-site and the residents living within the Proposed Development are expected to spend money in the local area. The additional worker expenditure has been assessed as being between £431,400 to £733,900 each year, and the additional residential expenditure has been assessed as being approximately £8,000,000; neither of these expenditure effects are considered to be significant.

64 The Proposed Development will provide at least 26,132m^2 Gross Internal Area of commercial floorspace, contributing to the commercial floorspace needs of the Royal Borough of Kensington and Chelsea. This has been assessed as a Moderate Beneficial effect, which is considered to be **Significant**. The Proposed Development would also provide at least 1,500m^2 Gross Internal Area of community floorspace, including community leisure facilities, which will be accessible to new residents and the local community. Whilst this effect is considered to be beneficial, it is not considered to be significant.

65 At least 2,300 new homes will be provided as a result of the Proposed Development, which would make a significant contribution (51%) to the Royal Borough of Kensington and Chelsea's 10-year housing target. Without the new housing introduced through the Proposed Development, the Royal Borough of Kensington and Chelsea would be unlikely to meet its housing provision targets. The provision of new homes has been assessed as a Major Beneficial effect, which is considered to be **Significant**.

66 The new residential population that will live in the Proposed Development will create additional demand on schools. It has been assessed that there will be an increased demand for early years education, but not to a level that is considered significant. When considering the impact on primary school education capacity, it has been noted that the primary schools that would be affected would only be at 60% capacity when the new residents are living in the Proposed Development. This indicates there is more than a surplus in capacity to accommodate the additional primary school pupils as a result of the Proposed Development. The effect on primary school capacity, therefore, is not considered to be significant. The increase in demand for secondary education as a result of the Proposed Development would leads to secondary school capacity being at 101% (i.e. over capacity), leaving no capacity for any additional students. The Applicant has proposed to provide financial contributions to the Royal Borough of Kensington and Chelsea to help alleviate the negative impact on secondary school capacity, subsequently, the effect is not considered to be significant.

67 The additional residents introduced to the area as a result of the Proposed Development would place additional demand on primary healthcare provision in the area surrounding the site, as well as having an impact on wider health and social services. The Applicant has proposed to provide financial contributions towards expansion of existing GP Surgeries in the surrounding area, to alleviate the effect on primary healthcare provision. This effect is not considered to be significant.

68 Once complete and operational, the Proposed Development would provide up to 38,374m^2 of publicly accessible open space. The proposed open space has been designed to provide lots of trees and vegetation, improved walking and cycling routes, and to discourage travel by car and excessive on-street parking. This effect has been assessed as being Moderate Beneficial, which is considered to be **Significant**.

69 The Proposed Development would provide a minimum of 9,203m^2 of play space across the site. This would consist of 3,706m^2 for children between 0-4 years old, 3,061m^2 for children between 5-11 years old and 2,436m^2 for children over 12 years old. The total amount of play space provided at this stage is above the policy requirement. This effect has been assessed as being Moderate Beneficial, which is considered to be **Significant**.

Likely Significant Effects

70 Table 1 summarises the significant socio-economic effects as a result of the Proposed Development.

Table 1 Summary of the Significant Residual Socio-Economic Effects

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Completed Development		
Commercial floorspace provision	The Proposed Development would provide at least 26,132m^2 of commercial floorspace.	Moderate Beneficial
Housing Provision	Provision of at least 2,300 additional homes.	Major Beneficial
Access to open space	The Proposed Development would provide up to 38,374m^2 of publicly accessible open space.	Moderate Beneficial
Access to play space	The Proposed Development would provide up to 9,203m^2 of dedicated play space.	Moderate Beneficial

TRAFFIC AND TRANSPORT

71 A traffic and transport assessment has been undertaken to determine the effects relating to changes in traffic flows, public transport, severance[7]; delay for drivers, pedestrian and cyclists, amenity, fear and intimidation; and accidents and safety.

Demolition and Construction

72 As a result of the demolition and construction activities associated with the Proposed Development, there will be an increase in the number of vehicles on surrounding roads. Construction traffic is anticipated to peak in 2029 of the construction programme, with a secondary peak in 2031. Peak construction traffic and traffic from the operation of Phase 1 have been assessed in combination to ensure a worst case assessment.

73 A Construction Logistics Plan will be submitted and agreed prior to any works commencing on site, in agreement with Royal Borough of Kensington and Chelsea. The aim of the Construction Logistics Plan is to minimise the effect of the demolition and construction works on local residents, businesses and the highway network. This will include traffic related management measures to be implemented during the demolition and construction period, such as designated construction traffic routes and methods that will be adopted to mitigate the effects associated within the demolition and construction works.

74 The demolition and construction traffic will result in an increase in traffic flows on Canal Way, which will result in **Significant Adverse** effects on pedestrians and cyclists in relation to severance and fear and intimidation. All other road links will experience Negligible (Not Significant) effects.

75 There is considered to be Minor Adverse effects (Not Significant) in terms of public transport delay and accidents and safety for users of the highway network (pedestrians, cyclists and car drivers).

[7] *being or the feeling of being isolated or separated from something.*

Completed Development

76 The traffic and transport assessment of the complete and operational Proposed Development has been undertaken for the year 2036, when the Proposed Development will be fully occupied.

77 The impact of the Proposed Development on pedestrian amenity, fear and intimidation and severance, public transport (buses) delay and pedestrian and cyclist fear and intimidation is considered to result in Negligible (Not Significant) effects.

78 The Proposed Development will enhance the pedestrian environment, through the open space and pathways, therefore improving accessibility. This will result in Minor Beneficial (Not Significant) effect on pedestrian delay.

79 The introduction of a new signalised junction between Ladbroke Grove, Canal Way and Kensal Road as part of the Proposed Development will result in a Minor Adverse (Not Significant) effect on driver delay. However, the junction will improve safety for pedestrians, cyclists and car drivers, therefore resulting in a Minor Beneficial (Not Significant) effect. The increase in London Underground trips as a result of additional residents and site users travelling to the site will result in a Minor Adverse (Not Significant) effect on public transport (London Underground) delay.

80 The Proposed Development will result in increased cyclist trips to and from the site, therefore resulting in a Minor Adverse (Not Significant) effect on cyclist amenity and delay.

Likely Significant Effects

81 Table 2 summarises the significant socio-economic effects as a result of the Proposed Development.

Table 2 Summary of the Significant Residual Traffic and Transport Effects

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Demolition and Construction		
Pedestrians and Cyclists	Severance (at Canal Way)	Moderate Adverse
	Fear and intimidation (at Canal Way)	Moderate Adverse

AIR QUALITY

82 The key considerations of the air quality assessment have been construction dust emissions, heavy duty construction traffic emissions, barge emissions, construction plant emissions, operational road traffic and car parking emissions, emissions from the proposed emergency generators, effects on introduced receptors from rail, road and generator emissions, and whether the Proposed Development is 'air quality neutral' and 'air quality positive' in line with the London Plan requirements.

Demolition and Construction

83 Although the demolition and construction works of the Proposed Development will lead to an increased number of heavy-duty vehicles on surrounding roads, the use of barges to transport materials and waste, and the use of on-site construction plant, the emissions from these will not have a significant effect on air quality (for both nitrogen dioxide and dust particles) at nearby sensitive receptors such as residential dwellings and houseboats on the canal. Whilst the demolition and construction works would give rise to a risk of dust impacts without mitigation, mitigation measures will be put in place to ensure that there are no significant effects. Measures to mitigate dust emissions will be written into a Dust Management Plan (likely as part of the Construction Environmental Management Plan) and will include measures such as the use of water to dampen dust.

84 When the Proposed Development is partly built out and partly under construction, emissions associated with the operational traffic and car parking have been assessed on existing residential dwellings, but they are not considered to be significant. New residents introduced to the site were also assessed, with Not Significant effects concluded.

85 As such, the assessment has identified the Proposed Development will not cause significant air quality impacts during the demolition and construction works.

Completed Development

86 Road traffic, car park and emergency generator emissions (namely dust particles (known as particulate matter) and nitrogen dioxide) associated with the operational Proposed Development were assessed as having a Not Significant effect at all receptors.

87 Residents of the Proposed Development have been assessed as experiencing Not Significant effects as a result of the emissions from road traffic, car park, emergency generator and railway emissions (from the adjacent railway line to the south of the site).

88 The Proposed Development will be better than 'Air Quality Neutral' in terms of the operational building emissions. However, when taking into account trips generated by the Sainsbury's store, the Proposed Development does not meet the Air Quality Neutral criteria. When excluding the trips generated by Sainsbury's, the Proposed Development is better than Air Quality Neutral. The need to mitigate or off-set the additional trips over the required amount to meet 'Air Quality Neutral' will be subject to future discussions between the Applicant and the Royal Borough of Kensington and Chelsea.

89 The design of the Proposed Development includes measures (such as the implementation of a delivery and servicing management plan and electric parking provision) to maximise benefits to local air quality and reduce exposure in line with the 'Air Quality Positive' approach.

Likely Significant Effects

90 No likely significant effects on air quality receptors have been identified as a result of the demolition and construction works or operation of the Proposed Development.

NOISE AND VIBRATION

91 The assessment undertaken has focused on the potential noise and vibration effects during the demolition and construction works (including construction and traffic). Once complete and operational, the assessment considered noise effects associated with operational road traffic, equipment associated with building services, and amplified music/ entertainment noise.

Demolition and Construction

92 There will be opportunities during the construction works to reduce the noise impacts experienced at the nearby sensitive receptors. A range of best practice measures shall be adopted to reduce noise and vibration levels, these measures include but are not limited to: locating construction plant away from noise sensitive areas, erection of site hoarding, and monitoring noise and vibration levels. Mitigation measures will be secured through the Construction Environmental Management Plan.

93 With the implementation of mitigation, temporary adverse noise effects (Moderate Adverse) will however still occur at the introduced residential receptors within Phase 1 of the Proposed Development, during construction works of Phase 2, which are considered to be **Significant**. However, it should be noted that this represents a worst-case scenario whereby numerous activities are operating concurrently, which would not be likely to occur in practice. Construction noise levels reaching this level

are only likely to occur for a relatively short duration (i.e. a few weeks), when activities take place closest to the site boundary.

94 Additionally, the existing Sainsbury's Store could potentially experience **Significant** vibration effects (Moderate Adverse) as a result of vibratory compacting during the road surfacing works during Phase 1. However, this this would not be expected to last for more than a few days. The remaining receptors would experience Not Significant effects.

95 Whilst an increase in road traffic is expected as a result of construction traffic, the increased traffic would result in a small change in noise levels on the surrounding road network. The effects of construction traffic noise on all sensitive receptors would be Negligible and therefore Not Significant.

Completed Development

96 The changes in road traffic as a result of the complete and operational Proposed Development will not result in significant noise effects. The noise from fixed plant associated with the building services of the Proposed Development, as well as any noise from amplified music/ entertainment from the Proposed Development, will also not result in any significant effects.

Likely Significant Effects

97 Table 3 summarises the significant noise and vibration effects of the Proposed Development.

Table 3 Summary of the Significant Residual Noise and Vibration Effects

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Demolition and Construction		
Introduced Residential Receptors (Phase 1 of the Proposed Development)	Noise from construction works during the daytime during the construction of the Proposed Development.	Moderate Adverse
Existing Sainsbury's Store	Vibration from construction works during the daytime during the construction of the Proposed Development.	Moderate Adverse

DAYLIGHT, SUNLIGHT, OVERSHADOWING AND SOLAR GLARE

98 The daylight, sunlight, overshadowing and solar glare assessment considers existing residential properties, areas of amenity spaces that are close to the site and road and railway viewpoints within proximity to the site. The assessment of daylight and sunlight considers the effect of the Proposed Development on the existing levels of daylight and sunlight received by nearby existing residential properties. The assessment of overshadowing determines the potential for the Proposed Development to cast a shadow on nearby areas of amenity spaces near the site. As the materiality of the Proposed Development is not known at this stage, professional judgement has been used for the solar glare assessment to determine whether significant effects are likely to occur.

Demolition and Construction

99 During the demolition and construction of the Proposed Development, the effects in respect of daylight, sunlight and overshadowing 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 demolition and construction works until completion.

100 The effects associated with the demolition and construction will steadily increase as the Proposed Development is constructed. It is therefore considered that the completed Proposed Development

represents the worst-case assessment in terms of likely daylight, sunlight, overshadowing and solar glare effects. Therefore, the assessments have focused on the completed Proposed Development.

101 During the construction of the Proposed Development, a number of tall, temporary structures are likely to be present on-site. It is considered unlikely that these would result in additional noticeable effects.

102 There are residential properties located within the Boathouse Centre, which are to be relocated into the Proposed Development. There may be temporary changes in daylight and sunlight to the properties within the Boathouse Centre; however, any alterations would be short-term and temporary and therefore have not been assessed further in the Environmental Statement.

Completed Development

103 Daylight is the general amount of light (direct and indirect) which enters a room during the daytime. To identify potential effects to the relevant properties listed above, a total of 156 rooms and 393 windows were assessed for availability of daylight at four properties (Kensal House Block 1, Kensal House Block 2, Kensal House Nursery and Water Tower). Kensal House Block 2 would experience a Minor to Moderate Adverse effect as a result of a reduction in daylight provision to the property, which is considered to be **Significant**. The greatest reduction can be seen at windows situated beneath balconies, and the kitchens and living rooms which experience a reduction are served by a second window which will remain well daylit. No reductions beyond the recommended criteria will occur, and very good levels of daylight distribution across the property will be achieved. The effects on all other properties were considered to be Not Significant.

104 Sunlight is the direct light from the sun which can be seen/ which enters a room. In the UK, this is only experienced from rooms which have windows facing within 90 degrees of due south (due to the sun's location in the sky). To identify potential effects to surrounding sensitive receptors, 131 windows of four properties were assessed. The Proposed Development would result in negligible alterations to the majority of the residential receptors, with the exception of Kensal House Block 2, which will experience rooms with Moderate or Major Adverse reductions in sunlight. However, owing to the limited number of rooms in the property which do meet the recommended criteria, and the living rooms which are adversely affected having a main window which retain sunlight levels predominantly above the criteria, the effect to the property is considered to be Minor Adverse and Not Significant.

105 A total of ten moored houseboats along the Grand Union Canal were also considered in terms of daylight and sunlight. The southern elevations of the houseboats would experience a reduction in daylight; however, the northern elevations would remain completely unobstructed and retain high levels of daylight. This would result in Minor to Moderate Adverse effects, which is considered to be **Significant**. The southern elevations of seven of the houseboats would experience reductions to sunlight alterations in the winter period. However, the annual levels of sunlight would remain high, as only isolated areas in five out of the ten boats would see slightly lower levels of sunlight. Overall, this would result in a Moderate to Major Adverse effect, which is considered to be **Significant**.

106 Analysis of the shadow from the Proposed Development on nearby amenity areas was undertaken in order to demonstrate the extent and times that the shadow from the Proposed Development would fall upon the amenity/ open spaces surrounding the site on the 21st March (Equinox). Of the six amenity areas assessed, all would experience Negligible effects, which are considered Not Significant.

107 Effects from solar glare[8] have also been assessed on surrounding sensitive road and rail viewpoints. At this stage, the detailed design of the Proposed Development is not known and so only a qualitative assessment has been completed. This determined a potential effect ranging from Negligible to Major Adverse (**Significant**); however, given the residential nature of the Proposed Development and the

[8] *The reflection of sunlight from a glazed façade or area of metal cladding.*

design details likely to comprise of brickwork, punched windows and solid balconies, significant effects are considered to be unlikely.

Likely Significant Effects

108 Given the above, Table 4 summarises the significant daylight, sunlight, overshadowing and solar glare effects of the Proposed Development once it is completed and operational.

Table 4 Summary of the Significant Residual Daylight, Sunlight and Overshadowing Effects

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Completed Development		
Kensal House Block 2	Reduction in daylight provision.	Minor to Moderate Adverse
Houseboats	Reduction in daylight provision.	Minor to Moderate Adverse
	Reduction in sunlight provision.	Moderate to Major Adverse
Road and Rail Viewpoints	Solar glare.	(Negligible to) Major Adverse

WIND MICROCLIMATE

109 Undesirable wind speeds may result in effects to pedestrian comfort and safety at ground and upper levels. Therefore, a wind microclimate assessment has been undertaken to determine whether any undesirable wind conditions would be created on-site and in the surrounding area, as a result of the Proposed Development. To predict the local wind environment, wind tunnel testing[9] has been undertaken.

110 The assessment considered areas of the Proposed Development at ground level (such as building entrances and thoroughfares) and at podium level. Additionally, areas surrounding the Proposed Development at nearby off-site locations (such as throughfares) have been assessed.

111 The assessment also considered the potential for strong winds to impact upon the safety of cyclists and pedestrians.

Demolition and Construction

112 As the nature of the site changes with the construction of the Proposed Development, on-site wind conditions would gradually adjust from those of the existing site to those of the Proposed Development, as described in the following 'Completed Development' section.

113 There would be no significant effects at any on-site or off-site locations during the demolition and construction of the Proposed Development. Wind conditions would be expected to be suitable for a construction site and intended off-site uses. Nevertheless, mitigation associated with each phase of construction will be implemented prior to occupation/ use.

[9] *Wind tunnel testing is one of the most well-established and robust means of assessing local wind microclimate. A 3D model of the Proposed Development and surrounding area is put into a wind tunnel to simulate wind conditions in and around the site, which are then measured and compared against criteria for wind conditions that should be reached for certain activities, e.g., walking, sitting, building entrances.*

Completed Development

114 The wind tunnel testing of the completed Proposed Development highlighted that, in the presence of the proposed landscaping scheme as well as the design mitigation measures, as shown in Figure 10, the majority of the locations tested would result in a comfortable wind environment, suitable for their uses, with the exception of the following locations:

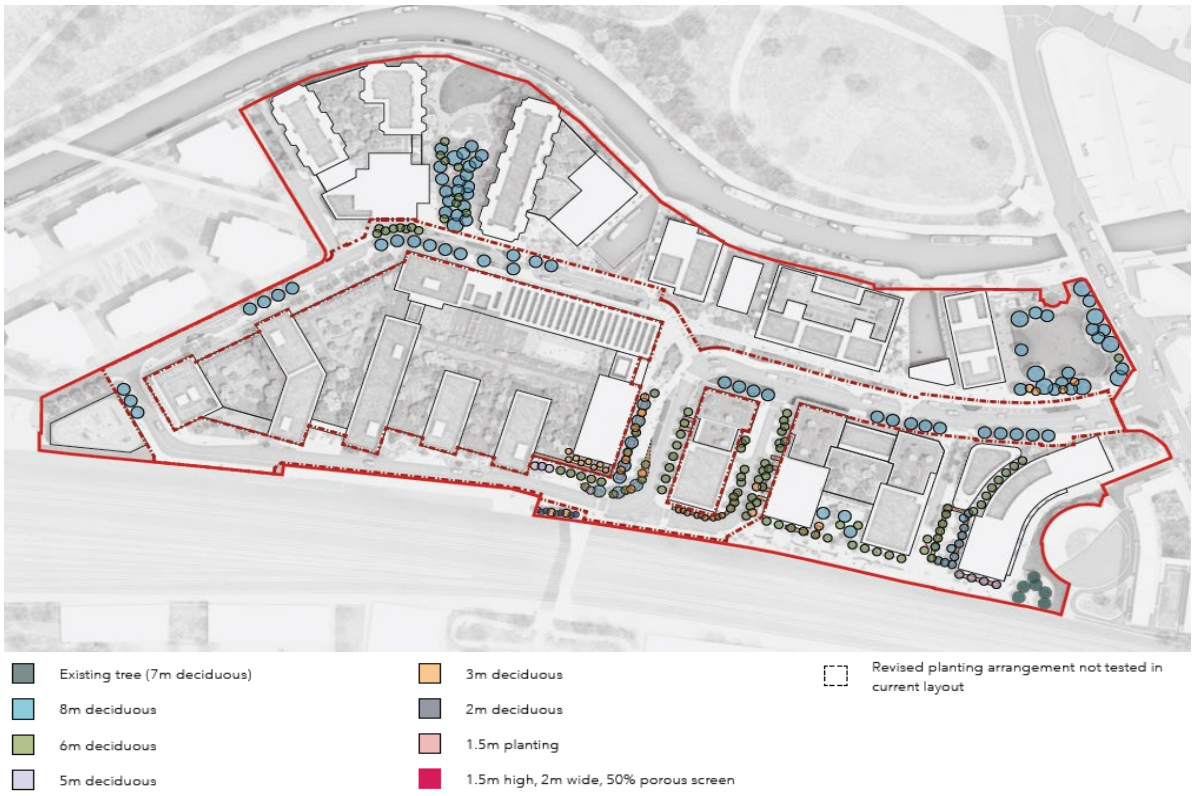
- The Detailed Element:
  - Thoroughfare to the east of Plot 2, which would be one category windier than suitable, resulting in a Minor Adverse effect, which is considered to be **Significant**;
  - Two bus stops, located to the north and east of Plot 2, which would be one category windier than suitable, resulting in a Minor Adverse effect, which is considered to be **Significant**;
- The Outline Element:
  - Thoroughfare between Plots 1.1 and 1.2, which would be one category windier than suitable, resulting in a Minor Adverse effect, which is considered to be **Significant**. Strong winds would also pose a safety concern for pedestrians at this location, resulting in a **Significant** effect;
  - Entrances, if they were to be located at the assessed locations along the façade of buildings, where wind conditions are one category windier than suitable, resulting in Minor Adverse effects, which are considered to be **Significant**;
  - Seating locations within the Plot 2 podium amenity space would be category windier than suitable, resulting in a Minor Adverse effect, which is considered to be **Significant**. Strong winds would also pose a safety concern for pedestrians at two locations on the podium, resulting in **Significant** effects.

115 The wind microclimate assessment also considered an 'interim scenario', whereby Phase 1 of the Proposed Development is complete and operational, with the implementation of landscaping and wind mitigation measures, and Phase 2 is under construction. The majority of locations tested would result in comfortable wind conditions, with the exception of the following locations:

- Bus stops located to the north of Plots 1 and 2, which would be one category windier than suitable, resulting in a Minor Adverse effect, which is considered to be **Significant**; and
- Carriageway located to the west of Plot 2 would experience strong winds, which would pose a risk to pedestrians, resulting in a **Significant** effect;
- Seating locations within the Plot 2 podium amenity space would be category windier than suitable, resulting in a Minor Adverse effect, which is considered to be **Significant**. Strong winds would also pose a safety concern for pedestrians at three locations on the podium, resulting in **Significant** effects.

116 However, further mitigation will be implemented at the detailed design stage of the Outline Element and tested through further wind tunnel testing. Further consideration will be given to the locations of the entrances to the Outline Element and wind conditions at the entrances will be assessed during the detailed design stage. Consideration will also be given when developing the final landscaping strategy for the podium space and the effectiveness will be assessed during the detailed design stage, as the locations of the amenity spaces are subject to change.

Figure 10 Wind Mitigation Measures



Likely Significant Effects

117 Table 5 summarises the significant wind microclimate effects of the Proposed Development.

Table 5 Summary of Significant Residual Wind Microclimate Effects

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Completed Development – Detailed Element		
Thoroughfares (measurement location 263 between Plot 1 and Plot 2)	Wind conditions uncomfortable for intended use as thoroughfares within the Detailed Element.	Minor Adverse
Bus Stops (measurement location 65, north of Plot 2, and location 301, between Plot 1 and 2)	Wind conditions uncomfortable for intended use as bus stops within the Outline Element.	Minor Adverse
Completed Development – Outline Element		
Entrances (if entrances are located along building façade at measurement locations 25, 57, 120, 125, 126, 136, 201, 207, 209, 213, 215, 216, 217, 228, 241, 242, 243, 249 and 251)	Wind conditions uncomfortable for intended use as entrances within the Outline Element.	Minor Adverse
Podium Amenity Space (measurement locations 306, 307, 312, 313, 317, 318, 320, 321 and 324 located on Plot 2 podium)	Wind conditions uncomfortable at the podium of Plot 2 of the Outline Element for intended use as amenity space.	Minor Adverse
Thoroughfares (measurement location 157 between Plot 1.1 and Plot 1.2)	Wind conditions uncomfortable for intended use as a thoroughfare.	Minor Adverse
Thoroughfares (measurement locations 157, 307 and 312)	Occurrence of strong winds on thoroughfares and podium space in the Outline Element.	Significant
Completed Development – Phase 1 Only		
Bus Stops (measurement locations 65 and 150)	Wind conditions uncomfortable for intended use at bus stops within the Detailed Element.	Minor Adverse
Carriageway (measurement location 3 to the west of Plot 2)	Occurrence of strong winds on thoroughfares in the Detailed Element	Significant

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Thoroughfares (measurement locations 307, 312 and 333)	Occurrence of strong winds on thoroughfares and podium space in the Outline Element	Significant

GROUND CONDITIONS AND CONTAMINATION

118 The ground conditions and contamination assessment has considered historic and current land uses of the site with regard to the underlying soils, hydrology and hydrogeology; the potential contamination of surface water, groundwater and soil from demolition and construction activities; and the potential for demolition and construction workers and future site users (residents, visitors and workers) to come into contact with contamination.

119 Historic potentially contaminative land uses on-site include infrastructure associated with the former gasworks within the east of the site, railway infrastructure and a basin of the Grand Union Canal which has since been infilled. Current uses on-site which are potentially contaminative include the petrol and fuel stations, vehicle cleaning services and electrical features such as substations.

120 Mitigation measures secured via a Construction Environmental Management Plan will be implemented and generic safe working practices adhered to. Further site investigation is proposed prior to the commencement of works, once the site is cleared. Remediation and mitigation of any contamination encountered during future ground investigations would be completed in line with a Remediation Strategy to mitigate the risk to human health and controlled water receptors. This is to be secured through a planning condition and reported to the Royal Borough of Kensington and Chelsea for approval. If unexpected gross contamination is encountered during excavation and/ or earthworks, expert advice will be sought, and the contamination managed in accordance with the agreed Remediation Strategy and verified in a verification report.

121 There is also the potential for unexploded ordnance on-site, and therefore an Unexploded Ordnance Risk Management Plan will be undertaken prior to any excavation works, which will recommend appropriate mitigation measures.

Demolition and Construction

122 With mitigation measures in place, potential effects in relation to the following would be Negligible and therefore Not Significant:

- Potential for surface water, groundwater and soil contamination from demolition and construction activities;
- Potential for landfill/ ground gas generation and exposure of chemical vapours and nuisance odours;
- Potential for workers and adjacent site users to be exposed to unexploded ordnance;
- Potential for demolition and construction work to come into direct contact with contamination;
- Potential for adjacent site users inhaling, ingesting or coming into direct contact with windblown contaminated dust.

123 Following the implementation of remediation measures, the effect of the demolition and construction works on the remobilisation of any existing contamination (on-site and off-site) on soils, hydrology (the Grand Union Canal) and hydrogeology (groundwater) has the potential to result in Negligible to Moderate Beneficial effects, which are considered to be **Significant**.

Completed Development

124 With the implementation of mitigation measures, potential effects as a result of the complete and operational Proposed Development will result in Negligible effects to soils, hydrogeology (groundwater), infrastructure and building materials, human health and proposed planting as a result of contamination that may exist on site. These effects would be considered Not Significant.

125 The Proposed Development will incorporate a range of Sustainable Drainage Systems, for example rain gardens, rain harvesting, green/ brown and blue roofs, to aid in the control of surface water drainage from the site. By providing this water quality treatment, the Proposed Development will result in a Minor to Moderate Beneficial effect on hydrology (the Grand Union Canal), when compared to the existing surface water treatment on-site. This effect is considered **Significant**.

Likely Significant Effects

126 Table 6 summarises the significant built heritage effects of the Proposed Development.

Table 6 Summary of Significant Residual Ground Conditions and Contamination Effects

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Demolition and Construction		
Soils	Remobilisation and creation of contaminant pathways to controlled waters.	(Negligible to) Minor Beneficial
Hydrology		(Negligible to) Moderate Beneficial
Hydrogeology		(Negligible to) Moderate Beneficial
Completed Development		
Hydrology	Contamination from routine site operation and/ or accidental releases on soils and Made Ground, hydrology and hydrogeology.	Minor to Moderate Beneficial

BIODIVERSITY

127 The biodiversity assessment has considered the effects of the Proposed Development on statutory ecologically designated conservation areas near the site, Sites of Importance for Nature Conservation, Site of Local Importance for Nature Conservation, ancient woodland, and protected species.

Demolition and Construction

128 Given the distance of the Proposed Development from the statutory designated sites considered (Richmond Park Special Area for Conservation, Wimbledon Common Special Area for Conservation and Lee Valley Special Protection Area and Ramsar site), no effects associated with the demolition and construction of the Proposed Development are anticipated, resulting in Negligible (Not Significant) effects.

129 The site encompasses the Kensal Gas Works Site of Local Importance for Nature Conservation. However, the condition of this ecological area has deteriorated due to the use of the site as a Crossrail Compound and Eurostorage facilities, and therefore the demolition and construction of the Proposed Development is anticipated to result in Negligible effects, which are considered to be Not Significant.

130 Demolition and construction effects were also considered on the London's Canals Site of Metropolitan Importance for Nature Conservation, Kensal Green Cemetery Site of Metropolitan Importance for

Nature Conservation and British Rail Western Region Land Site of Borough Importance for Nature Conservation; nearby habitats; and for protected species including bats, reptiles, birds and hedgehog.

131 Effects considered on these receptors include pollution from surface water runoff, spills or dust; increased lighting; overshadowing of habitat; and vegetation clearance. However, with the implementation of suitable mitigation secured through a Construction Environmental Management Plan, Negligible (Not Significant) effects were determined to each receptor.

132 This is with exception to the London's Canals Site of Metropolitan Importance for Nature Conservation and the Kensal Green Cemetery Site of Metropolitan Importance for Nature Conservation, which are likely to experience a Minor Adverse (Not Significant) effect due to overshadowing during the demolition and construction works.

Completed Development

133 Given the distance of the Proposed Development from the statutory designated sites considered (Richmond Park Special Area for Conservation, Wimbledon Common Special Area for Conservation and Lee Valley Special Protection Area and Ramsar site), no effects associated with the operation of the Proposed Development are anticipated, resulting in Negligible (Not Significant) effects.

134 Increased footfall arising from the introduced residents of the Proposed Development present a potential impact on the Wormwood Scrubs Local Nature Reserve. However, with the implementation of mitigation, such as financial contributions to the Royal Borough of Kensington and Chelsea for the upkeep of the Local Nature Reserve, the effect of the operational Proposed Development is considered to be Negligible (Not Significant).

135 The Proposed Development will introduce a range of landscaping on-site, including green roofs, in addition to wildflower grasslands and open mosaic habitat similar to that which would have been present on-site prior to it being cleared by Crossrail. This will provide important habitat for birds, bats and invertebrate species. Other habitat proposed includes scrub land, woodland, reedbeds, raingardens and flower planting, which would provide suitable compensatory habitat for the loss of the Site of Importance for Local Nature Conservation on-site, in addition to providing suitable habitat for other species. This will result in beneficial (but Not Significant) effects for habitat creation, and in particular habitat creation for bird species. All other effects to protected species and to the Kensal Gas Works Site of Local Importance for Nature Conservation itself, are considered to be Negligible (Not Significant).

136 The Proposed Development will also result in overshadowing on the London's Canals Site of Metropolitan Importance for Nature Conservation, Kensal Green Cemetery Site of Metropolitan Importance for Nature Conservation and the British Rail Western Region Land Site of Borough Importance for Nature Conservation, however, with the introduction of new planting and habitats on-site as part of the Proposed Development a Negligible (Not Significant) effect has been concluded. Mitigation measures would also be discussed and agreed with the Royal Borough of Kensington and Chelsea, which could also involve payments for up-keep of surrounding habitats.

137 Potential impacts from lighting on surrounding sites and on bats will be mitigated through the production of a lighting scheme and with the provision of bat boxes and tree planting. The complete and operational Proposed Development will therefore result in Negligible (Not Significant) effects on bats.

138 A Landscape Ecological Management Plan will be produced, to allow for the ecological betterment outlined above.

Likely Significant Effects

139 No likely significant effects on biodiversity receptors have been identified as a result of the Proposed Development.

BUILT HERITAGE

140 There are a number of designated and non-designated heritage assets[10] in close proximity to the site. The built heritage assessment identifies which built heritage assets would be affected by the Proposed Development due to sharing a historic, functional or visual relationship with the site and as a result, the following heritage assets have been assessed due to the potential for likely significant effects:

- Kensal Green Cemetery Conservation Area;
- Kensal House Day Nursery (Grade II* listed building);
- Kensal House, Ladbroke Grove (Grade II* listed building);
- Dissenters' Chapel (Grade II* listed building);
- Entrance Gateway Opposite Wellington Road (Grade II* listed building);
- The Anglican Chapel (Grade I listed building);
- Kensal Green (All Souls) Cemetery (Grade I Registered Park and Garden); and
- Canalside House (undesignated heritage asset).

Demolition and Construction

141 In terms of built heritage, construction activities have the potential to affect surrounding built heritage receptors.

142 The built heritage assets listed above will experience either additional noise, dust and visual disturbances during demolition and construction activities, or a combination of the three, which result in Slight Adverse effects (Not Significant). In all cases, disturbances will be temporary and will not fundamentally alter the settings or importance of the assets, with the greater impacts experienced when the Proposed Development is complete and operational.

143 The Proposed Development includes the demolition of the existing Canalside House (a non-designated heritage asset). The demolition of this building is considered to result in a Moderate Adverse (**Significant**) effect. Given the full demolition of this building, the effects will be permanent in nature.

Completed Development

144 In terms of Built Heritage, the completed development will lead to changes in the setting, through the introduction of a new built form of a different scale, height and density. This is considered to result in Moderate Adverse (**Significant**) effects to all of the heritage assets listed above, aside from Kensal Green (All Souls) Cemetery which will experience a Large Adverse (**Significant**) effect.

145 However, it is one of the objectives of the Proposed Development to provide a financial contribution to identified and clearly defined project initiatives that would improve or otherwise help to secure the long term conservation of Kensal Green Cemetery and its historic buildings, structures and landscape. This financial contribution could help support the cemetery in restoring some existing heritage assets and, as such, would create enhancements or positive impacts on these assets and also the cemetery more widely (including relevant Conservation Areas and Registered Park and Garden). The details of the financial contributions have not yet been determined; however, they are likely to have a (non-quantifiable) beneficial effect on the Kensal Green Cemetery.

[10] *A 'heritage asset' is a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including locally listed buildings).*

Likely Significant Effects

146 Table 7 summarises the significant built heritage effects of the Proposed Development.

Table 7 Summary of Significant Residual Built Heritage Effects

Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Demolition and Construction		
Canalside House	Demolition of undesignated heritage asset.	Moderate Adverse
Completed Development		
Kensal Green Cemetery Conservation Area	Views of upper storeys of the tall residential elements; increased height and density of built form within immediate surroundings.	Moderate Adverse
Kensal House Day Nursery Grade II* Listed Building	Views of upper storeys of the tall residential elements; increased height and density of built form within immediate surroundings.	Moderate Adverse
Kensal House, Ladbroke Grove Grade II* Listed Building	Views of upper storeys of the tall residential elements; increased height and density of built form within immediate surroundings.	Moderate Adverse
Dissenters' Chapel Grade II* Listed Building	Views of upper storeys of the tall residential elements; increased height and density of built form within immediate surroundings.	Moderate Adverse
Entrance Gateway Opposite Wellington Road Grade II* Listed Building	Views of upper storeys of the tall residential elements; increased height and density of built form within surroundings with impact on landmark status.	Moderate Adverse
The Anglican Chapel Grade I Listed Building	Views of upper storeys of the tall residential elements; increased height and density of built form within immediate surroundings.	Moderate Adverse
Kensal Green (All Souls) Cemetery Grade I Registered Park and Garden	Views of upper storeys of the tall residential elements.	Large Adverse

ARCHAEOLOGY

147 The archaeological assessment has considered the effects on potential buried archaeological assets, including remains related to the industrial heritage of the site, medieval remains, post-medieval and other modern remains and hitherto unknown remains. A desk-based study of available existing data sources has been undertaken to understand the potential for archaeological remains.

Demolition and Construction

148 Impacts on any archaeological remains, if present, would occur during the demolition and construction phase where ground disturbance takes place. They are limited to the area of the physical impact and are considered to be permanent.

149 The majority of identified known heritage assets within the site relate to previous buildings which have subsequently been removed, relating to the former gasworks and associated structures and infrastructure. The construction works would see an increased risk of direct effects upon any heritage assets within the site due to the need to construct new foundations, basements and services (which include the requirement for piling). Ground works required for the construction works have the potential to remove and/ or cut into archaeological remains below the site. However, a detailed mitigation strategy will be agreed with the Greater London Archaeological Advisory Service and secured through a planning condition, which will include a Risk Assessment Model for piling, archaeological monitoring and a programme of public benefit. With these measures in place, the effects on all archaeological remains will be Negligible, and therefore Not Significant.

Completed Development

150 Any potential impacts and effects on buried heritage assets will occur as a result of ground disturbance during the demolition and construction works (see above). No impacts or effects will occur on buried heritage assets on completion of the Proposed Development since no further ground disturbance will occur.

Likely Significant Effects

151 No likely significant effects on archaeological receptors have been identified as a result of the Proposed Development.

CLIMATE CHANGE AND GREENHOUSE GASES

152 The consideration of climate change and greenhouse gas emissions within the Environmental Statement has focused on two distinct areas: the ability of the Proposed Development to be resilient and adapt to the future worst-case climate scenario (including the influence of the future climate on the technical assessments), and the impact of the Proposed Development on future climate change as a result of its associated greenhouse gas emissions.

Climate Change Resilience and Adaptation

153 A worst-case future climate scenario has been used as the basis for the consideration of the Proposed Development's resilience and adaptation to climate change. This climate scenario is based on scientific climate data for the United Kingdom produced by the Meteorological Office (Met Office). The future climate scenario used in this Environmental Statement assumes much warmer annual, summer and winter air temperatures, as well as much drier summers and wetter winters. In addition to this, extreme weather and climate induced events (e.g. flooding, power loss etc.) have been considered.

154 The Proposed Development has been designed to be resilient to future climate change and will be able to manage instances of overheating, power loss, flood risk, as well as having drought resilient landscaping. With the Proposed Development being designed in this manner, and in consideration of how future climate change would interact with the assessments included within this Environmental Statement, it has been concluded that none of the technical assessments would result in worse effects than those reported within their technical chapters (**Environmental Statement Volume 1, Chapters 6-15**).

Greenhouse Gas Emissions Assessment

155 The greenhouse gases assessment considered the contribution of the Proposed Development to climate change from emissions of greenhouse gases[11] (namely carbon), in comparison to budgets set at the national (UK) and local (Royal Borough of Kensington and Chelsea) level. The assessment also considered the resilience of the Proposed Development to the changing climate.

156 The demolition and construction work associated with the Proposed Development would result in greenhouse gas emissions from construction traffic, construction site activities and embedded greenhouse gas emissions; which are the emissions involved in creating the construction materials.

157 A number of mitigation measures will be committed to during the demolition and construction to reduce the amount of greenhouse gases as a result of the Proposed Development. Measures include the use of sustainable materials where possible, the implementation of Resource Management Plans to plan,

[11] *Greenhouse gases are gases in the atmosphere which have the potential to increase air temperatures.*

monitor and record waste generation, and the implementation of Construction Environmental Management Plan to minimise waste, energy and water usage. The project also aims to divert 95% of non-hazardous waste from landfill.

158 The assessment of greenhouse gases once the Proposed Development is complete and operational considers emissions from operational transport, energy consumption, water supply and repair and maintenance work. Measures to reduce and avoid greenhouse gas emissions include the provision of facilities to promote active travel (e.g. cycle storage), the implementation of a Travel Plan, the provision of electric charging points, as well as measures to reduce water and energy usage. Further mitigation measures will also be brought forward during the detailed design.

159 The assessment of greenhouse gases during the decommissioning of the Proposed Development has considered emissions from transport vehicles and machinery. The decommissioning stage has been assumed to take place 60 years from the completion of the Proposed Development; subsequently assumptions have been made regarding the future emissions associated with this stage due to uncertainties around future greenhouse gas emissions related to transportation and machinery.

160 The greenhouse gas assessment has identified that the Proposed Development will lead to greenhouse gas emissions, which are small in the context of local and regional emissions. The Proposed Development will be compliant with relevant policies relating to greenhouse gas emissions and has sought to reduce emissions from the outset. Therefore, the effect on greenhouse gases is Minor Adverse and Not Significant.

Likely Significant Effects

161 No likely significant effects on climate change and from greenhouse gas emissions have been identified as a result of the Proposed Development.

TOWNSCAPE AND VISUAL IMPACT

162 The assessment of townscape effects has considered how the Proposed Development will affect the character of the area surrounding the site. A total of nine '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 how the Proposed Development may affect the character, context and quality of the surrounding townscape (see Figure 11). In addition, the visual impact assessment has considered the impact of the Proposed Development on the makeup and character of views. A total of 55 views were identified to assess the impact of the demolition and construction, and completion and operation of the Proposed Development on local views (see Figure 12).

Demolition and Construction

163 Activities during construction of the Proposed Development, including transport of heavy machinery to and from the site, scaffolding and tower cranes, have the potential to result in townscape and visual effects. The erection of hoarding around the perimeter of the site would provide some screening of construction activities on site from street level.

Townscape

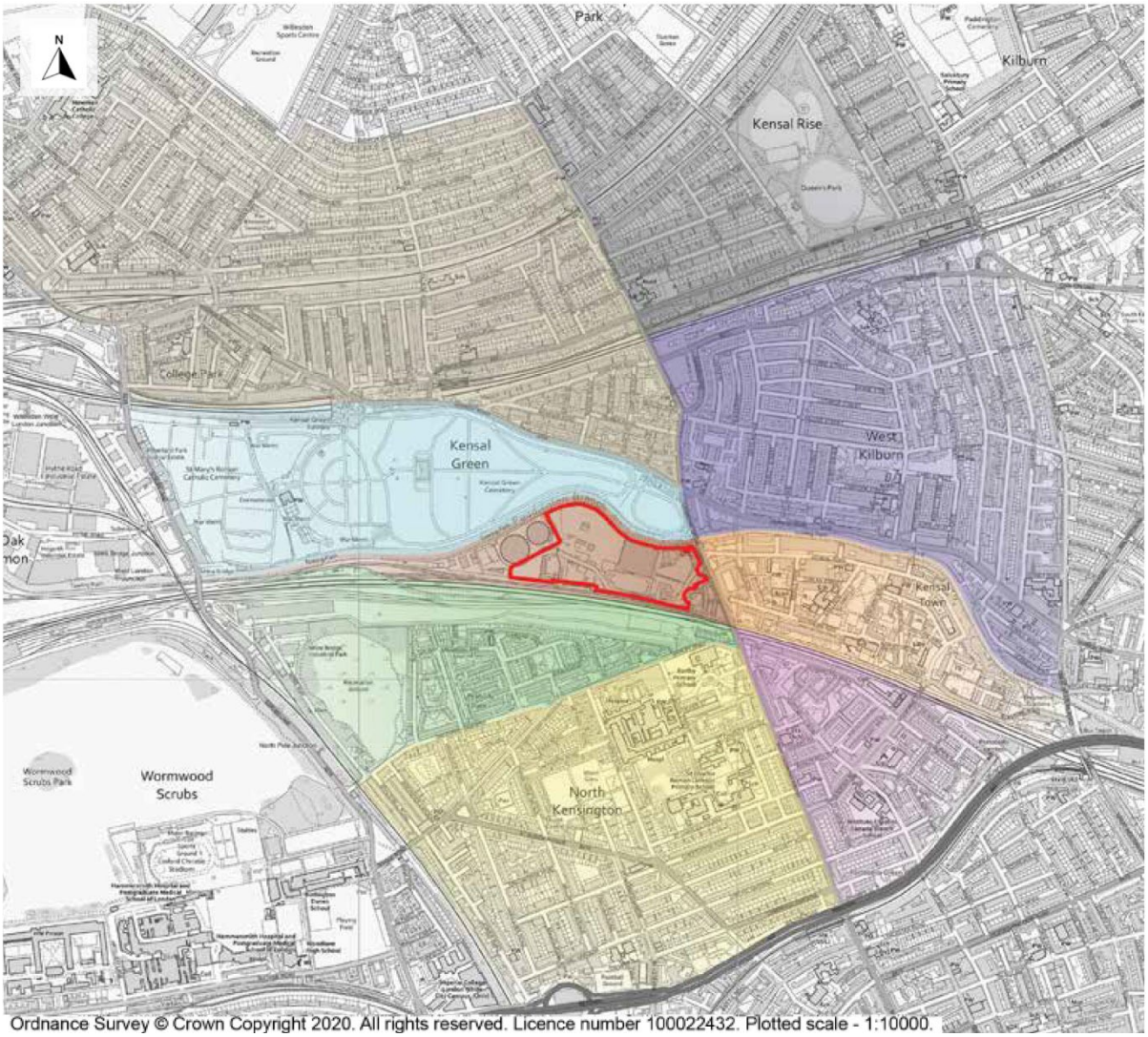
164 The demolition and construction works of the Proposed Development would result in the potential for temporary **Significant** effects to four townscape character areas (TCA): TCA A: The Site's Urban Block (Moderate Adverse), TCA B: East of Ladbroke Grove (Moderate Adverse), TCA C: Kensal Green

Cemetery/ St Mary's Cemetery (Moderate to Major Adverse) and TCA D: Dalgarno Neighbourhood (Moderate Adverse).

Visual Impact

165 The demolition and construction activities associated with the Proposed Development are anticipated to generate temporary **Significant** effects (ranging from Moderate Adverse to Major Adverse) to the following representative views assessed: Viewpoints 1, 2B, 3, 4, 8, 9, 10, 11, 13, 17, 18, 24A, 24B, 25A, 25B, 26, 27, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 51, 52 (refer to Figure 12).

Figure 11 Townscape Character Areas



Ordnance Survey © Crown Copyright 2020. All rights reserved. Licence number 100022432. Plotted scale - 1:10000.

Townscape Character Areas:

- TCA A: The Site's urban block
- TCA B: East of Ladbroke Grove
- TCA C: Kensal Green Cemetery / St. Mary's Cemetery
- TCA D: Dalgarno neighbourhood
- TCA E: North Kensington
- TCA F: Notting Hill
- TCA G: Kensal Town
- TCA H: Kensal Green and Kensal Rise
- TCA I: Queen's Park

Figure 12 Viewpoints

Completed Development

Townscape

166 The assessment of townscape identified two **Significant** beneficial effects (Moderate Beneficial) in relation to TCA A: The Site's Urban Block and TCA B: East of Ladbroke Grove, once the Proposed Development is complete and operational. The effects are considered to be beneficial as the Proposed Development would introduce high quality buildings and landscaped spaces which would have significant public realm and urban design benefits, therefore enhancing the townscape character areas.

167 The assessment also identified two **Significant** neutral effects in relation to TCA C: Kensal Green Cemetery/ St Marys Cemetery (Moderate to Major Neutral) and TCA D: Dalgarno Neighbourhood (Moderate Neutral). The effects are considered to be neutral as, although the Proposed Development represents a contrasting change in scale, a sense of separation is provided between the site and these character areas by trees and vegetation, as well as the railway lines for TCA D.

Visual Impact

168 Of the views assessed, **Significant** beneficial effects (ranging from Moderate to Moderate to Major Beneficial) were identified in relation to Viewpoints 1, 9, 13, 25A, 25B, 26, 27, 42, 43, 45, 46, and 47.

Significant neutral effects (ranging from Moderate to Moderate to Major Neutral) were identified in relation to Viewpoints 2B, 3, 4, 11, 18, 24A, 37, 38, 39, 40, 41, 48, 49 and 52. **Significant** adverse effects (ranging from Moderate to Major Adverse) were identified in relation to Viewpoints 8, 10, 17, 24B, 44 and 51. Refer to Figure 12 for the location of these viewpoints.

Likely Significant Effects

169 Table 8 summarises the significant townscape and visual effects of the Proposed Development.

Table 8 Summary of the Significant Residual Townscape and Visual Effects

Technical Topic	Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
Demolition and Construction			
Townscape	Townscape Character Areas	Alterations to the townscape setting of the following townscape character areas: • Townscape Character Area A (The Site's Urban Block); • Townscape Character Area B (East of Ladbroke Grove); and • Townscape Character Area D (Dalgarno Neighbourhood).	Moderate Adverse
		Alterations to the townscape setting of Townscape Character Area C (Kensal Green Cemetery/ St Mary's Cemetery).	Moderate and Major Adverse
Views	Key Visual Receptors	Alterations to Viewpoint 44: Kensal Green Cemetery – north west corner, path around Dissenter's section.	Major Adverse
		Alterations to the following representative views: • Viewpoint 8: Barlby Road towards Barlby Gardens • Viewpoint 37: Kensal Green Cemetery – Terrace Avenue, south of Anglican Chapel • Viewpoint 38: Kensal Green Cemetery – in front of Anglican Chapel • Viewpoint 42: Kensal Green Cemetery – central avenue junction of paths • Viewpoint 43: Kensal Green Cemetery – central avenue, further east • Viewpoint 45: Kensal Green Cemetery – central path towards Dissenters' Chapel • Viewpoint 46: Kensal Green Cemetery – north path around Dissenters' section • Viewpoint 47: Kensal Green Cemetery – north-east corner, path around Dissenters' section.	Moderate to Major Adverse
		Alterations to the following representative views: • Viewpoint 1: Ladbroke Grove / Canal Way Junction • Viewpoint 2B: Kensal House from Ladbroke Grove – Kensal House Buse Stop	Moderate Adverse

Technical Topic	Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
		• Viewpoint 3: Ladbroke Grove / Barlby Road Junction • Viewpoint 4: Exmoor Street / Hewer Street Junction • Viewpoint 9: St Marks Road / Barlby Road Junction • Viewpoint 10: Shrewsbury Street / Hilman Drive, south-west corner • Viewpoint 11: Barlby Road / Highlever Road junction • Viewpoint 13: Scrubs Lane Bridge • Viewpoint 17 Berens Road • Viewpoint 18: Kilburn Lane / Chamberlayne Road junction • Viewpoint 24A: Harrow Road, looking towards Kensal Green Cemetery Entrance Gateway • Viewpoint 24B: Harrow Road, in front of Kensal Green Cemetery Entrance Gateway • Viewpoint 25A: Ladbroke Grove, looking towards Canalside House • Viewpoint 25B: Ladbroke Grove Bridge Road • Viewpoint 26: Southern Canal Towpath, west of site • Viewpoint 27: Gran Union Canal • Viewpoint 39: Kensal Green Cemetery – central avenue • Viewpoint 40: Kensal Green Cemetery – central avenue east • Viewpoint 41: Kensal Green Cemetery – North Branch Avenue • Viewpoint 48: Kensal Green Cemetery – close to southern path • Viewpoint 49: St Marys Cemetery • Viewpoint 51: Kensal Green Cemetery – towards Anglican Chapel • Viewpoint 52: Kensal Green Cemetery – northern avenue, northern colonnade	
Completed Development			
Townscape	Townscape Character Areas	Alterations to the townscape setting of the following townscape character areas: • Townscape Character Area A (The Site's Urban Block) • Townscape Character Area B (East of Ladbroke Grove)	Moderate Beneficial

Technical Topic	Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
		Alterations to the townscape setting of Townscape Character Area C (Kensal Green Cemetery/ St Mary's Cemetery).	Moderate to Major Neutral
		Alterations to the townscape setting of Townscape Character Area D (Dalgarno Neighbourhood).	Moderate Neutral
Visual	Key Visual Receptors	Alterations to the following representative views: • Viewpoint 1: Ladbroke Grove / Canal Way Junction • Viewpoint 9: St Marks Road / Barlby Road Junction • Viewpoint 13: Scrubs Lane Bridge • Viewpoint 25A: Ladbroke Grove, looking towards Canalside House • Viewpoint 25B: Ladbroke Grove Road Bridge • Viewpoint 26: Southern Canal Towpath, west of site • Viewpoint 27: Grand Union Canal	Moderate Beneficial
		Alterations to the following representative views: • Viewpoint 2B: Kensal House from Ladbroke Grove – Kensal House Bus Stop • Viewpoint 3: Ladbroke Grove / Barlby Road Junction • Viewpoint 4: Exmoor Street / Hewer Street Junction • Viewpoint 11: Barlby Road / Highlever Road Junction • Viewpoint 18: Kilburn Lane / Chamberlayne Road Junction • Viewpoint 24A: Harrow Road, looking towards Kensal Green Cemetery Entrance Gateway • Viewpoint 37: Kensal Green Cemetery – Terrace Avenue, south of Anglican Chapel • Viewpoint 39: Kensal Green Cemetery – central avenue • Viewpoint 40: Kensal Green Cemetery – central avenue east • Viewpoint 41: Kensal Green Cemetery – North Branch Avenue • Viewpoint 48: Kensal Green Cemetery – close to southern path • Viewpoint 49: St Marys Cemetery • Viewpoint 52: Kensal Green Cemetery – northern avenue, northern colonnade	Moderate Neutral
		Alterations to Viewpoint 8: Barlby Road towards Barlby Gardens.	Moderate to Major Adverse

Technical Topic	Receptor	Description of Significant Effect	Scale and Nature of Residual Effect
		Alterations to the following representative views: • Viewpoint 10: Shrewsbury Street / Hilman Drive, south-west corner • Viewpoint 17 Berens Road • Viewpoint 24B: Harrow Road, in front of Kensal Green Cemetery Entrance Gateway • Viewpoint 51: Kensal Green Cemetery – towards Anglican Chapel	Moderate Adverse
		Alterations to the following representative views: • Viewpoint 38: Kensal Green Cemetery – in front of Anglican Chapel	Moderate to Major Neutral
		Alterations to the following representative views: • Kensal Green Cemetery – central avenue junction of paths • Viewpoint 43: Kensal Green Cemetery – central avenue, further east • Viewpoint 45: Kensal Green Cemetery – central path towards Dissenters' Chapel • Viewpoint 46: Kensal Green Cemetery – north path around Dissenters' section • Viewpoint 47: Kensal Green Cemetery – north-east corner, path around Dissenters' section	Moderate to Major Beneficial
		Alterations to Viewpoint 44: Kensal Green Cemetery – north west corner, path around Dissenter's section.	Major Adverse

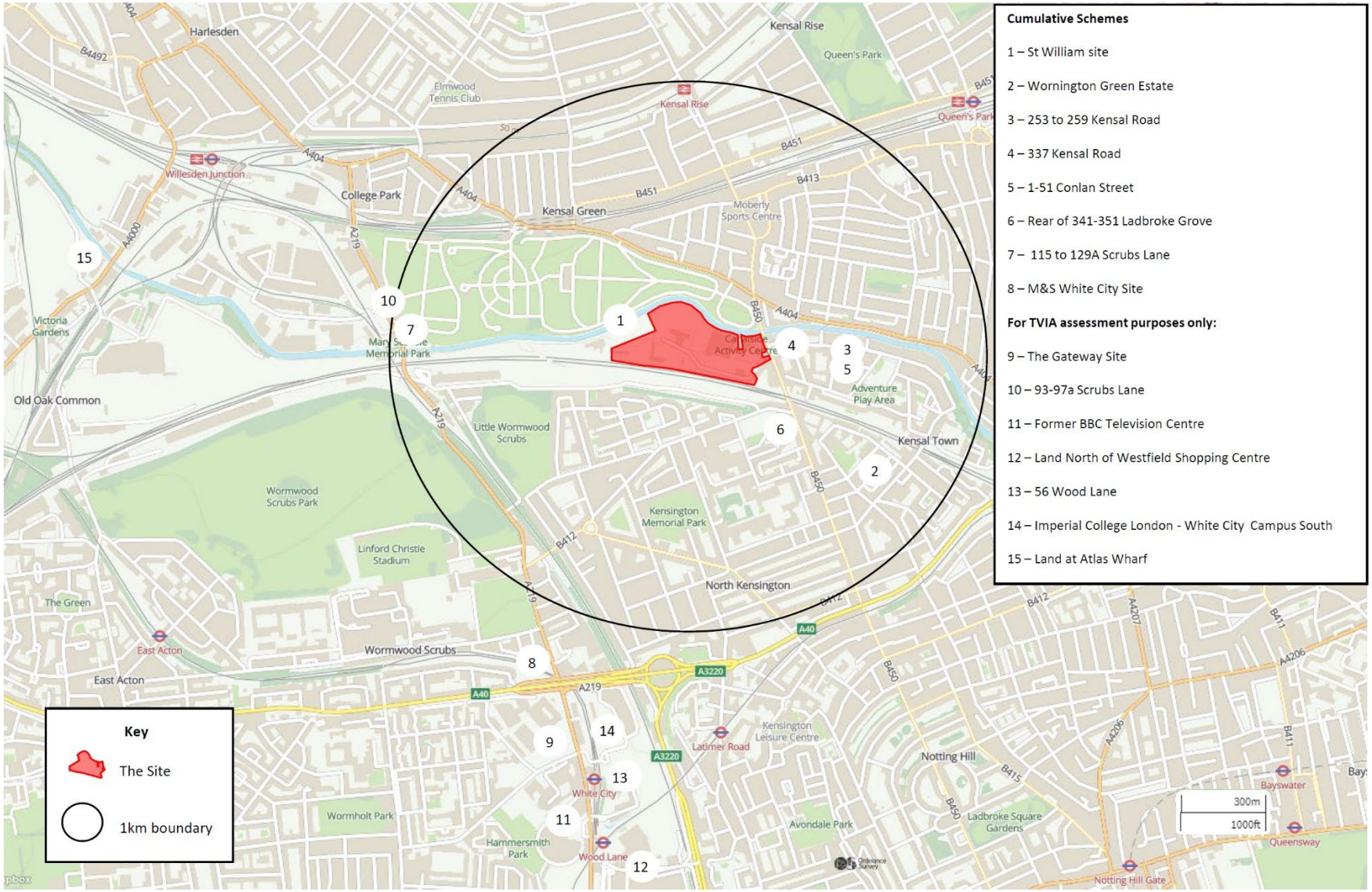
CUMULATIVE EFFECTS ASSESSMENT

170 A number of schemes (Figure 13) within the surrounding area have been considered in order to understand the impact of the Proposed Development in combination with these other schemes:

- (1) St William Development;
- (2) Wornington Green Estate;
- (3) 253 to 259 Kensal Road;
- (4) 337 Kensal Road and land adjacent to 338 Ladbroke Grove;
- (5) Buspace Studios at 1 – 51 Conlan Street;
- (6) Rear of 341-351 Ladbroke Grove,
- (7) 115 – 129A Scrubs Lane (North Kensington Gate) / Mitre Yard, 104-108 Scrubs Lane;
- (8) M&S White City;
- (9) The Gateway Site;
- (10) 93 to 97A Scrubs Lane;
- (11) Former BBC TV Centre;

- (12) Land North of Westfield Shopping Centre Ariel Way;
- (13) Centre House 56 Wood Lane; and
- (14) Imperial College London - White City Campus South – Masterplan
- (15) Land at Atlas Wharf, Atlas Road.

Figure 13 Cumulative Schemes



Likely Significant Cumulative Effects

Demolition and Construction

171 Additional or different likely significant effects as a result of the cumulative effects assessment have been identified for the below topics.

Noise and Vibration

- **Kensal House** – a **Significant Adverse** noise effect has been identified for Kensal House, due to increased road traffic noise along Canal Way as a result of the demolition and construction of the Phase 2 of the Proposed Development and operational Phase 1 of the Proposed Development and St William Development.

Completed Development

172 Additional or different likely significant effects as a result of the cumulative effects assessment have been identified for the below topics.

Socio-Economics

- **Play Space** – a **Significant Beneficial** socio-economic effect has been identified for play space provision as a result of the Proposed Development and cumulative schemes. Some of the cumulative schemes have capacity to contribute to play space provision in the local areas, for example the development at Wornington Green Estate is expected provide 1,880m^2 of community facilities and associated outdoor adventure play space.

Noise and Vibration

- **Existing Residential Receptors** – a **Significant Adverse** noise effect has been identified for existing residential receptors (including Kensal House, 322 to 328 Ladbroke Grove and Octavia House, Southern Row) due to increased road traffic noise along Canal Way and Ladbroke Grove as a result of complete and operation Proposed Development and St William Development.

Daylight, Sunlight, Overshadowing and Solar Glare

- **St William Development** – a **Significant Adverse** sunlight effect has been identified for the future St William Development in the future baseline, as a result of the Proposed Development. As the Proposed Development is located to the south-east of the St William Development, a small portion of the south-eastern façades of the St William Development will be affected, mostly in the winter period.

Townscape and Visual

- **Viewpoint 49: St Mary's Cemetery** – a **Significant Beneficial** effect has been identified in the cumulative scenario, as the Proposed Development will positively interact with the cumulative scheme to create a visually coherent group of buildings in the skyline. This is a change from a neutral effect within the main assessment;
- **Viewpoint 52: Kensal Green Cemetery – northern avenue** – a **Significant Beneficial** has been identified in the cumulative scenario, as the Proposed Development and the S William Development will create a visually coherent group of buildings in the skyline. This is a change from a neutral effect within the main assessment.

In-Combination Effects/ Effect Interactions

173 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).

174 The assessment identified the following:

- Potential for in-combination effects or effects interactions during the demolition and construction phase of the Proposed Development have been identified as:
  - Not Significant effect interaction on existing residential receptors (Kensal House, the Boathouse and the Water Tower) in relation to adverse demolition and construction dust, noise and vibration effects;
  - **Significant** effect interaction on introduced residential receptors (Phase 1 of the Proposed Development) in relation to adverse demolition and construction dust, noise and vibration effects;
  - **Significant** effect interaction on pedestrians and cyclists along Canal Way in relation to fear and intimidation, severance, and accidents and safety traffic and transport effects;
  - **Significant** effect interaction to public transport users (Bus) at probe locations 65 and 150 in relation to wind comfort levels and traffic and transport delay;
  - Not Significant effect interaction on introduced public amenity space (Ladbroke Grove Gardens – Plot 6) in relation to adverse demolition and construction dust and vibration effects.
- Potential for in-combination effects or effects interactions once the Proposed Development is completed and operational have been identified as:
  - Not Significant beneficial effect interaction to pedestrians as a result of combined delay and accidents and safety effects, which turns into a **Significant** beneficial effect interaction due to an additional visual impact effect when pedestrians are located at the site access junction on Ladbroke Grove/ Canal Way;
  - Not Significant effect interaction to car drivers as a result of adverse effects associated with driver delay and solar glare and beneficial effects associated with accidents and safety;
  - Not Significant effect interaction to cyclists in relation to adverse delay and amenity effects and beneficial accidents and safety effects;
  - **Significant** effect interaction to Kensal House Block 2 as a result of adverse daylight and sunlight effects; and
  - **Significant** effect interaction to the houseboats situated along the Grand Union Canal as a result of adverse effects associated with daylight and sunlight; and
  - Not Significant effect interaction to Kensal House Nursery in relation to adverse daylight effects and beneficial air quality effects.

175 The Health Impact Assessment draws conclusions from a number of topics in the Environmental Statement in respect of effects on health receptors. As the assessment of health effects has drawn from the topics in the Environmental Statement, a further assessment of effect interactions between health effects and the conclusions of the Environmental Statement is not required. Below is a summary of the health interactions:

- Housing design and affordability (Major Beneficial) – the Proposed Development will provide a large number of high quality homes, 20% of which would be affordable homes (by unit). By providing safe, healthy and well-built homes, individuals living in them would lead healthy lives. These new homes would also contribute to the Royal Borough of Kensington and Chelsea's housing targets;
- Access to open/ play space and nature (Moderate Beneficial) – the Proposed Development will provide several open and green spaces. This will allow individuals to be physically active, form connections in these areas and be amidst nature, all of which would positively impact their health and enrich their lives;

- Crime reduction and community safety (Moderate Beneficial) – the Proposed Development would ensure safety and security through its design. By creating a safe and secure environment, the Proposed Development would enable people to freely spend time on-site without worrying about their safety, benefitting their physical and mental wellbeing; and
- Social cohesion and inclusivity (Moderate Beneficial) – the Proposed Development would provide opportunities to enhance social cohesion through the open and green spaces in its design, as well as the local neighbourhood principle inherent in the design. The Proposed Development would also be built on inclusive design principles such as step free access and accessible car bays. Combined, these measures would enable people to be a part of social circles and interact freely, whilst enhancing inclusivity, all of which would in turn benefit their mental wellbeing and health.

SUMMARY AND CONCLUSION

176 The redevelopment of the site will provide a new Sainsbury's Supermarket, residential homes, commercial, community and leisure floorspace and improved public realm and open space within the Royal Borough of Kensington and Chelsea, which will make use of a currently underutilised brownfield site.

177 In summary, the Proposed Development is likely to result in the following significant environmental effects during the demolition and construction works:

- **Significant** adverse effects on existing businesses on-site, which will be displaced during demolition and construction;
- **Significant** adverse effects on pedestrians and cyclists along Canal Way in relation to severance and fear and intimidation;
- **Significant** adverse effects on introduced residential receptors within Phase 1 of the Proposed Development during the demolition and construction of Phase 2;
- **Significant** adverse effects on the existing Sainsbury's store from vibration during the construction works;
- **Significant** beneficial effects on soils, hydrology (Grand Union Canal) and hydrogeology (groundwater) after the implementation of remediation measures during the demolition and construction works;
- **Significant** adverse effects on Canalside House, due to its demolition during the demolition and construction works;
- **Significant** adverse effects on Townscape Character Areas A, B, C and D due to an alteration in their settings as a result of demolition and construction works; and
- **Significant** adverse effects on viewpoints surrounding the site, as a result of demolition and construction works.

178 In addition, the Proposed Development is likely to result in the following significant environmental effects once complete and operational:

- **Significant** beneficial effects on local jobs and skills as a result of the additional employment from the completed and operational Proposed Development;
- **Significant** beneficial effects through the provision of commercial floorspace;
- **Significant** beneficial effects on housing provision within the borough;
- **Significant** adverse effects on secondary education provision as a result of the introduced population;
- **Significant** adverse effects on primary healthcare provision as a result of the introduced population;

- **Significant** beneficial effects through the provision of open space;
- **Significant** adverse effects on the houseboats along Grand Union Canal in relation to daylight and sunlight;
- **Significant** adverse effects on the Kensal House Block 2 in relation to daylight;
- **Significant** adverse effects on car divers at various road viewpoints in relation to solar glare;
- **Significant** adverse effects in relation to wind microclimate, through the introduction of undesirable wind conditions at various thoroughfares, bus stops, entrances and podium amenity spaces within the Proposed Development;
- **Significant** beneficial effects on hydrology (Grand Union Canal) through the improvement of surface water runoff treatment;
- **Significant** adverse effects on built heritage assets near the site, including Kensal Green Cemetery Conservation Area and Registered Park and Garden, and associated listed buildings;
- **Significant** beneficial effects on Townscape Character Areas A and B, due to the enhancement of their settings as a result of the Proposed Development; and
- **Significant** neutral effects on Townscape Character Areas C and D;
- **Significant** beneficial effects on various viewpoints surrounding the site (Viewpoints 1, 9, 13, 25A, 25B, 26, 27, 42, 43, 45, 46 and 47);
- **Significant** neutral effects on various viewpoints surrounding the site (Viewpoints 2B, 3, 4, 11, 18, 24A, 37, 38, 39, 40, 41, 48, 49 and 52); and
- **Significant** adverse effects on various viewpoints surrounding the site (Viewpoints 8, 10, 17, 24B, 44 and 51).

179 The Health Impact Assessment has identified the following significant health effects, all of which occur once the Proposed Development is complete and operational:

- **Significant** beneficial effect from housing design and affordability;
- **Significant** beneficial effect from access to open/ play space and nature;
- **Significant** beneficial effect from crime reduction and community safety; and
- **Significant** beneficial effect from social cohesion and inclusivity.

180 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