EARLS COURT

Environmental Statement: Non-Technical Summary

Ramboll
EC.PA.12D
July 2024

The
Earls Court
Development
Company

EARLS COURT

We are creating a place the world will watch with wonder, on London's iconic site of human ingenuity.

Through our masterplan, we will reimagine the very fabric of living, working and urban wellbeing for London and future spaces.

Attracting the world's most inventive, imaginative and extraordinary minds.

That place is Earls Court.

Our four place pillars underpin our vision and set the ambitions for the place we want to create.

Discover Wonder

EARLS COURT

Foreword

After four years of deep consideration and collaboration with stakeholders and local people, The Earls Court Development Company (ECDC) is delighted to present the ambitious future plans for this iconic Site.

We formed in 2021 during the lockdown imposed by the first global pandemic in a century, an era which was both disruptive and formative, demanding that we reflect and reassess how we will be living in the future. There could be no more engaging mission for a team specifically assembled to design a place fit for the 22nd century.

As a team, ECDC shares a passion for transformational inner-city projects, and collectively have wide-ranging experiences from diverse international projects. Together, we are driven to fulfil the opportunities of this complex strategic site for London and rightfully put Earls Court as a place back on the global map.

Our intent from the very beginning, was to take a different approach to community involvement in shaping design. Setting up as a local business and being right next to Site everyday, working closely with both local authorities, the Mayor's office, local businesses and our neighbours has been fundamental in shaping our plans for the Site, which we believe are more relevant and exciting for it.

We have listened and taken huge inspiration from Earls Court's heritage, as a place that dared — to showcase, to entertain and celebrate the spectacular. A place that was so clearly cherished for being bold and brave, welcoming people from across the globe.

Our plans retain that innovative spirit that embraces future thinking — an approach we believe has become more important now than ever before. An approach that continues to drive us to create a global exemplar of sustainability.

We understand our responsibility to deliver much needed homes and employment opportunities for London. Critical to achieving these aims is creating a place with personality, a place that once again becomes a destination with a broad cultural appeal and is fully inclusive to all that come to experience it.

The masterplan has been created to prioritise urban wellbeing and includes a network of Exhibition Gardens that will be open and accessible for everyone to enjoy. We're creating a pedestrian-first environment alive with daytime and evening active uses. This generosity of open space is evident at key arrival points as well as the unique Table Park and Lillie Sidings.

Our commitment to create a better piece of city has been evidenced over the last three years as we have welcomed over 500,000 people back onto Site to enjoy a programme of events that nod to the past and point to the future of Earls Court.

ECDC began with a mantra 'to make haste slowly' and ensure we took the time to both listen and appreciate the world of Earls Court, which helped to establish the early vision to bring the wonder back to Earls Court.

Now, after over four years of consideration, we are proud to present our hybrid planning submission to the authorities for determination — a key milestone to enable the future of Earls Court as a place, once again, to discover wonder.

Rob Heasman
CEO
The Earls Court
Development Company

Contents

1.0 Introduction

1.1 This Non-Technical Summary ('NTS') of the Environmental Statement ('ES') has been prepared by Ramboll UK Limited ('Ramboll') and a team of technical specialists and is submitted as part of two Hybrid Planning Applications, one submitted to the London Borough of Hammersmith and Fulham ('LBHF') and one submitted to the Royal Borough of Kensington and Chelsea ('RBKC') in relation to the redevelopment of the land bounded by West Cromwell Road, Warwick Road, Philbeach Gardens, Eardley Crescent, Lillie Road, Old Brompton Road and the West London Railway Line ('WLL'); and 1 Cluny Mews in RBKC (the 'RBKC Site') and North End Road, Beaumont Avenue, West Cromwell Road, the WLL, land comprising the Empress State Building ('ESB'), Aisgill Avenue, the former Gibbs Green School properties fronting Gibbs Green Close, and properties fronting Dieppe Close (the 'LBHF Site') which straddle the boundary between the two boroughs (together forming the 'Site').

1.2 The redevelopment proposals would form the new Earls Court Development (the 'Proposed Development'). The Hybrid Planning Applications have been submitted on behalf of Earls Court Partnership Limited ('ECPL'), (the 'Applicant').

1.3 The RBKC Hybrid Planning Application is formed of detailed development proposals in respect of Development Plots EC05 and EC06 for which no matters are reserved (the 'RBKC Detailed Component'), and outline development proposals for the remainder of the RBKC Site, with all matters reserved (the 'RBKC Outline Component'). The RBKC Detailed Component and RBKC Outline Component together are referred to as the 'RBKC Proposed Development'.

1.4 The LBHF Hybrid Planning Application is formed of detailed development proposals in respect of Development Plots WB03, WB04 and WB05 for which no matters are reserved (the 'LBHF Detailed Component'), and outline development proposals for the remainder of the Site, with all matters reserved (the 'LBHF Outline Component'). LBHF Detailed Component and LBHF Outline Component together are referred to as the 'LBHF Proposed Development'.

1.5 Together the RBKC and LBHF Proposed Developments form the 'Proposed Development'. The Proposed Development would include residential dwellings, purpose-built student accommodation, assisted living, workspace, culture, community, retail and leisure facilities alongside high quality public realm and open spaces.

1.6 The purpose of the NTS is to provide a summary of the main findings of the Environmental Impact Assessment (EIA) that has been undertaken of the Proposed Development and that has been reported in the ES. The NTS provides:

- a description of the site and surrounding context;
- an outline of the reasonable development alternatives considered by the Applicant and an indication of the main reasons for their choice, taking into account the potential environmental impacts;
- a description of the Proposed Development; and
- a summary of the additional mitigation required and the likely significant residual environmental effects predicted.

1.7 The aim of the NTS is to summarise the main findings of the ES in a clear and concise manner to assist the public in understanding what the significant environmental effects of the Proposed Development are likely to be.

1.8 The NTS has been prepared in accordance with the statutory procedures set out in the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (hereafter referred to as the 'EIA Regulations')[1].

1 Secretary of State, 2017. The Town and Country Planning (Environmental Impact Assessment) Regulations 2017. London. HMSO.

Viewing of and Commenting on ES and Hybrid Planning Applications

1.9 The ES comprises the following documents:

- Volume 1: Main Environmental Statement Report;
- Volume 2: Built Heritage, Townscape and Visual Assessment ('BHTVA');
- Volume 3: Technical Appendices; and
- Non-Technical Summary (this document).

1.10 The ES, together with the Hybrid Planning Applications and other supporting documents are available for viewing on LBHF's and RBKC's websites:

- https://www.lbhf.gov.uk/planning/planning-applications/planning-applications-database-search; and
- https://www.rbkc.gov.uk/planning/searches/default.aspx.

1.11 Hard copies of the ES are available for purchase from Ramboll at:

240 Blackfriars Road
London, SE1 8NW
Tel: 020 7631 5291

1.12 Comments on the LBHF Hybrid Planning Application should be submitted to LBHF at:

London Borough of Hammersmith and Fulham
Planning Department
Town Hall, King Street
Hammersmith
London, W6 9JU

Email: PlanComments@lbhf.gov.uk

1.13 Comments on the RBKC Hybrid Planning Application should be submitted to RBKC at:

Royal Borough of Kensington and Chelsea
Planning Department
The Town Hall, Hornton Street
Kensington,
London, W8 7NX

Email: planning@rbkc.gov.uk

2.0 Environmental Impact Assessment

EIA Process and Methodology

2.1 EIA is a process that identifies the likely significant effects on the environment (both beneficial and adverse) of a proposed development and proposed mitigation to avoid, reduce or off-set any likely significant adverse environmental effects. It is an iterative process which proactively seeks to integrate mitigation within the development proposals so as to avoid significant effects from arising.

2.2 The EIA process adopted for the Proposed Development has followed best practice guidelines, as set out by the Institute of Environmental Management and Assessment ('IEMA') Quality Mark Scheme. The process involved the following key steps:

- Consultation with key stakeholders such as, but not limited to, LBHF, RBKC (and the local planning authorities' EIA advisors Waterman Consulting ('Waterman')), Transport for London (TfL), London Underground Limited ('LUL'), Historic England ('HE'), Environment Agency ('EA), Thames Water ('TW'), Network Rail ('NR') and National Air Traffic Services ('NATS') on the issues to be considered within the EIA;
- Collection, use and assessment of the most up-to-date information on the baseline conditions and likely evolution of that baseline without the Proposed Development or in the future;
- Interpretation of the Hybrid Planning Applications' planning documents, as well as the formulation of assumptions in the absence of information, as the basis for the individual technical assessments;
- Use of relevant guidance and good practice methods to predict the likely nature, scale and significance of any environmental change; and
- Reporting of the results of the EIA process in the ES in a transparent way, to provide the information required to inform the decision-making process.

EIA Scoping

2.3 An EIA Scoping Request Report ('EIA SRR') was submitted to LBHF and RBKC on 25 October 2023 in support of a request for a formal EIA Scoping Opinion pursuant to Regulation 15(1) of the EIA Regulations. The EIA SRR was informed by the informal EIA Scoping consultation process that the Applicant proactively initiated in February 2023. The informal EIA Scoping process focussed on consultations with LBHF, RBKC and Waterman.

2.4 The EIA SRR set out a description of the then emerging development proposals; the environmental topics where there was a potential for significant environmental effects and required consideration within the ES ('scoped in'); the environmental topics where significant effects was considered unlikely ('scoped out'), as well as the proposed approach to be adopted for the EIA including the proposed assessment methodologies.

2.5 RBKC adopted an EIA Scoping Opinion on 8 December 2023 and LBHF adopted an EA Scoping Opinion on 13 December 2023.

2.6 Subsequently the Applicant responded to the adopted Scoping Opinions to seek clarifications and directly engaged with individual technical counterparts at the respective local planning authorities ('LPAs') to refine technical aspects. Formal meetings were held with LBHF, RBKC and Waterman on 19 March 2024 and on 22 May 2024.

2.7 During these meetings a number of amendments to the EIA Scoping Opinions were agreed with all relevant parties.

2.8 The EIA of the Proposed Development has been undertaken in accordance with the EIA Scoping Opinions (as amended). The EIA Scoping Opinion (as amended) remains valid as the Proposed Development is materially consistent with the emerging development proposals scoped in October 2023.

Topics Included in ES

2.9 The following environmental topics were scoped into the ES, as confirmed during the EIA Scoping process, and their technical assessments are presented within discrete ES chapters:

- Archaeology;
- Socio-Economics;
- Human Health;
- Transport and Accessibility;
- Air Quality;
- Noise and Vibration;
- Ecology;
- Ground Conditions;
- Water Resources;
- Daylight, Sunlight, Overshadowing, Solar Glare and Light Spill;
- Wind;
- Climate Change;
- Built Heritage; and
- Townscape and Visual.

Topics Excluded from EIA

2.10 The following environmental topics were scoped out of the ES during the EIA Scoping process:

- Telecommunication Interference;
- Aviation;
- Major Accidents and Disasters; and
- Waste.

2.11 However, the topics have informed the design evolution process and have been accounted for in the scoped-in environmental topics where appropriate and relevant. Additionally, ES Volume 3 includes the following reports as ES technical appendices:

- Telecommunication Impact Assessment;
- Aviation Impact Assessment;
- Demolition and Construction Waste Management Plan; and
- Operational Waste Management Plan.

Assessment Approach

2.12 The EIA has had regard of the statutory Development Plan for LBHF and RBKC, including The London Plan, 2021. In addition, the emerging Royal Borough of Kensington and Chelsea New Local Plan Review (‘NLPR’) was considered given its advanced status.

2.13 The Detailed Component has been assessed in the EIA based on the following documents submitted for approval:

- Detailed planning drawings;
- Detailed area schedule; and
- Residential unit and tenure mix schedule.

2.14 The Outline Component has been assessed in the EIA based on the following Control Documents, which are submitted for approval:

- Parameter Plans;
- Development Specification; and
- Design Code.

2.15 The Control Documents define the quantum, scale and nature of the Outline Component and provide a controlling set of development principles within which reserved matters applications[2] ('RMA') would be brought forward.

2.16 The Development Specification defines and describes the principal components of the Outline Component, including but not limited to the area schedule (maximum); and the indicative residential unit and tenure mix schedule.

2.17 The Parameter Plans establish rules for the Outline Component, controlling the layout and scale of future development plots.

2.18 The Design Code presents a set of design principles and commitments that establish standards for:

- how buildings will form streets and give enclosure to public spaces (public realm typologies and urban design);
- indicative material palettes and design principles;
- public realm;
- biodiversity; and
- landscaping/planting requirements.

2.19 Due to the scale, nature and duration of the Proposed Development, some aspects of the Proposed Development (the Outline Component) are unknown and/or flexibility is required. Accordingly, the EIA adopts a reasonable 'worst-case' assessment approach for each technical assessment scoped within the EIA and ES. Each technical assessment chapter provides detail as to how the reasonable worst-case has been derived, drawing on professional experience of developments of a similar nature and scale.

2.20 An illustrative masterplan ('Illustrative Scheme') was developed during the consultation process. This Illustrative Scheme comprises the Detailed Component Plots and one version of how the Outline Component could be delivered. Assumptions have been drawn from the Illustrative Scheme in respect of landscaping to demonstrate that the Applicant's commitments in respect of landscaping and biodiversity net gain could be delivered. Furthermore, supplementary assessments of the Illustrative Scheme have been undertaken in the EIA in respect of wind, heritage, townscape and visual as agreed during the EIA Scoping process.

2.21 The majority of the Site benefits from two extant outline planning permissions (RBKC ref PP/11/01937 (as amended) and LBHF ref 2011/02001/OUT (as amended)) granted in November 2013 for a mixed-use masterplan development (hereafter referred to as the 'Consented Scheme'). These permissions have been implemented. The Consented Scheme has been taken into consideration within supplementary daylight, sunlight and overshadowing analysis.

2.22 The EIA has considered potential environmental impacts during the demolition and construction stage and during the completed development stage. Each technical assessment considers a range of effects including direct3, indirect4 (or secondary) and cumulative (intra- and inter-cumulative)[5] effects.

2.23 Assessments have been undertaken against the existing baseline (typically 2024) or a defined year in the future ('future baseline'). An alternative baseline and pre-existing baseline in relation to the Consented Scheme and

2 Reserved matters of the Outline Component where details are not currently provided are landscaping ,layout, scale, appearance and access that would therefore be subject of further detailed applications at a later date.
3 Direct effects are those which arise as a direct consequence of a project action, e.g. the loss of habitat or the run-off of surface water to a watercourse
4 Indirect effects include, for example, the decline in the abundance of a species as a result of the loss of habitat or the damage to aquatic vegetation as a result of water pollution. Other common examples include the effect on air quality and ambient noise as a result of increased traffic flows.
5 Intra-Project effects of different types of impacts from the Proposed Development that could interact to jointly affect a particular receptor at the Site or within the study area. Potential impact interactions could include for example, the combined effects of noise and dust during demolition and construction activities on a particular sensitive receptor; and
Inter-Project effects which are combined or additional effects generated from the Proposed Development together with other 'approved or existing projects' ('cumulative schemes') as defined by the EIA Regulations. These cumulative schemes may generate their own individually insignificant effects but when considered together could amount to a significant cumulative effect, for example, combined transport and accessibility impacts from two or more schemes. Additive effects were considered for transport, air quality, noise, built heritage, townscape and visual.

previous Earls Court Exhibition Centres, respectively, have also been taken into consideration within supplementary daylight, sunlight and overshadowing analysis.

2.24 Consideration has been given to the temporal and spatial nature of effects including permanent or temporary; reversible and irreversible; short- (up to 5 years), medium- (5 - 10 year) or long-term (more than 10 years); Site (i.e. within the Site boundary), local (i.e., Avonmore, Lillie, West Kensington, Abingdon, Earl's Court and Redcliffe wards), borough (the LBHF and the RBKC), regional (London), and national levels.

2.25 In respect of the temporal scope, the Proposed Development is currently anticipated to be delivered in nine phases and over an estimated programme of approximately 19 years (including an infrastructure works phase). The indicative development programme is based on the assumption that planning permission is secured in Q3 2025. Elements of the infrastructure works phase are expected to commence prior to Q3 2025. Where applicable, separate applications have already been submitted or may be submitted for these works as described in ES Volume 1, Chapter 5: Demolition and Construction Description. The impacts of these works have been considered as part of the EIA for completeness and robustness.

2.26 No significant delay is anticipated between the phases. However, realising vacant possession of the on-site Lillie Bridge Depot ('LBD') is complex and whilst an indicative programme has been agreed with LUL, it is subject to ongoing review, detailed preparation and design, and additional consents. It may change and could delay vacant possession beyond the timescales currently anticipated.

2.27 Due to the above, the EIA considers and assesses the following two development scenarios:

- 'Early Phases': Phases 0 - 4 with the LBD remaining operational and currently anticipated to be completed over 13 years by Q2 2037.
- 'All Phases': Phases 0 - 8 comprising the entirety of the Proposed Development and currently anticipated to be completed over 19 years by Q2 2043.

2.28 Each of the scoped-in environmental topics have been reported on in a separate technical assessment chapter within ES Volumes 1 and 2. Typically, in each chapter, a description of the assessment methodology is given together with existing site and study area conditions or predicted future conditions. This is followed by an assessment of the likely effects of the Proposed Development taking into account mitigation measures that are embedded in the Proposed Development; the consideration of additional mitigation or any enhancement measures; and a further assessment of the residual effects that would remain following the inclusion of additional mitigation measures, if relevant. Where scoped in, the chapter concludes with an assessment of the combined or additive effects of the Proposed Development together with/in addition to cumulative schemes that may be delivered concurrently. A summary of the assessment is then provided.

2.29 Mitigation is the term used to refer to the process of avoiding where possible and, if not, minimising, controlling and/or offsetting the potentially significant effects of a development. As part of the iterative process, mitigation measures have been integrated (embedded) into the design stage; the demolition and construction stage; and the completed development stage. The embedded mitigation measures are described in the following ES chapters:

- Chapter 3: Alternatives and Design Evolution;
- Chapter 4: Proposed Development Description; and
- Chapter 5: Demolition and Construction Description.

2.30 A total of 17 cumulative schemes were identified and agreed with LBHF and RBKC for assessment during the EIA Scoping process.

2.31 ES Volumes 1 and 2 report upon the scale (i.e. typically Negligible, Minor, Moderate or Major) and nature (Beneficial, Neutral and Adverse) of effects in order to determine what the likely significant effects of the Proposed Development would be. Significance has been determined based on published thresholds and/or the application of professional judgement and experience. The results of these assessments have been summarised in this document.

2.32 The EIA and the technical assessment chapters have considered the Proposed Development as a whole and the Site as a whole. However, as requested and agreed through the EIA Scoping process, where it is practicable and proportionate to do so, environmental effects have been summarised on a borough-by-borough basis and has been provided in a technical appendix within ES Volume 3.

3.0 Existing Site and Surrounding Context

Site Location

3.1 The Site is located in the Earls Court and West Kensington areas of West London, approximately 1.1 km south-west of Kensington and approximately 2.3 km east of Hammersmith (centred at National Grid Reference: TQ 25119 78205), as presented in Figure 3.1.

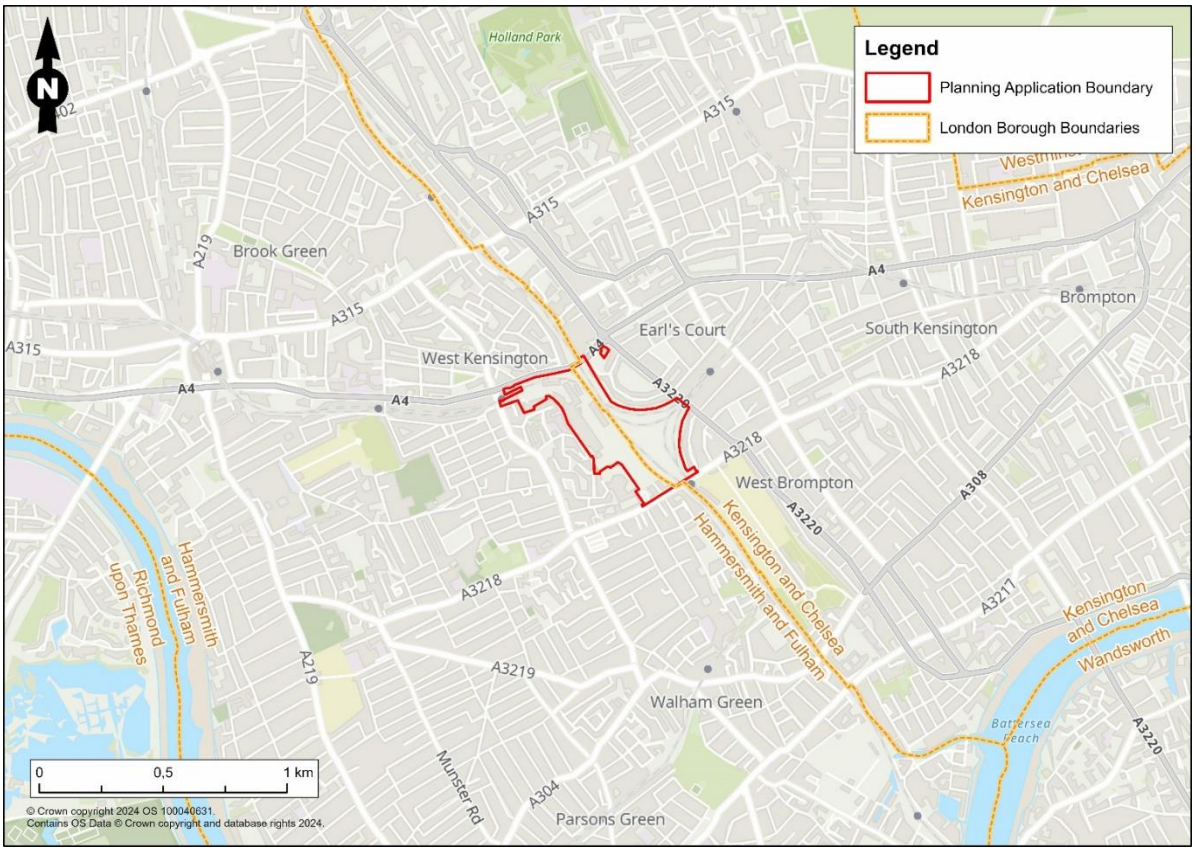


Figure 3.1: Site Location Plan

Site Description

3.2 The Site occupies an area of approximately 18 hectares ('ha'). The Site area associated with the RBKC Hybrid Planning Application is approximately 8 ha and the Site area associated with the LBHF Hybrid Planning Application is approximately 10 ha.

3.3 The Site is bisected north to south by the West London Line ('WLL') railway which also approximately demarcates the administrative boundary line in the north of the Site with LBHF west of the line and RBKC east of the line. The administrate boundary deviates from the WLL in the south of the Site and aligns to the west of the WLL.

3.4 The boundaries and immediate surroundings of the Site comprises the following:

- North: A4 (West Cromwell Road) and Kensington Tesco Superstore. Beyond these are residential properties to the north, north-east and north-west.
- North-east: A4 (West Cromwell Road), A3220 (Warwick Road), Cluny Mews Gardens, Earls Court Hotel, residential properties (including One Cluny Mews) and LEYF Earls Court Nursery and Pre-School.
- East: Primarily residential properties (Philbeach Gardens and Eardley Crescent), Church of St Cuthbert and St Matthias, and A3220 (Warwick Road) and the Earl's Court grade II listed underground station exit.
- South: A3218 (Lillie Road/ Old Brompton Road). Beyond these roads are a mix of hotels, shops, offices, residential properties, West Brompton underground station and Brompton Cemetery.
- West: The Metropolitan Police Empress State Building ('ESB') which is occupied by the Major's Office for Policing and Crime ('MOPAC') and associated car park, a network of residential properties along Aisgill Avenue and Mund Street within the West Kensington and Gibbs Green Estates, as well as the former Gibbs Green School and properties Fronting Dieppe Close.
- North-west: Beaumont Avenue, B137 (North End Road), West Kensington station and the Three Kings public house. Beyond Beaumont Avenue and North End Road are residential and commercial properties.

3.5 The Site is a large brownfield site with railway infrastructure and comprises the following:

- Cluny Mews: The far north-eastern part of the Site comprises an office building at approximately 4 storeys, an annex building which comprises 3 storeys of residential flats and associated paved roads with parking. This is currently activated as a temporary meanwhile use[6];
- Land formerly home to the Earls Court Exhibition Centres: The eastern and south-eastern parts of the Site (roughly triangular shaped and to the east of the WLL) and the south-western part of the Site (to the west of the WLL) comprise extensive areas of open hardstanding. These areas of hardstanding were previously occupied by the Earls Court Exhibition Centres which were demolished between 2015 and 2017. A raised concrete deck (the 'Table') spans the WLL between the hardstanding areas. Beneath is an extensive network of railway infrastructure including the District Line and Piccadilly Line. Areas of this part of the Site are currently activated with temporary meanwhile uses;
- Empress Place – The southern and south-western parts of the Site comprise 3-4 storey terrace buildings fronting Empress Place and Lillie Road. These are currently activated with temporary meanwhile uses;
- Bus Facility: To the west of Empress Place is a bus turning and waiting facility accessed from Lillie Road. This area comprises a bus layover area with capacity for up to four buses and a small standalone structure that includes welfare facilities for bus drivers;
- Lillie Bridge Depot ('LBD'): The western, northern and northwestern part of the Site comprise the LBD. The LBD is currently used as a maintenance facility by LUL and as a TfL training facility. The LBD uses and on-site structures comprise office buildings, rail tracks, road to rail vehicle ('RRV') delivery and access point, articulated lorry access and delivery area, carpenter/rail workshops, storage buildings, train stabling box, associated infrastructure and parking;
- 9 Beaumont Avenue: A 2 storey building located in the far northwestern part of the Site. This is currently activated as a temporary meanwhile use; and
- 175-177 North End Road - A 1 storey building in the far north-western part of the Site with one residential unit and four retail units.

3.6 Representative photographs of the Site are presented in Figure 3.2.

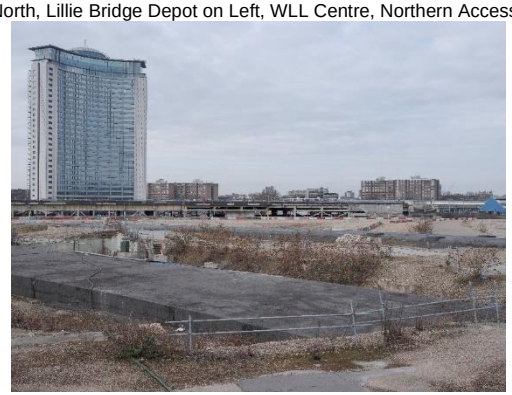
6Uses that occupy vacant or underutilised premises, sites or spaces on a temporary basis.

Aerial View to East with Table in Foreground

View to North, Lillie Bridge Depot on Left, WLL Centre, Northern Access on Right

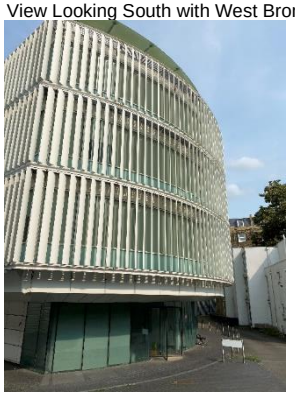
View to East, Earl's Court Station in Background, Underground Lines on Right

View Looking South with West Brompton Station Entrance in Middleground



View to West with Empress State Building on Left

View to North-West with Ashfield House on Right in Background



Cluny Mews

Lillie Bridge Depot

9 Beaumont Avenue

Figure 3.2: Representative Site Photographs

4.0 Alternatives and design evolution

4.1 The EIA Regulations require the ES to report on the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the Applicant, which are relevant to the Proposed Development and its specific characteristics, as well as an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

4.2 The ES considers the following alternatives:

- The 'Do Nothing Scenario';
- Alternative sites;
- Alternative land uses;
- Alternative height and massing layouts;
- Alternative land use distribution; and
- Alternative open space and landscaping.

'Do Nothing' Alternative

4.3 The 'Do-Nothing' scenario is a hypothetical alternative considered in EIA as the basis for comparing the development proposals under consideration.

4.4 In the 'Do-Nothing' alternative, the Proposed Development would not come forward and the Site would be left in its current state which would comprise the majority of the Site remaining vacant and LBD in the north of the Site remaining operational. This would result in the following:

- Failure to deliver the Earls Court Development in line with the Earl's Court and West Kensington Opportunity Area;
- No redevelopment of a key strategic site which is currently underutilised;
- No delivery of much needed housing, including affordable homes, helping to meet London's targets for housing delivery and in accordance with the Earl's Court and West Kensington Opportunity Area;
- No delivery of increased employment opportunities in accordance with planning policy objectives and lost opportunity to support local economies;
- No delivery of public realm and open space, no enhancements to biodiversity and no community benefits;
- No improvement to the place and neighbourhood which could be created by a high-quality development with active frontages at ground level;
- No improvement to the connectivity and permeability; and
- No flagship regeneration scheme which places environmental, social and economic considerations at the heart of the Proposed Development.

Alternative Sites

4.5 No alternative sites were considered by the Applicant. The Site forms part of the Earl's Court and West Kensington Opportunity Area and is allocated for development in both the RBKC and LBHF local plans for the provision of new homes and jobs. A large component of the Site is owned by the Applicant.

Alternative Land Uses

4.6 The type and quantum of land uses have been informed by the objectives of the Earl's Court and West Kensington Opportunity Area and Local Plan site specific designations / allocations. In addition, throughout the design process, extensive and wider ranging consultation has been undertaken with local residents, the GLA, LBHF, RBKC and other key stakeholders on the proposed land uses.

4.7 To ensure the sustainability of the Proposed Development across the 13- and 19-year development programme for the Early Phases and All Phases development scenarios respectively, the Applicant is seeking flexibility in respect of the Proposed Development uses, in particular within the Outline Component.

Alternative Designs and Design Evolution

4.8 The design evolution of the Proposed Development has been an iterative process over several years, beginning with early concept layouts in 2020 to the final strategic framework in 2024.

4.9 Since 2020, extensive consultation has been undertaken to inform the Proposed Development's design comprising community events, pre-application meetings with the GLA, LBHF and RBKC, and key stakeholder meetings.

4.10 The design evolution process has been iterative based upon stakeholder engagement, technical and environmental testing and consideration of key planning policies.

4.11 Technical and design advice was also sought from a wide range of specialist consultants throughout the design evolution process to embed sustainability and to deliver on the vision for the Site.

4.12 The vision for the Site was created through early engagement and understanding of what the Site and its history meant to people. Overwhelming feedback from engagement was that Earls Court had been a place of excitement, spontaneity and diversity. The word 'wonder' was frequently used, resulting in the vision - 'to bring the wonder back to Earls Court'.

4.13 At the same time, four priorities emerged through public and stakeholder consultation. These set out the ambition and helped shape the emerging masterplan approach:

- Open up the former Exhibition Centre site for the first time in 150 years - giving back to the local communities;
- Deliver a showground of world class ingenuity - celebrating its legacy and history;
- Create a better piece of city - a blueprint for future generations; and
- Address the climate emergency - an ambition to go beyond net zero.

4.14 During early engagement and consultation, the question 'why would you come here' was repeatedly asked. This led to the evolution of the following four place pillars which would create the identity for Earls Court and have shaped the emerging masterplan approach:

- Nature: A celebration of nature and its ability to connect and revive. The design seeks to create diverse and generous spaces to play, meet, relax and for sanctuary, whatever the season.
- Innovation: A showcase for climate and clean innovation and skills. A new destination offering the scale, location and connectivity to create a home for a green economy, accelerating opportunities in a smart campus environment that supports start-ups, scale ups and multi nationals to collaborate and tackle humanity's challenges.
- Culture: A cultural ecosystem for the future of talent. The spirit of delight and discovery is re-emerging as the Site once again is proudly stitched back into London's cultural map.
- Neighbourhood: An inspiring neighbourhood designed for all stages of life. Reflecting the brilliance of London, Earls Court would be inclusive and accessible, allowing families, communities, businesses and social connections to take root and thrive.

4.15 In addition to the four place pillars, the development proposals have incorporated the themes of the Earls Court Sustainability Charter which sets out the goals and objectives for three focus areas: Social Value, Economic Inclusion and Environmental Wellbeing as presented in Figure 4.1. The Sustainability Charter sets out goals that will adapt and develop over time to suit the changing needs of the communities and stakeholders, which underpin the vision for the Site.

Figure 4.1: Earls Court Sustainability Charter

4.16 A holistic approach to modelling and testing has been adopted throughout the design evolution process with a focus on the following drivers:

- Establishing a development quantum informed by the Earl's Court and West Kensington OA, and the Applicant's Brief;
- Maximising public open space and mixed-use opportunities for wider public benefit;
- Optimising residential density;
- Leveraging Earls Court's strategic location and connectivity;
- Realising height opportunities while maintaining coherence in townscape strategy; and
- Addressing local sensitivities and wider typology context.

4.17 The key stages of the Illustrative Masterplan's evolution are presented in Figure 4.2 and summary commentary is provided on the key changes in response to environmental modelling and assessment. The design changes have been categorised into the key design moves: Nature and Park; Movement and Hierarchy; Uses and Clusters; and Density and Townscape.

4.18 A number of plots include details submitted for approval. These Detailed Component Plots were also subject to extensive design evolution considering orientation, height and massing, materiality and façade detailing options. Detail on this is provided in the Detailed Component Design and Access Statement that accompanies the Hybrid Planning Applications.

Figure 4.2: Design Evolution

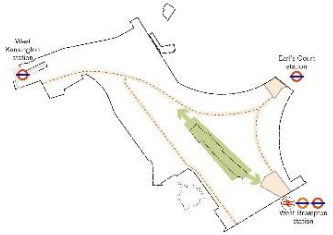
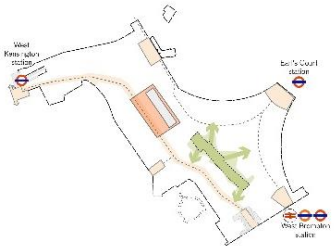
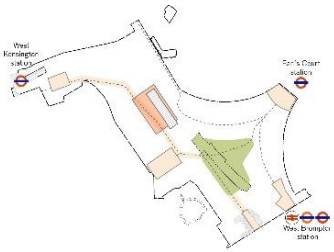
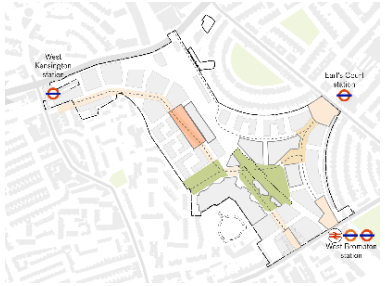
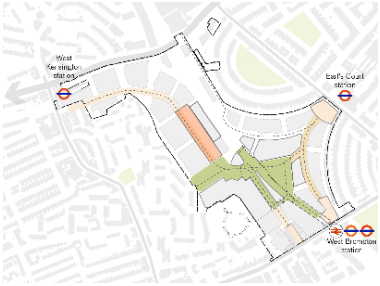
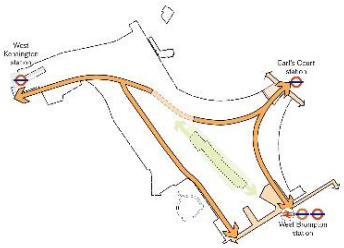
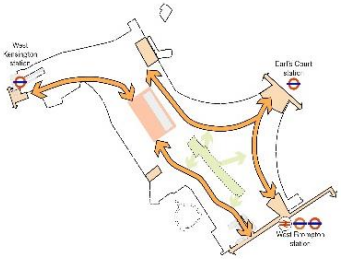
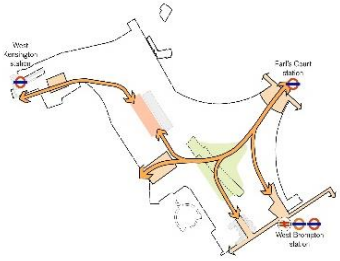
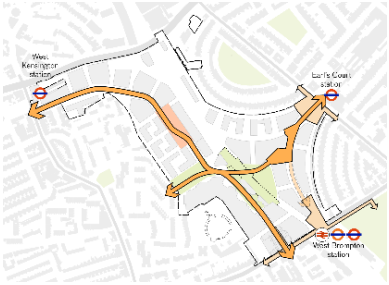
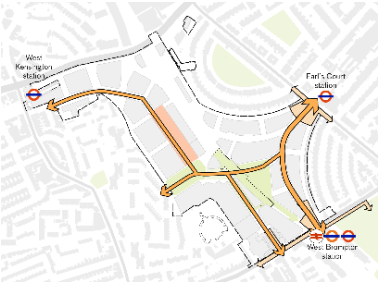
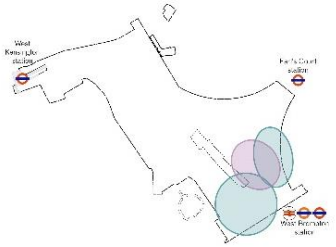
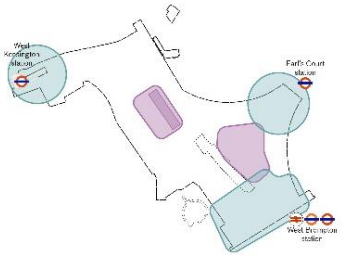
	Early Concept Studies	Options Testing	Initial Concept Layout	Design Development	Finalising Masterplan
Nature and Park					
	• Desire for a central open green space.	• Retention of Table unlocked approach to a central park ('Earls Table').	• Table Park introduced at centre of Site. • Aisgill Square introduced with a focus on community and playspace in east.	• Aisgill Square renamed 'Aisgill Gardens' and re-defined as a destination playspace.	• Open spaces increased by 20%. • Ecological green corridor links to off-site habitats established through 'Bioline'.
Movement and Hierarchy					
	• Movement strategy prioritised crescents and north-south route through Site.	• Clear street network around Earls Table strengthening north-south and east-west routes, with squares at entrances. • Creation of Lillie Sidings Square. • Potential retention of Empress Place buildings informed heritage and character.	• Distinctive east-west connection was established across Site.	• North-south and east-west routes emerged as primary connections across Site. • Routes designed to be pedestrian first with minimal vehicle movement by consolidating servicing, vehicle movements to edges and at under-croft spaces.	• Character areas were established defining identity and sense of place of each area, creating a recognisable hierarchy of street typologies.

Figure 4.2: Design Evolution

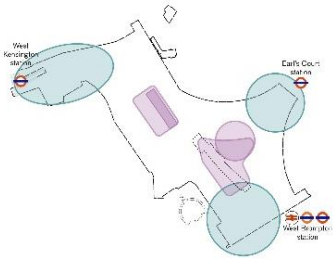
Uses and Clusters



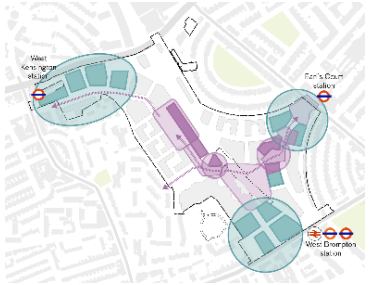
- Cultural uses located in south of Site.



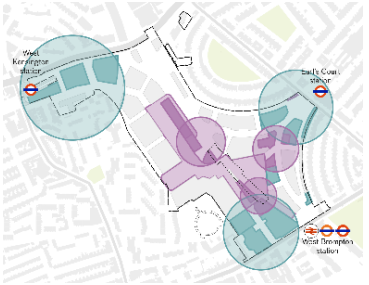
- Three workspace clusters established within eastern, southern and western Site edges, with optimum proximity to stations and to entrance squares.



- Introduction of a cultural venue below the Table, forming a destination at centre of Site.

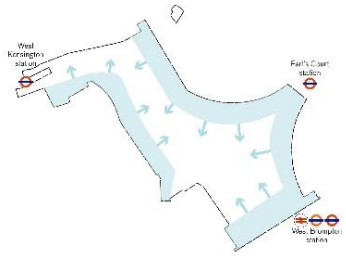


- Flexible cultural spaces distributed across Site, activating the east-west and north-south routes

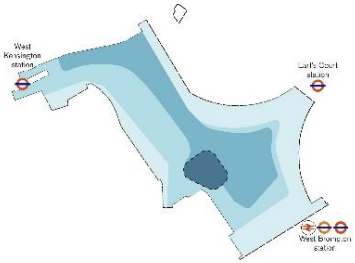


- Culture offer changed from an ecosystem of small venues to three clusters anchored by a larger venue, at edges of Table Park, in Empress Place and Lillie Sidings Shed.

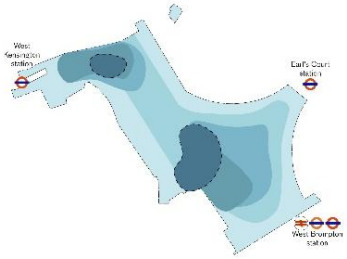
Density and Townscape



- Principle of stepping heights from Site edges towards centre formalised.



- Footprint of Table Park increased with distinct plot typologies and height clusters forming either side.



- Approach to heights refined forming two distinct height clusters (in the south-west and north of Site).

- Detailed plot architects appointed and brought more specificity to design of tallest buildings and ground floor uses along key public spaces and routes.

- 10% reduction in quantum of development, with substantial decreases in density.
- Tall buildings reduced from five to three.
- Heights strategy adjusted to a single landmark tower of high architectural design and quality.

5.0 Proposed Development

Proposed Development Description

5.1 The Applicant is submitting two Hybrid Planning Applications for the following:

LBHF: "*Hybrid Planning Application for part outline (all matters reserved) and part detailed (no matters reserved) planning permission for demolition and alteration of existing buildings and structures and phased redevelopment to include landscaping, car and cycle parking, means of pedestrian, cycle and vehicular access and routes and mixed use development comprising Residential (Class C3), Workspace (Class E), Student Accommodation (Sui Generis), Cultural Facilities (Class F1 / Sui Generis), Co-Living (Sui Generis), Older Persons Housing (Class C2), Health (Class C2 / E), Hotel (Class C1), Community Facilities (Class F2), Retail (Class E), Leisure (Class E / F2), Education (Class E / F1), Storage and Distribution (Class B8) and Sui Generis uses (to include Bus Parking Facility, Theatre, Car Showroom, Nightclub, Drinking Establishment (with or without expanded food provision), Hot Food Takeaway, Live Music Performance Venue, Cinema, Concert Hall, Bingo Hall and Dance Hall uses) above and below ground level and all associated ancillary works and structures including temporary development, highway and infrastructure works and structures*."

RBKC: "*Hybrid Planning Application for part outline (all matters reserved) and part detailed (no matters reserved) planning permission for demolition and alteration of existing buildings and structures and phased redevelopment to include landscaping, car and cycle parking, means of pedestrian, cycle and vehicular access and routes and mixed use development comprising Residential (Class C3), Workspace (Class E), Cultural Facilities (Class F1 / Sui Generis), Older Persons Housing (Class C2), Hotel (Class C1), Retail (Class E), Leisure (Class E / F2), Education (Class E / F1), Community Facilities (Class F2), Storage and Distribution (Class B8) and Sui Generis uses (to include Student Accommodation, Co-living, Theatre, Car Showroom, Nightclub, Drinking Establishment (with or without expanded food provision), Hot Food Takeaway, Live Music Performance Venue, Cinema, Concert Hall, Bingo Hall and Dance Hall uses) above and below ground level and all associated and ancillary works and structures including temporary development, highway and infrastructure works and structures*."

5.2 In summary the Proposed Development would comprise the following:

- Infrastructure works;
- Enabling works;
- Potential, partial or full demolition of existing on-site buildings;
- Excavation, piling and substructure works;
- Construction of buildings within two Detailed Component Development Zones (H and L), consisting of Development Plots EC05, EC06, WB03, WB04 and WB05 (Figure 5.1 and 5.2):
- Construction of buildings within 26 Outline Component Development Zones (A, B1, B2, C, D, E, F, G, I, J, K, M, N, O, P, Q, R, S, T, U, V1, V2, W, X, Y and Z). Where a Development Zone straddles the boundary between LBHF and RBKC, the Zone is denoted by a number e.g. B1 and B2 (Figure 5,1 and 5.2).
- Vehicular, pedestrian and cycle access and infrastructure; and
- Drainage infrastructure, lighting, landscaping and associated development.

5.3 In respect of the Detailed Component, no matters are reserved. Development Zones H and L would comprise the following:

- predominant uses:
  - EC05: Residential (Class C3);
  - EC06: Residential (Class C3);
  - WB03: Purpose Built Student Accommodation ('PBSA') (*Sui Generis*);
  - WB04: Residential (Class C3);

  - WB05: Residential (Class C3);
- other uses:
  - EC05: Retail, Food and Beverage, Flexible Commercial and/or Culture (Use Classes E(a)/(b)/(c), F and/or *Sui Generis*), Office and Research and Development (Use Class E(g)(i)) and Community, Social Infrastructure (Use Class F/E(g));
  - EC06: Retail, Food and Beverage, Flexible Commercial and/or Culture (Use Classes E(a)/(b)/(c), F and/or *Sui Generis*), Office and Research and Development (Use Class E(g)(i)) and Community, Social Infrastructure (Use Class F/E(g));
  - WB03: Retail, Food and Beverage, Flexible Commercial and/or Culture (Use Classes E(a)/(b)/(c), F and/or *Sui Generis*), Leisure (Use Class E(d));
  - WB04: Retail, Food and Beverage, Flexible Commercial and/or Culture (Use Classes E(a)/(b)/(c), F and/or *Sui Generis*), Leisure (Use Class E(d)); and
  - WB05: Retail, Food and Beverage, Flexible Commercial and/or Culture (Use Classes E(a)/(b)/(c), F and/or *Sui Generis*), Leisure (Use Class E(d)).

5.4 In respect of the Outline Component, all matters are reserved. The 26 Development Zones could comprise the following range of uses:

- Residential (Class C3);
- Residential Institutions - Later Living (Class C2);
- Residential Institutions - Hospital (Class C2);
- Co-living (*Sui Generis*);
- Workspace (Class E);
- Research and Development (Class E);
- Hotel (Class C1);
- Purpose Built Student Accommodation (*Sui Generis*);
- Cultural Facilities (Class F1/*Sui Generis*);
- Retail (Class E);
- Leisure (Class E/F2);
- Education (Class F1);
- Community/Social Infrastructure (Class F/E);
- Storage and Distribution (Class B8); and/or
- Specific *Sui Generis* uses.

Area Schedule

5.5 The total floorspace of the Detailed Component would be 133,519 m^2 (gross external area ('GEA')). The total floorspace of the Outline Component would not exceed 577,000 m^2 (GEA).

5.6 Up to 3,900 residential homes could be delivered within a range of unit types and tenures. A total of 35 % affordable housing would be delivered by habitable room.

5.7 It is noted that the EIA has assessed minimums where appropriate, to represent a reasonable worst-case assessment, but the Applicant is not seeking planning permission for the minimums.

Site Arrangement

5.8 The composite perceived[7] ground floor site arrangement for the Early Phases and All Phases are presented in Figure 5.1 and Figure 5.2 respectively. As can be seen, the Detailed Component (coloured blocks) form part of both the Early Phases and the All Phases development scenarios.

5.9 Development Zones would line the edges of the Site, with set-backs provided on road frontages at Warwick Road, Old Brompton Road and Aisgill Avenue to create the three main entrance squares: Warwick Square in the west, Brompton Square in south and Aisgill Gardens in the east, respectively. These main entrances would be supplemented in the All Phases by three further access points at the Northern Access Road (north), Empress Place (south-west) and Beaumont Avenue (north-west).

7 Ground level would be different across the Site as a whole and this plan represents the combined ground floor plan for different parts of the Site.

Figure 5.1: Proposed Early Phases Development Scenario Site Arrangement

Figure 5.2: Proposed All Phases Development Scenario Site Arrangement

5.10 From these access points, two main access routes would run north to south (to connect West Kensington Station and Beaumont Avenue in the north with Lillie Road in the south) under the All Phases and east to west (to connect Warwick Road and Earl's Court Station in the east with Aisgill Avenue in the west) under both the Early and All Phases.

5.11 The Proposed Development would embrace the Site's challenging level changes by lifting the levels in the RBKC side to meet the existing Table across the WLL. Site levels would gradually rise towards the Table, where the main public open space, the Table Park, would be located and be fronted by the Detailed Component plots and Outline Component Development Zones.

5.12 The Cascades, a terraced water feature, would step down north-west from the Table Park to link to two further open spaces, namely Aisgill Gardens and Lillie Square (part of the All Phases).

5.13 To the east of Table Park, crescents (Warwick Crescent and West Brompton Crescent) and lanes would respond to the sensitive existing townscape and built heritage context and would link Earl's Court Station with the Northern Access Road in the north and West Brompton Station in the south.

5.14 Plots EC05 and EC06 in RBKC would be located to the north-east of the Table Park. The plots would front onto Warwick Crescent to the north and the Table Park to the south, managing the change in Site levels between the Table Park and Warwick Crescent.

5.15 Plots WB03, WB04 and WB05 in LBHF would be located in the centre of the Site adjacent to the western boundary and to the west of the Table Park. The plots would front onto Empress Place Boulevard to the east and WB05 would front Aisgill Gardens to the north and Aisgill Avenue to the west.

Detailed Component

5.16 Detailed planning drawings present the access, appearance, landscaping, layout and scale of the Detailed Component. The general arrangement plans for Plots WB03, WB04 and WB05 is presented in Figure 5.3 and for Plots EC05 and E06 in Figure 5.4 .

5.17 Plot WB04, a residential-led block, would be the tallest building within the Proposed Development at 42 storeys, and the focal point of the central tall building cluster. It would be located at a pivotal point in the Early Phases and All Phases where new east-west and north-south routes cross at the Table Park.

5.18 Plot WB03, housing student accommodation, would be lower to its south. At 33 storeys it would be equivalent in height to but more slender than the existing ESB.

5.19 Plot WB05, would be to the west of WB04 at the western edge of the Early Phases and All Phases. It would comprise two residential-led buildings of 17 (Plot WB05-T1) and 9 (Plot WB05-T2) storeys with a shared courtyard between them, and a community centre (in outline). The scale of the buildings, stepping down dramatically from the height of Plot WB04, would create a transition in scale to the existing West Kensington Gibbs Green Estate to the west.

5.20 The three buildings would share a plinth and be anchored by the new public open space of Aisgill Gardens at the entrance into the Early Phases and All Phases from the west. Their design has been informed by Art Deco typologies referencing the language of the Earl's Court Exhibition Centres that formerly occupied the Site.

5.21 Plots EC05 and EC06, would be located on Warwick Crescent to the north of Table Park, managing the change in Early Phases Site and All Phases Site level between the Table and the Crescent. Between Plots EC05 and EC06 the park would extend to Warwick Crescent via generous landscaped steps, and a public lift, between the levels.

5.22 Plot EC05 would be a residential-led block with an octagonal plan. At its base Plot EC05 would provide active café use onto the upper ground level of Table Park. The residential entrances would be from the lower ground level on Warwick Crescent, which is proposed as a calm, tree-lined residential street. Like Plots WB03, 04 and 05, its design has been informed by Art Deco typologies.

5.23 Plot EC06 would also be a residential-led block, with a triangular plan, forming the prow of development at the northern end of Warwick Crescent. It would provide community uses at the ground level to Warwick Crescent. Like Plot EC05 it would have a sculpted form and familial Art Deco language.

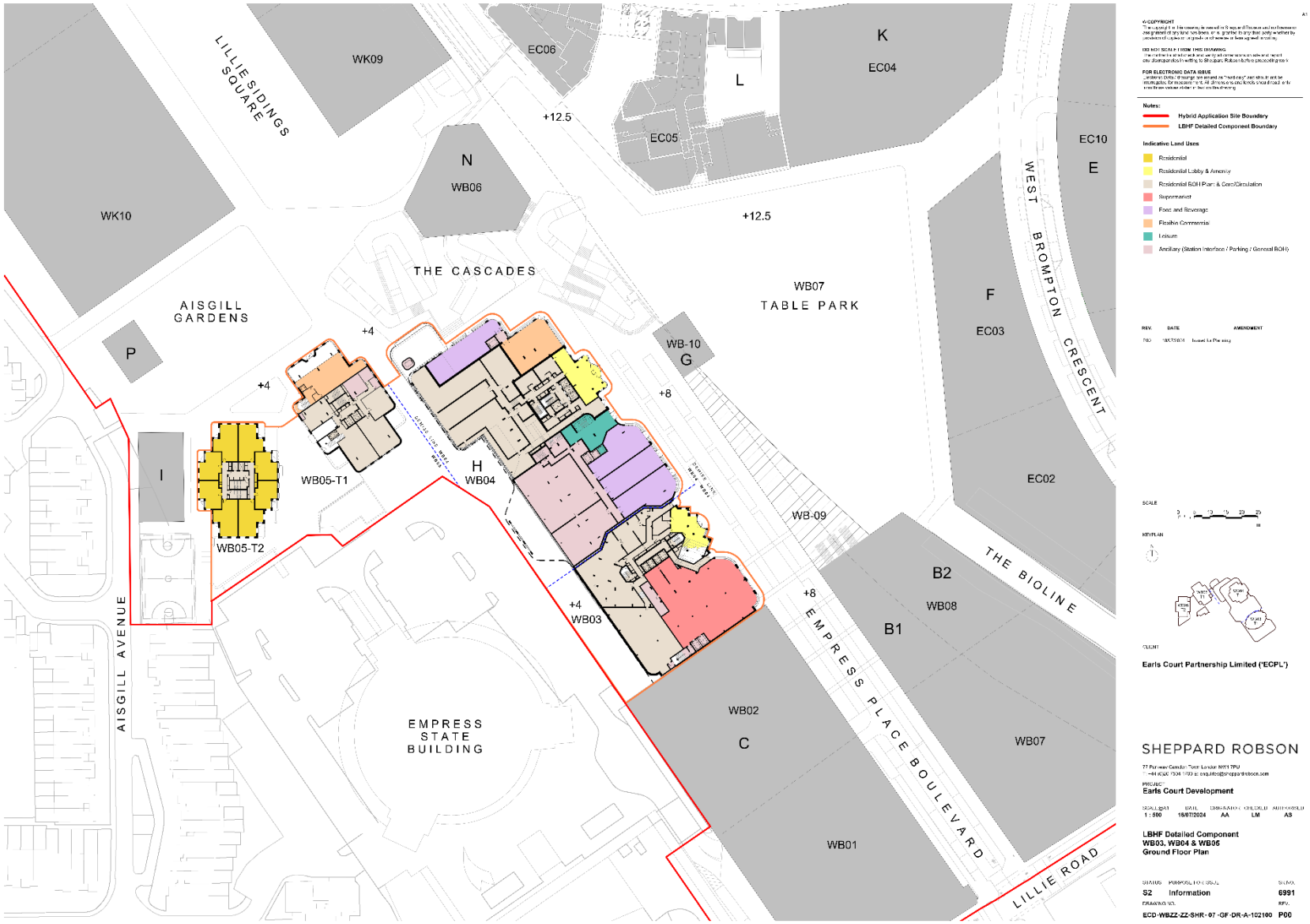


Figure 5.3: Proposed Plots WB03, WB04 and WB05 Ground Floor General Arrangement

Figure 5.4: Proposed Plots EC06 and EC06 Ground Floor General Arrangement

Outline Component

5.24 As set out previously, the Outline Component for the Proposed Development would comprise 26 Development Zones (18 within the Early Phases) as presented on the Development Zones, Maximum Building Lines and Public Realm Parameter Plan in Figure 5.5.

5.25 A series of streets and boulevards would be established through the Development Zones to provide public realm and aid in activating the street level.

5.26 Lines or zones of deviation have been set to provide flexibility for building massing to move within the Development Zones and allow for landscaping, spill out for active ground floor uses, space for entrances to building cores and privacy thresholds (including defensible space).

5.27 Minimum widths which must be maintained, principally in response to daylight, sunlight and overshadowing testing, have been embedded in the parameter plans.

5.28 The Proposed Plot Parameter Plan in Figure 5.6 presents the indicative location for public routes, associated area of deviation and resulting Plot names.

5.29 The Below Ground Floor Parameter Plan in Figure 5.7 presents the spatial arrangement of below ground floors and where basements would be provided.

5.30 The distribution of land uses at the ground and upper floors of each of the Development Zones is shown in the Proposed Land Use Ground Level Parameter Plan and Proposed Land Use Upper Levels Parameter Plan at Figures 5.8 and 5.9 respectively.

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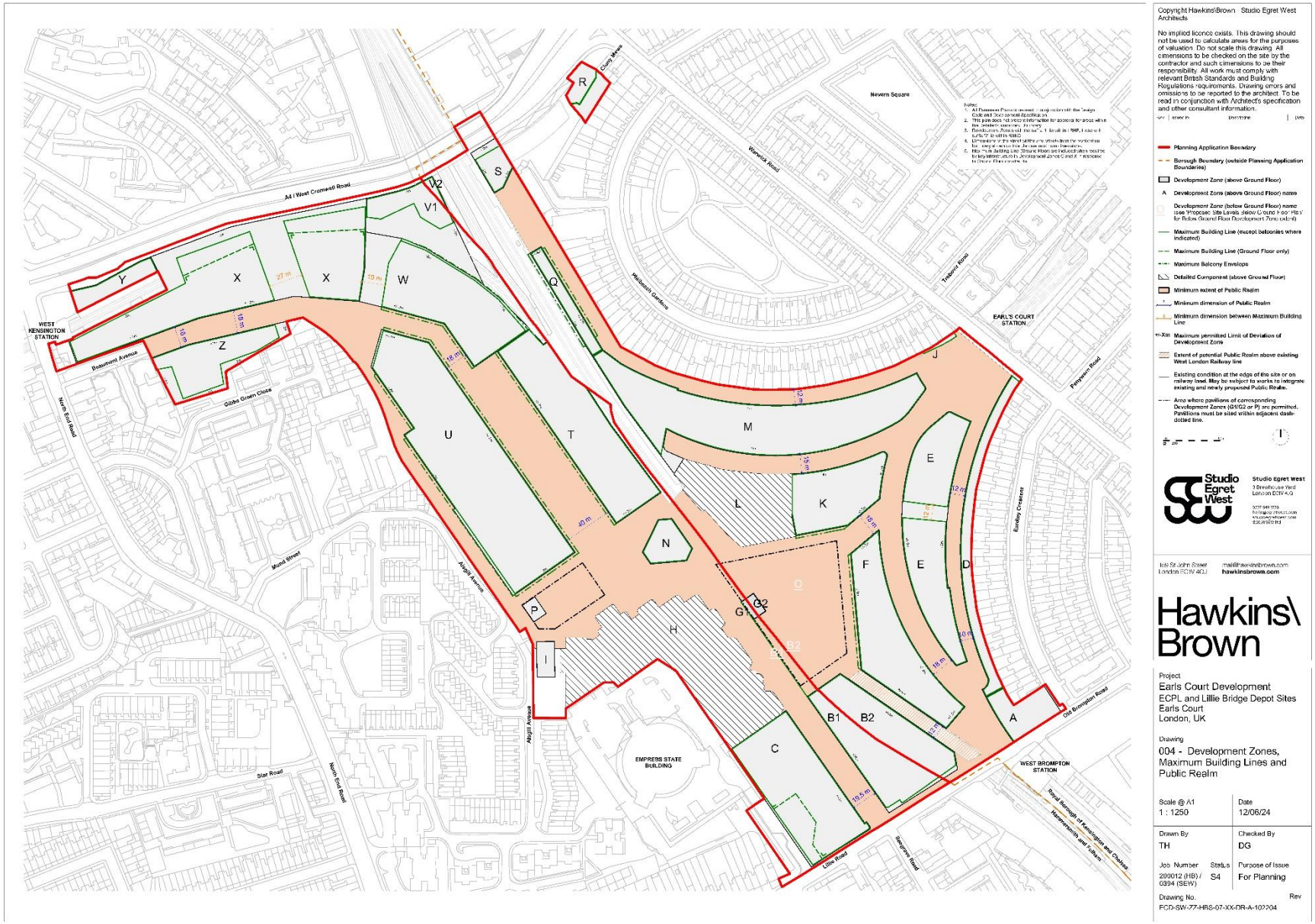

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no	issue to	description	date

- Planning Application Boundary
- Borough Boundary (outside Planning Application Boundaries)
- Development Zone (above Ground Floor)
- A — Development Zone (above Ground Floor) name
- Development Zone (below Ground Floor) name (see 'Proposed Site Levels (above Ground Floor Plan' for Below Ground Floor Development Zone extent)
- Maximum Building Line (except balconies where indicated)
- Maximum Building Line (Ground Floor only)
- Maximum Balcony Envelope
- Detailed Component (above Ground Floor)
- Minimum extent of Public Realm
- Minimum dimension of Public Realm
- Minimum dimension between Maximum Building Line
- +/-Xm — Maximum permitted Limit of Deviation of Development Zone
- Extent of potential Public Realm above existing West London Railway line
- Existing condition at the edge of the site or on railway land. May be subject to works to integrate existing and newly proposed Public Realm.
- Area where pavilions of corresponding Development Zones (G1/G2 or P) are permitted. Pavilions must be sited within adjacent dash-dotted line.

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Project
Earls Court Development
ECPL and Lillie Bridge Depot Sites
Earls Court
London, UK

Drawing
004 - Development Zones, Maximum Building Lines and Public Realm

Scale @ A1	Date
1 : 1250	12/06/24
Drawn By	Checked By
TH	DG
Job Number	Status / Purpose of Issue
200012 (HB) / 0394 (SEW)	S4 / For Planning
Drawing No.	Rev
FCD-SW-77-HRS-07-XX-DR-A-102204	

Figure 5.5: Proposed Development Zones, Maximum Building Lines and Public Realm Parameter Plan

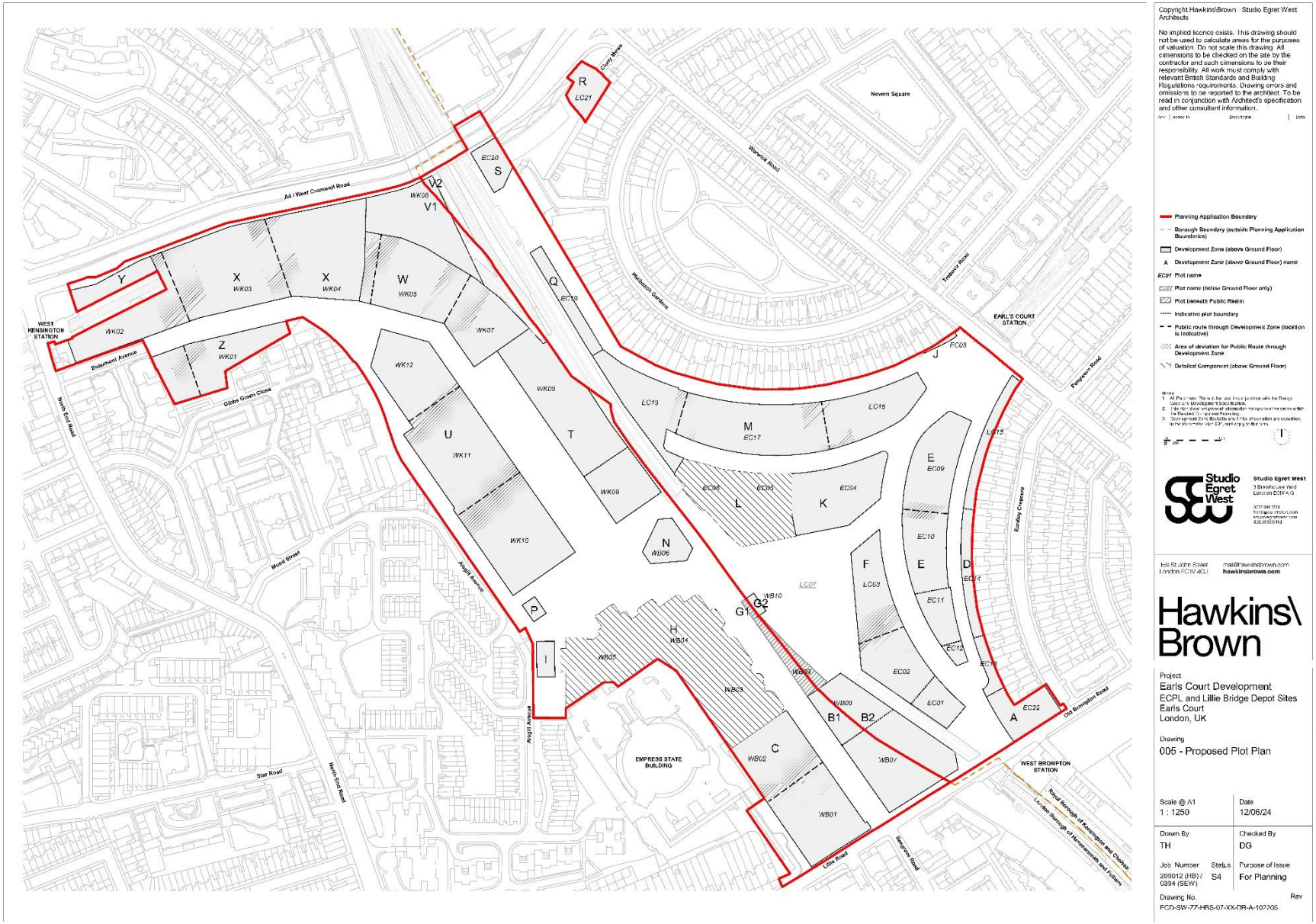


Figure 5.6: Proposed Plot Parameter Plan

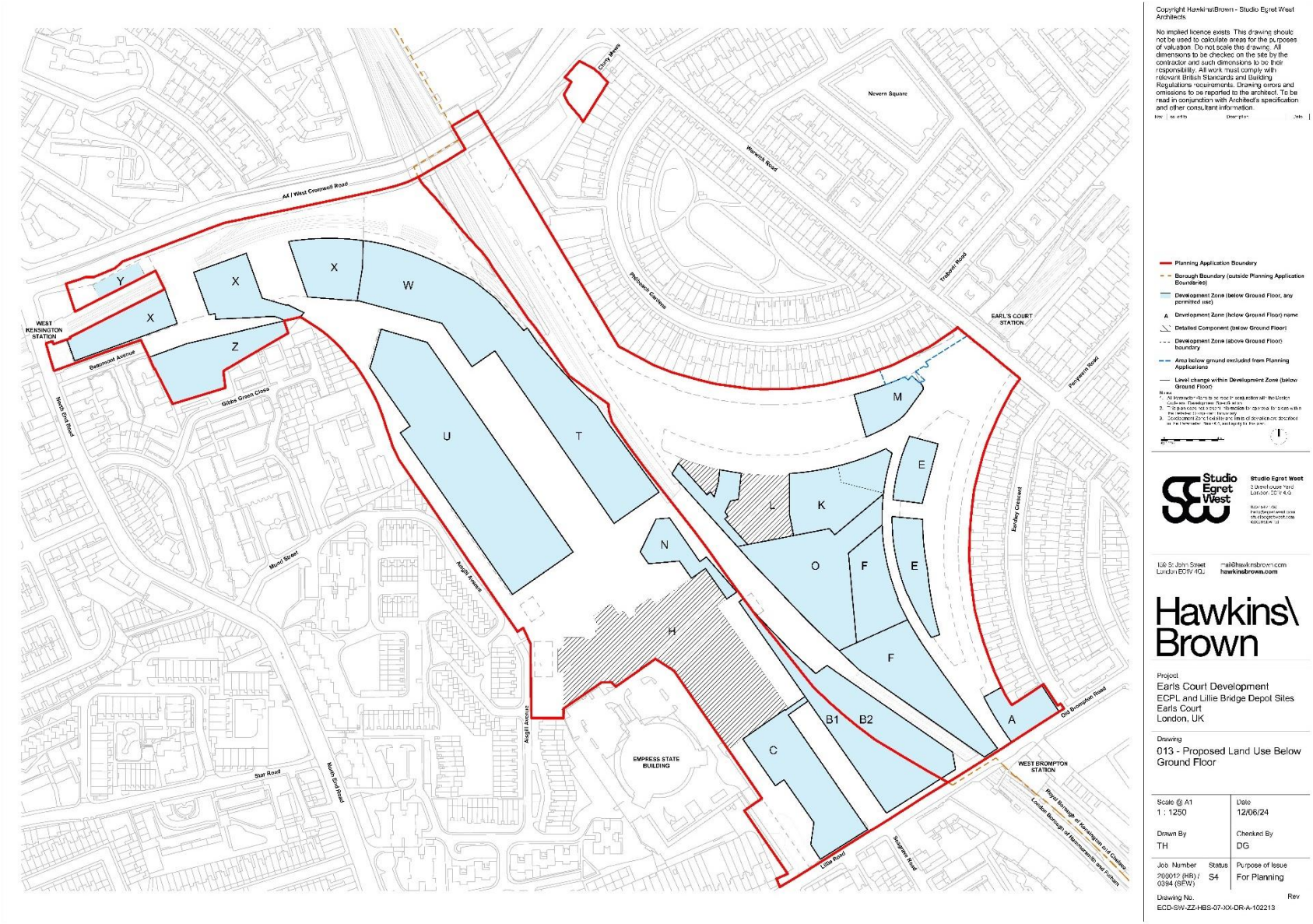


Figure 5.7: Below Ground Floor Parameter Plan

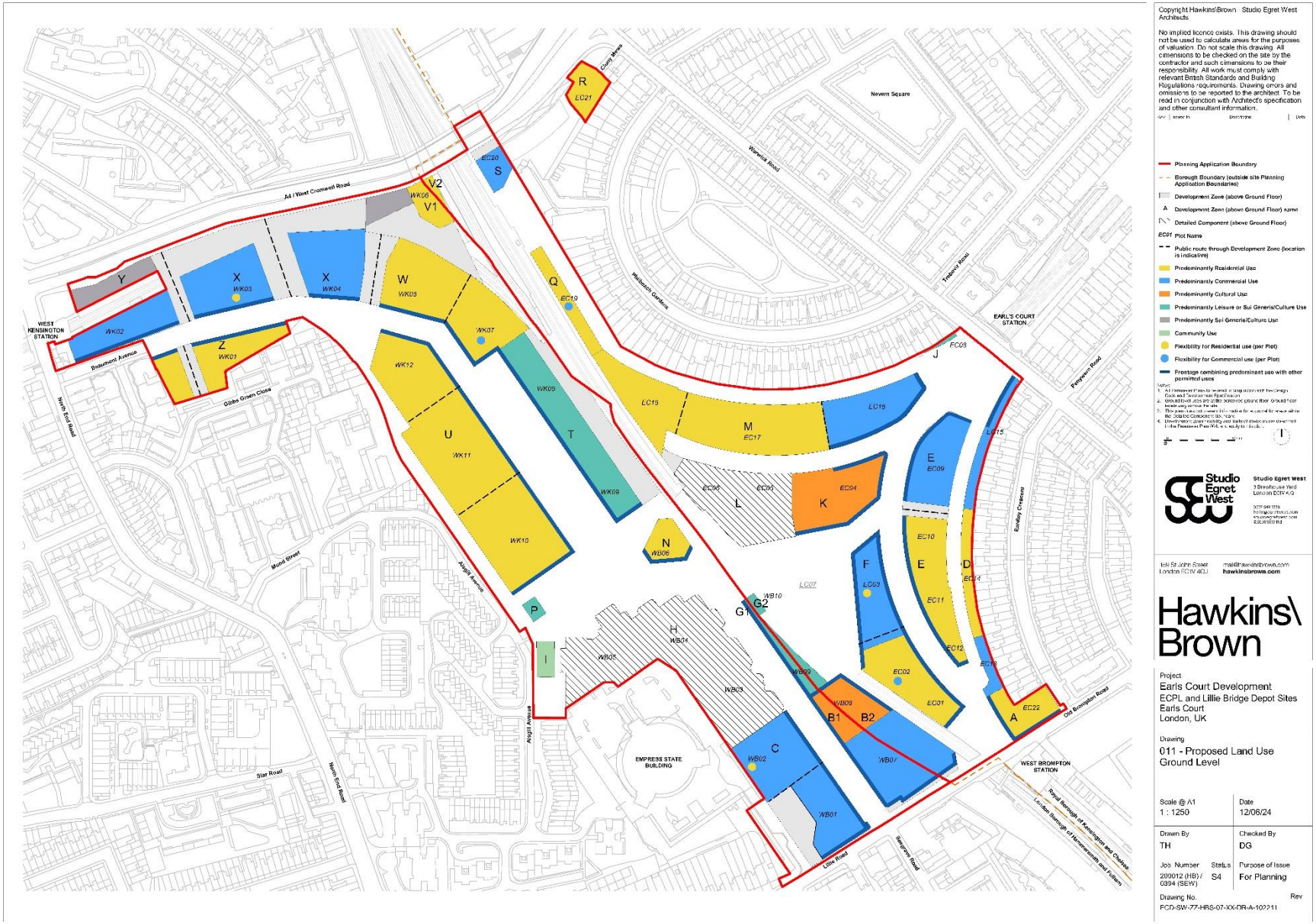


Figure 5.8: Proposed Land Use Ground Level Parameter Plan

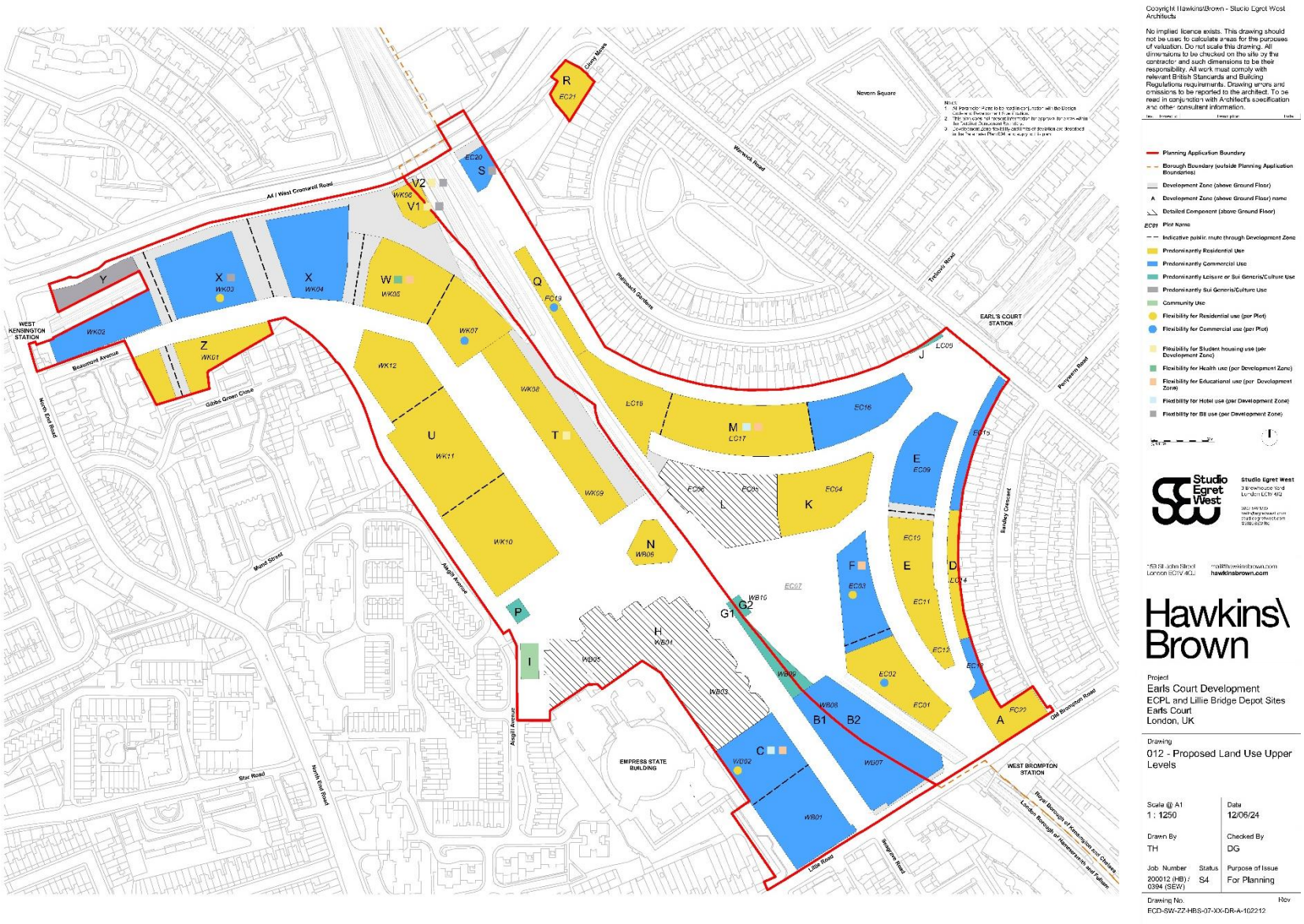


Figure 5.9: Proposed Land Use Upper Levels Parameter Plan

Built Form, Height and Massing

5.31 The building heights of the Detailed Component buildings would range in height between 3 (20.1 metres above Ordnance Datum (mAOD)) and 42 (158 mAOD) storeys above typical ground level.

5.32 In respect of the Outline Component, proposed uses would be delivered above and below ground level in buildings of up to approximately 30 storeys (106.4 mAOD) above an approximate two-storey podium level.

5.33 The built form, height and massing proposals have been designed to respond to the character of the historic Site uses and its existing surrounding context.

5.34 The scale of the Proposed Development would transition in height from the edges of the Site to manage the change in scale and visually mediate between the existing lower surrounding townscape context of the Site and proposed tall building clusters. Tall buildings have been located to minimise their impacts on views from the Grade I listed landscape of Brompton Cemetery, views of the Grade I listed Church of St Cuthbert at the north-eastern edge of the Site and other designated heritage assets.

5.35 The tallest buildings would be clustered to the immediate north-east of the ESB. The clustering of tall buildings in this location would integrate the tall broad form of ESB within the new cluster, and consolidate the existing point of greater height within the townscape. A secondary cluster of tall buildings would be located at the northern edge of the Site next to West Cromwell Road. The two tall building clusters would form part of a seam of taller development emerging on major redevelopment sites located along the WLL corridor that runs south from Old Oak and White City to meet the River Thames at Chelsea Harbour.

Character and Urban Design

5.36 The Proposed Development would comprise the following seven Character Areas:

- The Table;
- West Brompton;
- Warwick Crescent;
- Empress Place;
- Aisgill Gardens;
- Lillie Sidings (All Phases only); and
- West Kensington (All Phases only).

5.37 The Character Areas would form one neighbourhood across the Site. Nature would be at the forefront of the Character Areas, with a landscape encouraging residents and visitors to discover the Character Areas through recognisable public realm typologies. In addition an Urban Design plan has been produced for the Outline Component which establishes the urban design principles for key routes, public spaces and navigation through the Site.

Landscape and Biodiversity Strategies

5.38 The nature-led approach would amplify city nature for the benefit of people and the planet and the landscape would harness the potential of water as a feature of play, reflection, biodiversity and sustainability.

5.39 The Proposed Development would commit to deliver the following in respect of the landscaping and biodiversity:

- A minimum Urban Greening Factor of 0.4;
- A minimum Biodiversity Net Gain (BNG) of 10 %; and
- Achieving all BNG Trading Rules.

5.40 The nature-led design would ensure ecologically valuable habitats are, where possible, retained, protected and enhanced and otherwise created as an integral part of the Proposed Development. In this regard, the on-site SINC habitats would be enhanced by means of a diverse landscape and planting strategy, which would functionally link with the existing SINC habitats or mitigate for small losses.

5.41 The Proposed Development would provide substantial biodiverse green infrastructure which could include biodiverse roofs, green walls, rain gardens, swales with diverse native planting, hedgerows and other landscape planting of high biodiversity value.

5.42 A Habitat Management Plan would be produced to describe the specific long-term management and monitoring of habitats and features on the Site following completion of the Proposed Development. This would be secured by means of appropriately worded planning conditions.

5.43 With the exception of the Detailed Component Plots, details of the Proposed Development's landscaping scheme have not yet been developed and would be subject to RMA approval. However, to demonstrate that the commitments in respect of UGF and BNG can be achieved, an indicative, worst-case landscape design ('UGF Illustrative Landscape Scheme') has been prepared. Habitat assumptions have been drawn from this UGF Illustrative Landscape Scheme to enable assessment within the EIA, BNG Assessment and Arboriculture Assessment.

Public Realm and Open Space Network

5.44 The Proposed Development has been designed to connect to surrounding neighbourhoods and encourage people and nature towards the largest open space at the centre of the Site, the Table Park.

5.45 The public realm would be designed to create an integrated system of spaces and gardens that would showcase biodiversity in an active urban realm. These public spaces could be used for activities, events, recreational uses and social gatherings.

5.46 Table 6.7 summarises the area of public realm and open space network to be delivered across the Proposed Development for the Early and All Phases development scenarios.

Table 6.7: Proposed Public Realm and Open Space Summary

Open Space Element	Early Phases (ha)	All Phases (ha)
Public realm (Site Wide)	4.22	6.03
Public realm landscaped amenity open space (Detailed Component)	0.756	0.756
Public realm key landscaped amenity open space (The Table Park, Aisgill Gardens and Lillie Sidings)	0.53	1.7
Trees (Detailed Component)	144 (no)	144 (no)
Trees (Outline Component based on assumptions drawn from the UGF Illustrative Landscape Scheme)	723(no)	1,343 (no)
Biodiverse roofs, amenity terraces and on-plot podium planting (Detailed Component)	0.567	0.567
Biodiverse roofs, amenity terraces and on-plot podium planting (Outline Component based on assumptions drawn from the UGF illustrative landscape scheme)	1.22	2.70

Access Arrangements

5.47 The aim of the Proposed Development is to maximise a pedestrian priority public realm throughout the Site. The Transport Strategy has responded to this by creating a hierarchy of movement across the Site as presented in Figure 5.10. Trips have been ranked in order of priority from highest to lowest as follows:

- Walking;
- Cycling and micro-mobility;
- Shared mobility; and
- Maintenance, residual deliveries and emergency services.

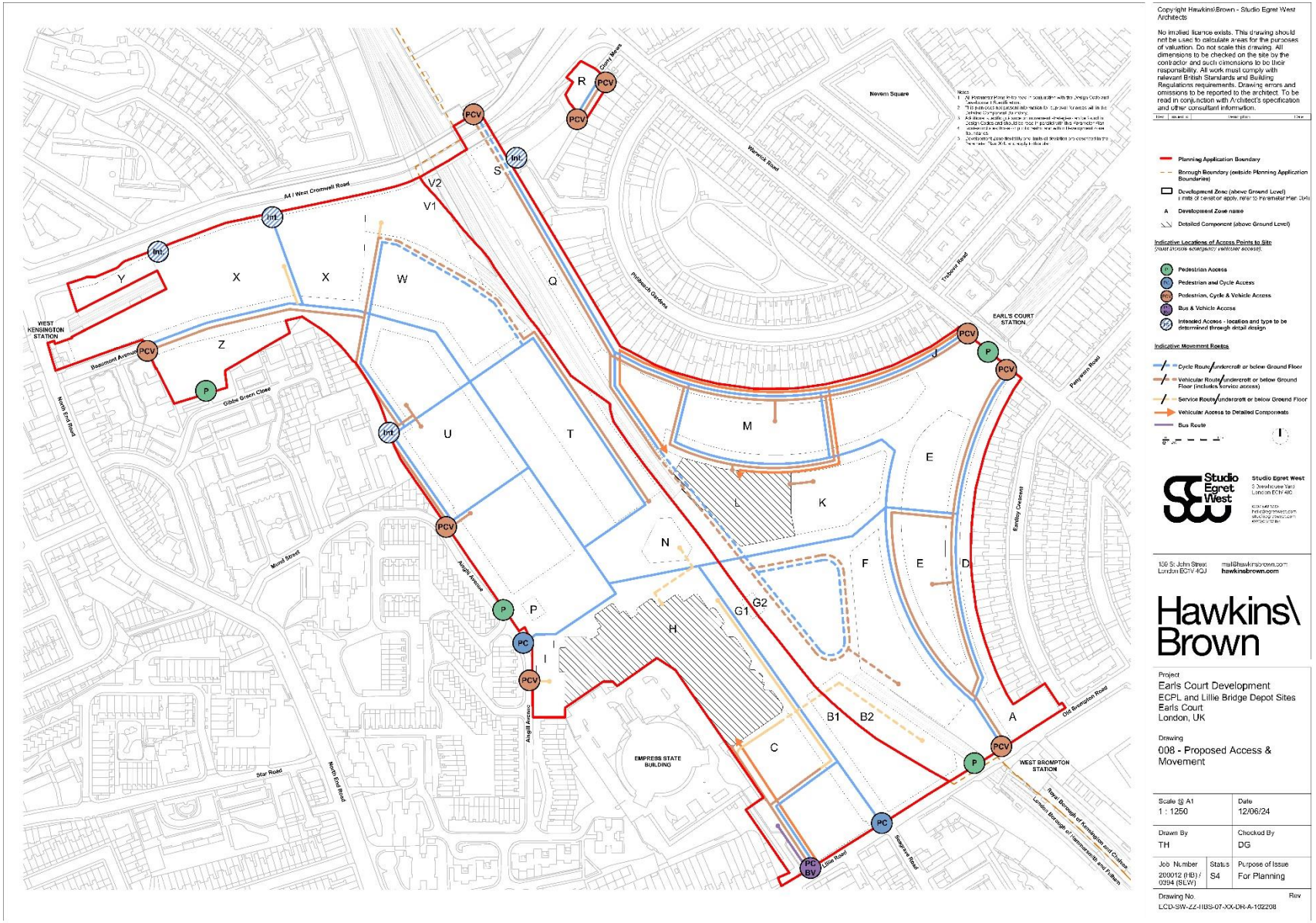


Figure 5.10: Proposed Development Access and Movement Parameter Plan

Pedestrian and Cycle Access

5.48 The Proposed Development seeks to prioritise travel by active modes through provision of a pedestrian priority public realm and a 'car lite' development.

5.49 A key principle of the pedestrian and cycle network would be the creation of clear north to south and east to west movement corridors through the Site. These routes would connect with existing and future cycle infrastructure to then enable onward connections to key destinations across London.

5.50 The following improvements are proposed to facilitate active travel:

- Provision of secure cycle parking in accordance with London Plan policy;
- Creation of cycle / micro mobility hubs at key transport nodes to allow efficient interchange;
- Appropriately scaled contributions towards targeted off-site improvements to address gaps in infrastructure provision and improve connectivity; and
- Set of incentivised travel planning measures.

5.51 The Early Phases main pedestrian and cycle access points would be as follows:

- Aisgill Avenue;
- Warwick Road at the former entrance to the Earls Court Exhibition Centre 1;
- Lillie Road at Empress Place;
- Old Brompton Road at West Brompton Station;
- Lillie Road at the Lillie Road Bus Layover;
- Northern Access Road; and
- Cluny Mews.

5.52 In addition, pedestrian and cycle access points for the All Phases would be located at:

- Beaumont Avenue, along the north-western site boundary;
- Gibbs Green Close;
- Mund Street, north of Aisgill Avenue; and
- Aisgill Avenue.

Vehicular Access

5.53 Vehicular routes would be limited to the periphery of the Site. A 'car-lite' approach to parking would be adopted, and servicing movements segregated from the public realm where possible, with opportunities for consolidation prioritised to minimise the number of trips to and from the Proposed Development. As such, the street network has only been designed to accommodate low volumes of vehicular traffic.

5.54 The vehicle access strategy on-site would limit vehicular access to those trips that need to take place such as for servicing, emergency vehicles, limited blue badge parking and for those who need direct access (such as the mobility impaired).

5.55 For the Early Phases, the main vehicular access points would be as follows:

- 100 West Cromwell Road for access via the Northern Access Road;
- Warwick Road junction with Cluny Mews (for access to Development Zone R only);
- Warwick Road junctions with West Brompton Lane and Warwick Lane)
- Old Brompton Road junction with West Brompton Lane; and
- Lillie Road junction with Empress Place and the Lillie Road bus layover.

5.56 In addition to the Early Phases, the main vehicular access points in the All Phases would be as follows:

- North End Road junction with Beaumont Avenue; and
- Mund Street/Aisgill Avenue.

Public Transport

5.57 Public transport would be the primary mode of transport for trips to and from the Proposed Development.

5.58 The public transport strategy has been developed on the basis of the following over-arching design principles:

- High quality walking routes (pedestrian priority public realm) would be provided on-site to facilitate connection to the key transport nodes off-site; and
- Improvements to the local highway network would be made to connect the Site with entrances to stations and bus stops located around the Site.

5.59 Subject to agreement with London Buses and TfL, this layover would be reconfigured to provide an enhanced rest stop facility for bus drivers and incorporate bus stop provision for the Route 190 to allow the commencing route to start within the Site instead of off-site.

Parking

5.60 The Proposed Development would include provision of Santander Cycle Hire docking stations and set downs spaces for e-scooters and e-bikes to encourage micro-mobility. These would be located adjacent to the transport nodes to facilitate interchange between modes.

5.61 The Detailed Component would deliver 1,922 long-stay cycle spaces and 188 short-stay cycle parking spaces. An additional 10 cycle spaces would be provided at Plots WB03, WB04 and WB05 for deliveries and servicing.

5.62 For the Outline Component, the proposed cycle parking quantum would be provided in accordance with the level identified in the London Plan.

5.63 The key principles of the vehicle parking strategy would be as follows:

- A ‘car-lite’ approach would be applied to vehicle parking to encourage travel by sustainable modes;
- 3 % disabled car parking provision on-plot or on-street for residential and non-residential use;
- A zero emissions car club would enable travel by private vehicle and reduce the need for car ownership on-site;
- Limited parking for visitors (e.g. tradespeople);
- All spaces would have EV charging provision; and
- Set down areas would facilitate ride hailing services for taxis and private hire vehicles.

5.64 Within the Detailed Component, 28 car parking spaces would be provided, comprising:

- 11 spaces at plots EC05 and EC06; and
- 17 spaces at plots WB03, WB04 and WB05.

5.65 An additional three parking spaces for the car club and four motorcycle spaces for servicing would be provided at Plots WB03, WB04 and WB05.

5.66 For the Outline Component, provision for disabled parking of up to 10 % of the number of dwellings as required within the London Plan would be provided. Disabled persons parking equivalent to 3 % of the number of dwellings would be designed in from the outset and provided on-plot. The remaining 7 % provision required within the London Plan would be identified through a Parking Design and Management Plan (‘PDMP’) submitted at the RMA stage in relation to each plot.

5.67 Areas for servicing (including laybys and dedicated servicing / consolidation areas) would be provided at strategic locations across the Site.

5.68 Visitor parking spaces would be controlled by the Facility Management (‘FM’) team. Spaces would need to be booked in advance.

Waste Management and Facilities

5.69 A site-wide waste management strategy has been developed to accompany the Hybrid Planning Applications and provides details on the total estimated waste arising of the Proposed Development. This would be relevant to both the Early Phases and All Phases development scenarios.

5.70 The waste strategy is fully aligned with the London Plan and seeks to achieve, if not exceed, the London Plan target to recycle 65 % of residential waste.

Water Management Strategy

5.71 An integrated water management strategy has been developed for the Proposed Development as detailed in the Sustainability Strategy.

5.72 Effective water management would aim to minimise the consumption of potable water within the Proposed Development.

5.73 The Proposed Development's outline drainage strategy ('ODS') has been developed in tandem with the Proposed Development's Landscape Strategy and Flood Risk Assessment ('FRA'). These documents have evaluated the options for attenuating surface water on-site and to demonstrate how these would be achievable within the context of the Proposed Development.

5.74 All proposed drainage would be designed in accordance with local policy, local sustainable drainage systems ('SuDS') guidance, national standards and best practice where applicable during detailed design stages.

5.75 The surface water drainage strategy would accommodate the 1 in 100-year event plus 40 % climate change allowance. The surface water would either infiltrate via soakaway or discharge to the local sewer at less than greenfield rate.

5.76 Rainwater harvesting systems would be adopted at both a plot and sitewide level to promote water neutrality and achieve a climate change resilient public realm which would stay green and cool within hot drought periods.

Energy Strategy

5.77 The proposed energy network would comprise the following:

- An all-electric, low temperature district heating and cooling network;
- A network that shares energy between plots, minimising wasted energy;
- A network with virtually zero heat losses;
- A network that offers flexibility to allow for future expansion and connection of new technologies as these become available;
- A network that can be connected to neighbouring networks, even high temperature district heating network; and
- A network that maximises space for development, planting and open space enabled by the decentralised plant strategy.

5.78 An electric based, low temperature energy network is proposed that would satisfy the heating, hot water, and cooling demands across the Proposed Development, via an ambient loop system. The proposed ambient loop system would not produce emissions from burning fossil fuels within the Proposed Development. The proposed system would operate at much lower temperatures compared to a traditional heat network, which would substantially reduce heat losses across the network and would be able to benefit from future technologies that can be connected into the system at a later date to further enhance the efficiency and reduce the cost to consumer. The proposed system would be expandable and can offer connections to allow integration with other heat networks that may be developed in the vicinity of the Site.

Operational Management Controls

5.79 Operational Management Plans would be prepared and implemented for all elements of the Proposed Development (commercial and residential) by the on-site FM team .

5.80 Aspects of operational management incorporated into the Proposed Development would comprise:

- technological and Integrated Electronic Security Systems, such as CCTV cameras;
- a security control room and associated operators;
- security policy and procedures;
- facility management;

- maintenance staff;
- landscape staff;
- cleaning staff;
- emergency planning; and
- business continuity management and planning.

5.81 The following additional management plans would be implemented for the operation of specific components of the Proposed Development:

- Habitat Management Plan;
- Security Strategy;
- Delivery and Servicing Management Plan;
- Parking Design and Management Plan;
- Travel Plan; and
- Habitat Management Plan.

6.0 Demolition and Construction Works

Overview

6.1 A detailed development programme has not yet been finalised. However, to enable assessment of potential environmental impacts and their likely effects within the EIA, an indicative, but feasible, programme has been developed by the Applicant based on a number of assumptions. These assumptions have been informed by an understanding of current and future projected market conditions, logistical arrangements, technical considerations, and professional experience, all of which are considered to be reliable.

6.2 It is anticipated that the indicative demolition and construction programme would be delivered in five phases (including the infrastructure works) for the Early Phases and nine phases (including the infrastructure works) for the All Phases with associated enabling, demolition and construction works. The indicative programme, as presented in Figure 6.1, is based on the assumption that planning permission is secured in Q3 2025. For the purpose of the EIA, the Proposed Development works are anticipated to be undertaken over 13 years for the Early Phases (completion targeted for Q2 2037) and 19 years for the All Phases (completion Q2 2043). First residential occupation is likely to be in 2030.

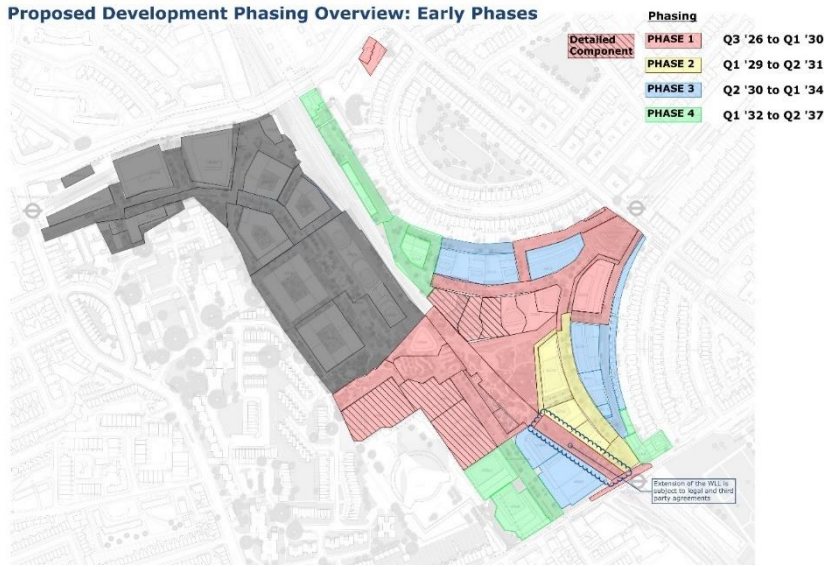
6.3 Due to the duration of the programme, annual 'time-slices' have been prepared to aid understanding of key works and activities likely to occur on-site, including overlaps in phasing. The time-slices summarise the likely works and activities, site arrangements, access routing and interface between new and existing properties. The time slices cover the period Q3 2025 - Q2 2043, as applied for under the Hybrid Planning Applications.

Construction Environmental Management Plan

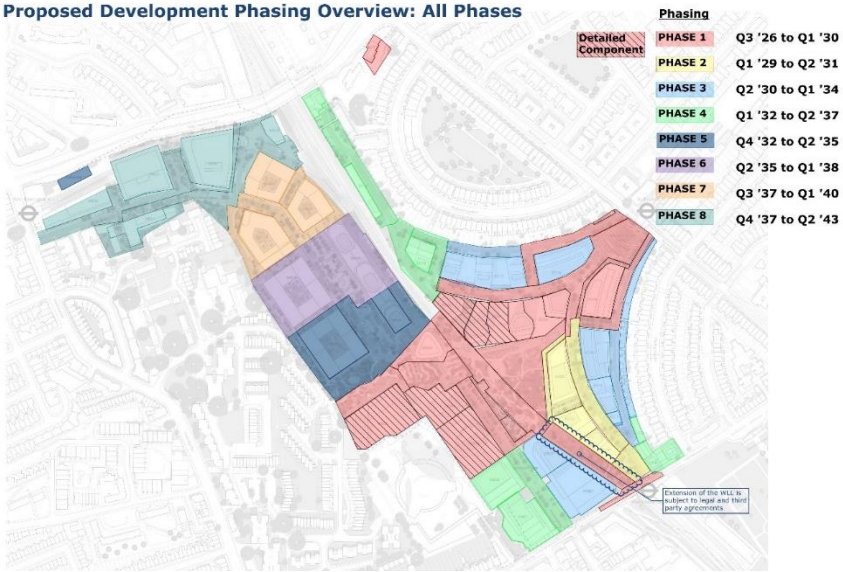
6.4 The demolition and construction framework which has been developed for the Proposed Development as part of the iterative design process is set out within ES Chapter 5: Demolition and Construction Management, as well as within the Earls Court Development Framework Construction Management Plan ('CMP') and Earls Court Development Construction Site Waste Management Plan ('SWMP') which accompany the Hybrid Planning Applications. The CMP includes a Construction Environmental Management Plan ('CEMP') section. The framework has been developed in tandem with the Sustainable Construction Statement as presented within the Earls Court Development Sustainability Statement which also accompanies the Hybrid Planning Applications.

6.5 Detailed CMPs would be secured as part of the phased delivery of the Proposed Development. It is envisaged that the detailed CMPs would address the following as a minimum:

- A commitment to environmental protection (all consultants and trade contractors would be invited to declare their support for this at tender stage);
- Documentation of measures to comply with environmental aspects of any planning conditions;
- Detailed control measures and activities to be undertaken to minimise likely environmental impacts, as well as associated roles and responsibilities;
- Target criteria for environmental issues, where practical, such as water and energy consumption;
- Any requirements for monitoring and record keeping;
- Proposed noise, vibration and dust monitoring levels to be agreed with LBHF and RBKC;
- A dedicated point of contact during normal working hours and in emergencies with responsibility to deal with environmental issues if they arise; and
- A review and monitoring regime of on-site performance against the CEMP provisions by the project team and regular environmental audits of its implementation.



Early Phases	Duration	Start Date	Completion Date
Phase 0 Infrastructure	146 months	Q4 2024	Q2 2032
Phase 1	51 months	Q3 2026	Q1 2030
Phase 2	27 months	Q1 2029	Q2 2031
Phase 3	45 months	Q2 2030	Q1 2034
Phase 4	63 months	Q1 2032	Q2 2037



All Phases	Duration	Start Date	Completion Date
Phase 0 Infrastructure	146 months	Q4 2024	Q2 2037
Phase 1	51 months	Q3 2026	Q1 2030
Phase 2	27 months	Q1 2029	Q2 2031
Phase 3	45 months	Q2 2030	Q1 2034
Phase 4	63 months	Q1 2032	Q2 2037
Phase 5	36 months	Q4 2032	Q2 2035
Phase 6	33 months	Q2 2035	Q1 2038
Phase 7	30 months	Q3 2037	Q1 2040
Phase 8	54 months	Q4 2037	Q2 2043

Figure 6.1: Indicative Proposed Development Programme

6.6 The commitments, controls and measures presented in ES Chapter 5 have been relied upon as embedded mitigation in the EIA

Community Liaison

6.7 The Applicant would engage with and inform the local community and local stakeholders of particulate construction tasks and indicative timelines across the development programme.

Working Hours

6.8 Working hours would be agreed with the LBHF and RBKC, but are expected to be:

- 08:00 to 18:00 hours Monday to Friday.
- 08:00 to 13:00 hours Saturday.
- No working on Sundays or Bank Holidays.

6.9 Works that are defined as 'high impact activities' would generally only be carried out between:

- 09:00 to 12:00 and 14:00 to 17:30 hours Monday to Friday.
- 09:00 and 12:00 hours Saturday.
- Not permitted on Sundays, bank holidays and public holidays.

6.10 Despite this provision, there would be certain circumstances where it may not always be possible to strictly comply with the terms of this condition such as the following:

- Seasonal and/or weather dependent/ daylight hour's dependent;
- Construction plant repair and maintenance work;
- Major concrete operations and other continuous operations;
- Setting-up of traffic management schemes;
- Short-term construction activities requiring road and railway closures/possessions;
- Delivery of abnormal loads in accordance with the requirements of the Highways Authority and Police, for example during mobilisation and demobilisation; and
- Works that require executing under TfL/LUL/NR engineering and possession hours.

6.11 All work which is intended outside of these hours, excluding emergencies, would be subject to prior agreement, and / or reasonable notice to LBHF and RBKC in terms of Section 61 (S61) of the Control of Pollution Act 1974[8].

Potential Construction Environmental Effects

6.12 ES Chapter 5: Demolition and Construction Management presents a summary of the anticipated infrastructure, enabling, demolition, earthworks, sub-structure, superstructure, fit-out, landscaping and associated works of the Proposed Development.

6.13 The demolition parameter plan is presented in Figure 6.1.

6.14 Each technical assessment has made worst-case assumptions where flexibility is sought and to account for uncertainty.

6.15 The main sources of potential environmental effects during demolition and construction of the Proposed Development have been identified as demolition and construction transport and associated noise and vehicle emissions; as well as dust, noise and vibration emissions from demolition and construction activities. The evolving massing of the proposed development would also be a source of environmental effect, but in all cases it would be temporary and less than the effects associated with the completed development.

6.16 Potential impacts have been identified and standard best practice mitigation measures have been incorporated into the development proposals to avoid, as far as practicably possible, the likelihood for significant environmental effects.

8 Secretary of State, 1974. Control of Pollution Act. London. HMSO.

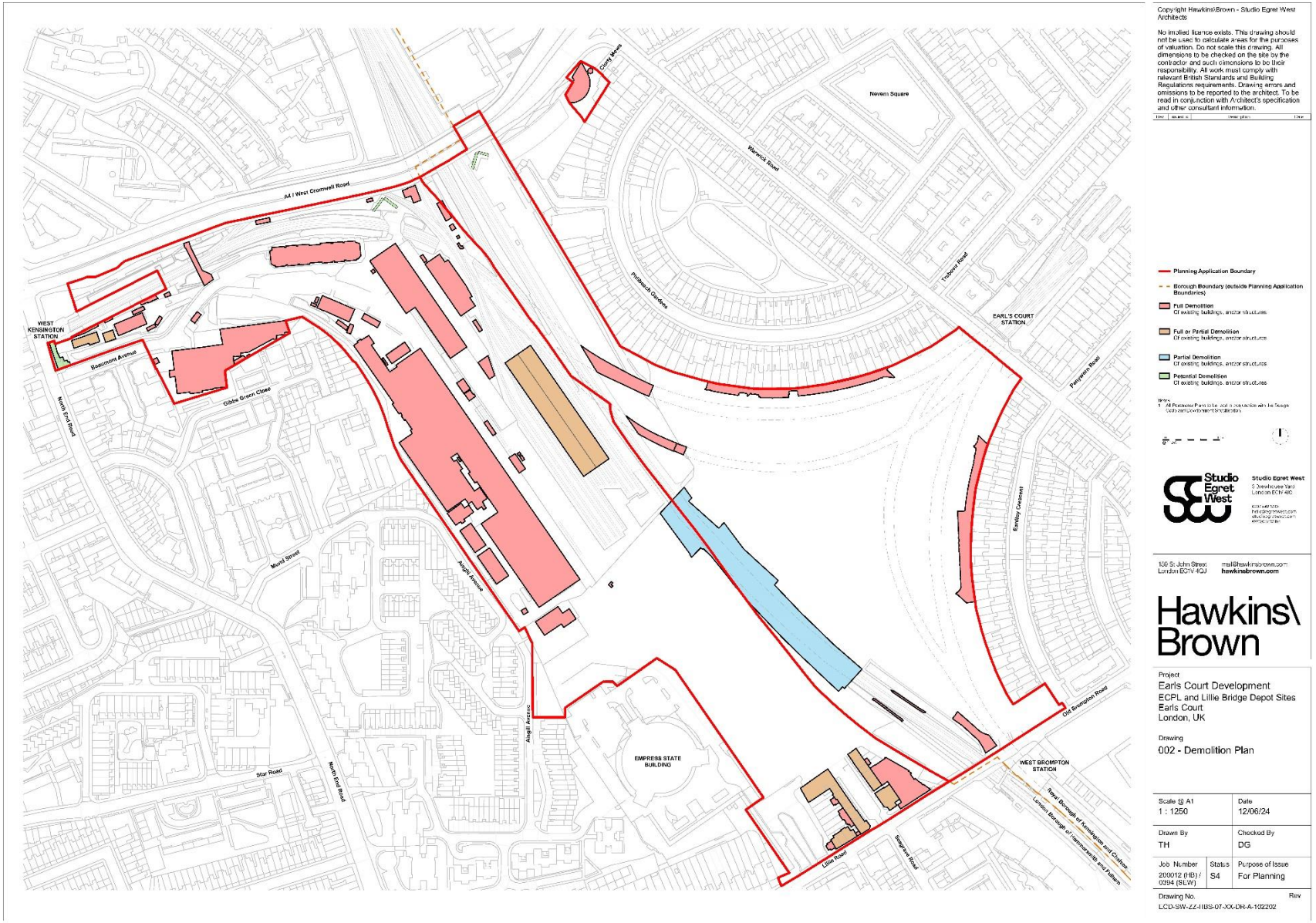


Figure 6.1: Proposed Demolition Parameter Plan

7.0 Likely Significant Environmental Effects

Archaeology

7.1 Completed development and inter-project cumulative effects were scoped out of the assessment.

7.2 The Site is not located within an Archaeological Potential Area.

7.3 The archaeological potential across the Site is presented in Figure 7.1.

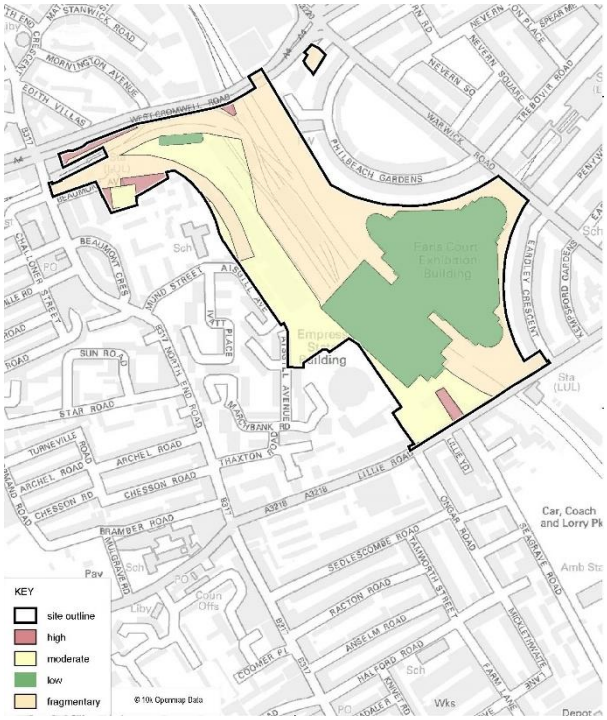


Figure 7.1: On-Site Buried Heritage Potential

7.4 The assessment has concluded that buried heritage assets that may be impacted by the Proposed Development comprise:

- **Post-medieval**[9] **remains**: There is a high potential for agricultural remains, such as ditches and plough soils, along with structural remains including wall footings and foundations, wells and cess pits in the western part of the Site which would be of low heritage significance.
- **Palaeoenvironmental remains**[10]: There is moderate or high potential for palaeoenvironmental remains (organic remains such as pollen and plant macro fossils which can be used to reconstruct the past environment) within alluvial deposits associated with the former Counter's Creek in the eastern part of the Site, which would be of low or medium heritage significance.

9 Archaeological finds, or evidence such as building remains, pits or ditches dating to AD 1500 to the 20th century.
10 Evidence of former natural environments, i.e. during the prehistoric and later periods. Such remains can be of archaeological interest, and often consist of organic remains such as preserved pollen, seeds, snail shells and peat deposits. May also provide evidence of human activity or modification of the environment such as cultivation of particular crops or of food preparation, e.g. charred wheat grains. .

- **Later medieval**[11]**settlement remains along North End Road**: There is a moderate potential for settlement remains along the western edge of the Site including cellars, wells, and pits of moderate heritage significance, and agricultural ditches or plough soils of low heritage significance.
- **Remains of the 19th century infrastructure**: There is low or possibly moderate, depending on location, potential for buried remains of the Kensington Canal and the later railway infrastructure, which would be of low or medium significance, depending on the level of preservation. Extensive remains would be of medium significance with fragmentary remains being of low significance.
- **Potential remains of a World War 2 bunker**: There is a moderate potential for remains of a bunker in the north-western part of the Site, which would be of medium heritage significance.

Early Phases

Demolition and Construction Effects

7.5 The following infrastructure, enabling, demolition and construction works are those that are likely to have an impact upon the known and potential buried heritage assets:

- Preliminary site works and infrastructure works, including demolition and breaking out existing foundation slabs;
- Pile probing and obstruction removal;
- Ground remediation and earthworks;
- Construction of basements;
- Insertion of new piled foundations, pile caps and ground beams; and

New services (including ambient loop heating system and attenuation/infiltration tanks), landscaping and other shallow groundworks.

7.6 The main impact of the Early Phases would be from pile probing or foundation removal associated with demolition and the excavation for any proposed basements which would remove buried heritage assets within the footprint of these works across large areas of the Early Phases Site. The insertion of piling would completely remove any surviving buried heritage assets within the footprint of each pile. Additional impacts may arise from landscaping and other shallow ground works outside the basement footprints.

7.7 During demolition and construction works, there is a predicted potential for impacts on remains of no more than medium heritage significance, e.g. thick deposits of palaeoenvironmental remains (potentially containing peat), and extensive survival of post-medieval industrial remains (for example evidence of the Kensington Canal and later railway infrastructure

7.8 Therefore, it is considered that the adverse effects on buried heritage assets could be offset and reduced to an acceptable level by:

- archaeological investigation and palaeoenvironmental sampling, with dissemination at an appropriate level to increase knowledge and appreciation of the buried heritage assets; and,
- a programme of research and education about the industrial heritage of the Site for public benefit.

7.9 The scope and method of the archaeological work would be as set out in an archaeological Written Scheme of Investigation ('WSI') approved in advance by the RBKC and LBHF and their archaeological advisor.

7.10 Overall, with the successful implementation of an appropriate programme of archaeological investigation it is considered that the demolition and construction stage of the Early Phases would not give rise to significant residual effects on buried heritage assets.

All Phases

Demolition and Construction Effects

7.11 The demolition and construction works for the All Phases development scenario would be consistent with the Early Phases development scenario and have not been repeated for the sake of proportionality.

11 An area where people lived and therefore remains dating from AD 1066 - 1500

7.12 During demolition and construction works, there is a predicted potential for impacts on remains of no more than medium heritage significance e.g. thick deposits of palaeoenvironmental remains (potentially containing peat), later medieval settlement remains, extensive survival of the post-medieval industrial remains (for example evidence of the Kensington Canal and later railway infrastructure) and a World War II bunker. It is considered, therefore, that the adverse effects on buried heritage assets could be offset and reduced to an acceptable (not significant) level by:

- archaeological investigation and palaeoenvironmental sampling, with dissemination at an appropriate level to increase knowledge and appreciation of the buried heritage assets;
- a programme of research and education about the industrial heritage of the Site for public benefit; and
- building recording of the World War 2 bunker, if required by Historic England.

7.13 The scope and method of the archaeological work would be as set out in an archaeological WSI approved in advance by the RBKC and LBHF and their archaeological advisor.

7.14 Overall, with the successful implementation of an appropriate programme of archaeological mitigation and offsetting, it is considered that the demolition and construction stage of the All Phases would not give rise to significant residual effects on buried heritage assets.

Socio-Economics

7.15 The Site accommodates the following existing uses:

- Cluny Mews - an office building and a residential building containing five apartments. The office building is currently in meanwhile use;
- Land formerly home to the Earl's Court Exhibition Centres currently activated by temporary meanwhile uses;
- Empress Place - a mix of offices, commercial and residential properties occupied as temporary meanwhile uses on short-term leases;
- Empress Space - an area of hardstanding used for temporary meanwhile uses, mostly recently for BBC Early Experience;
- Bus Facility - a bus turning and waiting facility;
- Earls Court Community Hub - a community hub in a temporary building opened in June 2022;
- LBD and Ashfield House - A LUL maintenance facility and a TfL training facility;
- 9 Beaumont Avenue - a building in temporary meanwhile use on a short term lease for an interactive theatre experience (The Lost Estate); and
- 175-177 North End Road - one residential unit and four retail units.

7.16 Unemployment is slightly higher in the study area compared to the average for RBKC but is lower than the averages for LBHF and London. The LBHF part of the Site falls within the 10-20 % most deprived areas in England.

7.17 RBKC has met their housing delivery targets in only two of the previous 10 years. LBHF has met their targets in half of the previous 10 years.

7.18 There are 123 nurseries and formal childcare settings in the two boroughs south of the A315. There are also 30 primary schools south of the A315 (16 in LBHF and 14 in RBKC). There are 1,300 surplus places at the primary schools in LBHF (27 % surplus), this is a greater than the 390 surplus places at the primary schools in RBKC (12 % surplus).

7.19 Secondary schools are considered at borough-wide level as older children tend to travel further than primary age pupils to attend school. There are 670 surplus secondary school places in LBHF (8 % surplus) which is greater than the 70 surplus places in RBKC's secondary schools (1 % surplus). LBHF predicts that surplus capacity across the borough's secondary schools is going to increase to 18 % by 2031, whilst RBKC anticipate the need to expand existing secondary schools to meet demand.

7.20 There are 16 GP practices within 1 km of the Site boundary (seven in LBHF and nine in RBKC). Collectively these practices are operating below benchmark provision which suggests there is surplus capacity available.

7.21 There is good provision of leisure and other community facilities within 1 km of the Site boundary with 25 sports facilities including gyms which offer low-cost memberships and 22 community facilities including two libraries and nine community centres/halls.

7.22 The Site is in an area identified as deficient in access to open space and there is also limited existing playspace in the area surrounding the Site, with the majority of existing provision in LBHF.

Early Phases

Demolition and Construction Effects

7.23 In terms of impacts on existing Site uses, the meanwhile uses are temporary and on short-term leases which would conclude prior to commencement of the works. The Earls Court Community Hub would be replaced by a new Community Hub in a permanent building in Plot WB05 once complete. The five apartments at Cluny Mews would be retained and as such would not be lost. Therefore, the effect would not be significant.

7.24 It is estimated that the Early Phases would generate an average of 1,150 construction jobs over the duration of the demolition and construction period. This effect is considered at the Regional scale due to the mobility of demolition and construction workers. Whilst generating additional construction opportunities would be beneficial, at the Regional level, the effect would not be significant.

7.25 Employment and training initiatives to be secured as additional mitigation through the Section 106 Agreement would help local people better access construction job opportunities arising from the Early Phases which would have a beneficial effect at the Local level. Spending by construction workers and supply chain effects would also have beneficial effects. The effects would not be significant.

7.26 Overall, it is considered that the demolition of the existing Early Phases Site and the construction of the Early Phases would result in overwhelmingly beneficial effects on socio-economics and identified receptors, but these would not be significant.

Completed Development Effects

7.27 The Early Phases are expected to deliver a minimum of 1,674 new homes and 696 PBSA bed spaces making a considerable contribution towards the housing supply in LBHF and RBKB. The effect would be significant beneficial.

7.28 The new homes, PBSA, Co-Living units and Older Person Housing units would accommodate an estimated population of 7,206 residents including 335 early years children, 258 primary age children and 149 secondary age children.

7.29 The Early Phases would provide community/social infrastructure floorspace which would include nursery provision to help meet demand, therefore the effect on nurseries would be beneficial, but not significantly so. There is substantial surplus capacity in local primary schools and therefore the scale of demand for primary school places generated by the Early Phases is unlikely to result in a significant adverse effect. There is some surplus capacity in borough secondary schools, the majority of which is in LBHF, and therefore the demand for secondary school places generated by the Early Phases is also unlikely to result in a significant adverse effect.

7.30 The new residents of the Early Phases would result in the need for the equivalent of up to four GPs. As existing GPs are operating below benchmark provision indicating some surplus capacity the effect of demand from the Early Phases on existing provision would be adverse, but not significantly so.

7.31 Additional mitigation in the form of financial contributions towards secondary education and primary healthcare capacity could be secured through the Section 106 Agreement if deemed necessary.

7.32 The Early Phases would deliver new community/social infrastructure floorspace and new leisure floorspace. Playspace would be provided within the Detailed Component Plots and for the Outline Development Zones, the Applicant has committed to deliver 10 m^2 playspace per child. These effects would be beneficial, but not significantly so.

7.33 The Early Phases would also deliver substantial new open space in an area of open space deficiency which would have a significant beneficial effect.

7.34 The Early Phases are expected to accommodate a minimum of 5,635 jobs on-site which would result in a net increase of 4,860 jobs in LBHF and RBKC (a significant beneficial effect at Local and Borough levels) and a net increase of 2,400 jobs in London (a beneficial effect at Regional Level).

7.35 The new residential population, students and employees would have a beneficial effect on the local economy through increased spending, which is estimated to be in the region of £22 million for annual household spending, £5.5 million for annual student spending and £15 million for annual employee spending (based on 4,860 net additional jobs in the boroughs). This is considered to have a significant beneficial effect.

7.36 Overall, it is considered that the completed Early Phases would result in overwhelmingly beneficial socio-economic effects, with significant effects in respect of housing delivery, employment generation and open space delivery.

Cumulative Effects

7.37 The cumulative schemes, together with the Early Phases, would deliver new housing, generate employment and have a beneficial effect on the local economy through additional spending. Residual socio-economic cumulative would be beneficial, but no additional significant effects are likely in addition to those reported for the Early Phases in isolation.

All Phases

Demolition and Construction Effects

7.38 The demolition and construction works would result in the displacement of the existing Site uses. The meanwhile uses are temporary and on short-term leases which would conclude prior to commencement of the works. The Earls Court Community Hub would be replaced by a new Community Hub in a permanent building in Plot WB05 once complete. The five apartments at Cluny Mews would be retained and as such would not be lost. LBD and Ashfield House would be demolished. The uses are proposed to be relocated to other parts of TfL's operational estate. 175-177 North End Road could be retained or demolished. On a worst-case basis, if demolished, the existing occupants would be displaced. All occupants are on short-term leases which would conclude prior to demolition. This is assessed to have an adverse, but not significant, effect.

7.39 It is estimated that the All Phases would generate an average of 1,150 construction jobs over the duration of the demolition and construction period. This effect is considered at the Regional scale due to the mobility of construction workers. Whilst generating additional construction opportunities would be beneficial, at the Regional level the effect would not be significant.

7.40 Employment and training initiatives would be secured as additional mitigation through the Section 106 Agreement which would help local people better access construction job opportunities arising from the All Phases. The effect would be beneficial at the Local level. Spending by construction workers and supply chain effects would also have beneficial effects. The effects would not be significant.

7.41 Overall, it is considered that the demolition of the existing All Phases Site and the construction of the All Phases would result in beneficial effects on socio-economics and identified receptors, but these would not be significant.

Completed Development Effects

7.42 The All Phases are expected to deliver a minimum of 2,650 new homes and 696 PBSA bed spaces making a considerable contribution towards the housing supply in LBHF and RBKB. The effect would be significant beneficial.

7.43 The new homes, PBSA, Co-Living units and Older Persons Housing units would accommodate an estimated population of 10,785 residents including 497 early years children, 381 primary age children and 217 secondary age children.

7.44 The All Phases would provide community/social infrastructure floorspace which would include nursery provision to help meet demand, therefore the effect on nurseries would beneficia, but not significantly so. There is substantial surplus capacity in local primary schools and therefore the scale of demand for primary school places generated by the Early Phases is unlikely to result in a significant adverse effect. There is some surplus capacity in borough secondary schools, the majority of which is in LBHF, and therefore the demand for secondary school places generated by the Early Phases is also unlikely to result in a significant adverse effect.t.

7.45 The new residents of the All Phases would result in the need for the equivalent of up to six GPs. As existing GPs are operating below benchmark provision indicating some surplus capacity the effect of demand from the Early Phases on existing provision would be adverse, but not significantly so.

7.46 Additional mitigation in the form of financial contributions towards additional secondary education and primary healthcare capacity could be secured through the Section 106 Agreement if deemed necessary.

7.47 The All Phases would deliver new community/social infrastructure floorspace and new leisure floorspace. Playspace would be provided within the Detailed Component Plots and for the Outline Development Zones, the Applicant has committed to deliver 10 m^2 playspace per child..

7.48 The All Phases would also deliver substantial new open space in an area of open space deficiency which would have a significant beneficial effect. The All Phases are expected to accommodate a minimum of 8,460 jobs on-site which would result in a net increase of 6,960 jobs in LBHF and RBKC (a significant beneficial effect at Local and Borough Levels) and a net increase of 3,430 jobs in London (a beneficial effect at Regional Level).

7.49 The new residential population, students and employees would have a beneficial effect on the local economy through increased spending, which is estimated to be in the region of £35 million for annual household spending, £5.5 million for annual student spending and £21 million for annual employee spending (based on 6,960 net additional jobs in the boroughs). This is considered to have a significant beneficial effect.

7.50 Overall, it is considered that the completed Early Phases would result in overwhelmingly beneficial socio-economic effects, with significant effects in respect of housing delivery, employment generation and open space delivery.

Cumulative Effects

7.51 The cumulative schemes, together with the All Phases, would deliver new housing, generate employment and have a beneficial effect on the local economy through additional spending. Residual socio-economic cumulative would be beneficial, but no additional significant effects are likely in addition to those reported for the All Phases in isolation.

Human Health

7.52 A wide variety of direct and indirect factors can influence health, from factors over which the individual has some control, such as lifestyle, to factors influenced by society such as the economy and the built environment. The effects are often wide-ranging and are likely to vary between populations. This means there can be inequalities in health between populations and so the assessment of human health has assessed potential effects on the general population and on the vulnerable groups population.

7.53 In determining 'physical, mental and social wellbeing', external contributory factors, known as 'determinants', have been considered. Determinants are made up of a combination of influences from an individual's society and environment. This assessment has adopted the 'wider determinants of health' model which shows how health spans social, behavioural, economic and institutional components.

7.54 The key areas of potential impacts that have been considered in the assessment comprised the following:

- Health Related Behaviours:
  - Diet and nutrition;
  - Social Environment:
  - Open Space;
  - Leisure and Play;
  - Transport Modes, Access and Connections;
  - Community Safety; Community Identity, Culture, Resilience and Influence;
  - Social Participation, Interaction and Support;
- Bio-physical Environment:
  - Climate Change Mitigation and Adaptation;
  - Air Quality;

  - Water Quality or Availability;
  - Land Quality;
  - Noise and Vibration; and
- Institutional and Built Environment:
  - Health and Social Care Services.

7.55 The local level is made up of the six wards that border the Site. Levels of health and wellbeing differ across the wards and so the assessment has used Census data to identify the most deprived area within each ward. This has been done by looking at the Lower Super Output Areas ('LSOAs')[12]. ' The assessment has taken a worst case approach and selected the most deprived LSOA to represent each ward. The representative LSOAs in LBHF wards are in the most deprived 20 % in England. The RBKC representative LSOAs range from the top 50 % to the top 20 % most deprived.

7.56 The following baseline data for determinants of health are relevant:

- **Diet and Nutrition:** Representative LSOAs in the wards around the Site have high numbers of fast-food shops and tobacconists/ vape stores. There has been an increase in Eligibility for Free School Meals since 2015-2016. Both boroughs have higher percentages of pupils eligible for Free School Meals than London and England. Since 2019-2020 eligibility has been higher in RBKC than in LBHF.
- **Open Space, Leisure and Play:** The representative LSOAs in the wards around the Site have very low proportions of green space.
- **Transport Modes, Access and Connections:** Most households in the representative LSOAs in the wards around the Site do not have a vehicle, which is higher compared to the borough, regional and national averages. Many people either work from home or they have less than 10 km to work. The proportion of people walking and cycling for travel at least three days per week is higher in LBHF and RBKC than the regional and national proportions.
- **Community Safety:** In LBHF the annual rates at the borough level for violent crime and sexual offences, hospital admissions for violent crimes including sexual violence, domestic abuse are higher than, or similar to the regional rates. In RBKC the rates for violent crime and for sexual offences are higher than the regional rates, the rates for hospital admissions for violent crimes including sexual violence are lower than the regional rates and the rates for domestic abuse are the same as the regional rate. The rates for first-time offenders are lower in both LBHF and RBKC than at the regional level. For levels of education and health literacy, all representative local LSOAs have higher percentages of people with 'no qualifications' and lower percentages of people with 'level 4 qualifications and above' than the borough, regional and national values.
- **Community Identity, Culture, Resilience and Influence:** LBHF and RBKC, and the wards surrounding the Site, have rich ethnic and religious diversity.
- **Physical Health:** The prevalence of overweight (including obesity), in Year 6 children is lower in LBHF and RBKC than at the regional level. The percentage of people who reported having a limiting long-term illness or disability is lower in LBHF and RBKC than at the national level. The borough levels for incidence of new sexually transmitted infections ('STIs') diagnoses (excluding chlamydia aged under 25) is higher in LBHF and RBKC than at the regional level. The HIV diagnosed prevalence rate per 1,000 aged 15 to 59 in 2022 is higher in LBHF and RBKC than at the regional level.
- **Mental Health:** Estimated prevalence of common mental disorders is higher in LBHF and RBKC than at the regional level for people aged 16 and over and for people aged 65 and over. The proportion of people who described themselves as feeling lonely often, always, or some of the time is higher in LBHF and RBKC than at the regional level.
- **Employment:** The percentage of people in employment for 2022-2023 in LBHF is higher than the regional level. The percentage in RBKC is lower than the regional level.
- **Health Literacy and Education:** The percentage at LBHF and RBKC levels, from 1 to 4, is lower than its regional equivalent for all levels except 'level 4 qualifications and above'. Some of the representative LSOAs in the wards around the Site, in both LBHF and RBKC, have higher percentages of people with

12 Lower layer Super Output Areas (LSOAs) are statistical grouping used by the Office of National Statistics and are made up of groups of Output Areas (OAs), usually four or five. They comprise between 400 and 1,200 households and have a usually resident population between 1,000 and 3,000 people.

'no qualifications' and lower percentages of people with 'level 4 qualifications and above' than the borough, regional and national values.

7.57 The assessment considered two receptor groups:

- General Population:
  - Existing off-site population: residents, workers and visitors;
  - Future on-site occupants: residents, construction industry workers, non-residential workers, visitors;
- Vulnerable Group Population
  - Children and young people;
  - Parents and carers;
  - Older people;
  - Social disadvantaged people (experiencing discrimination for example due ethnicity, sexuality, gender; social isolation; low income);
  - People with existing poor health (physical and mental health);
  - People with access and geographical factors, e.g.:
  - Unemployed or shift workers who are most likely to spend more of their time at home and who are living in close proximity to the Site; and
  - Existing on- and off-site occupants in close proximity to the Site.

Early Phases

Demolition and Construction Effects

7.58 The assessment has concluded that the Early Phases demolition and construction is likely to give rise to:

- Temporary adverse, but not significant, effects in respect of:
  - Air Quality (for the vulnerable groups population);
  - Climate Change Mitigation and Adaption (for the vulnerable groups population); and
  - Transport Modes, Access and Connections (for the general population and vulnerable groups population);
- Temporary adverse, significant effects in respect of Noise and Vibration (for the vulnerable population group);
- Temporary beneficial, but not significant, effects in respect of:
  - Community Identity, Culture, Resilience and Influence (for the general population);
  - Social Participation, Interaction and Support (for the general population);
- Temporary beneficial, significant, effects in respect of:
  - Community Identity, Culture, Resilience and Influence (for the vulnerable groups population); and
  - Social Participation, Interaction and Support (for the vulnerable groups population).

7.59 The efforts that have been made by the Applicant to work with and to engage local communities and the relationships established would be of great importance in managing the demolition and construction works of the Early Phases to minimise disturbance to surrounding communities, and vulnerable population groups, and address complaints promptly and sensitively.

Completed Development Effects

7.60 The assessment has concluded that the Early Phases completed development is likely to give rise to:

- Permanent adverse, but not significant, effects in respect of:
  - Air Quality (for the vulnerable groups population);
  - Noise and Vibration (for the vulnerable groups population);
  - Health and Social Care (for the general population and vulnerable groups population);
- Permanent beneficial, but not significant, effects in respect of:

  - Climate Change Mitigation and Adaption (for the Local Level vulnerable population group);
  - Diet and Nutrition (for the general population and vulnerable groups population);
  - Community Safety (for the general population and vulnerable groups population);
  - Open Space, Leisure and Play (for the general population);
  - Community Identity, Culture, Resilience and Influence (for the general population);
  - Social Participation, Interaction and Support (for the general population);
- Permanent beneficial and significant effects in respect of:
  - Climate Change Mitigation and Adaptation (for the Site Level vulnerable groups population);
  - Diet and Nutrition (for the vulnerable groups population);
  - Open Space, Leisure and Play (for the vulnerable groups population);
  - Community Identity, Culture, Resilience and Influence (for the vulnerable groups population);
  - Social Participation, Interaction and Support (for the vulnerable groups population);
  - Transport Modes, Access and Connections (for the general population); and
  - Transport Modes, Access and Connections (for the vulnerable groups population).

7.61 The efforts made by the Applicant to work with and to engage local communities and the relationships established have been important in the design of the Early Phases and they would continue to be important.

Cumulative Effects

7.62 No additional significant cumulative effects are expected to arise.

All Phases

Demolition and Construction Effects

7.63 The assessment has concluded that the All Phases demolition and construction is likely to give rise to:

- Temporary adverse, but not significant, effects in respect of:
  - Air Quality (for the vulnerable groups population);
  - Climate Change Mitigation and Adaption (for the vulnerable groups population); and
  - Transport Modes, Access and Connections (for the general population and vulnerable groups population);
- Temporary adverse, significant effects in respect of Noise and Vibration (for the vulnerable population group);
- Temporary beneficial, but not significant, effects in respect of:
  - Community Identity, Culture, Resilience and Influence (for the general population);
  - Social Participation, Interaction and Support (for the general population);
- Temporary beneficial, significant, effects in respect of:
  - Community Identity, Culture, Resilience and Influence (for the vulnerable groups population); and
  - Social Participation, Interaction and Support (for the vulnerable groups population).

7.64 The efforts that have been made by the Applicant to work with and to engage local communities and the relationships established would be of great importance in managing the demolition and construction works of the All Phases to minimise disturbance to surrounding communities, and vulnerable population groups, and address complaints promptly and sensitively.

Completed Development Effects

7.65 The assessment concludes that the All Phases completed development is likely to give rise to:

- Permanent adverse, but not significant, effects in respect of -
  - Air Quality (for the vulnerable groups population);
  - Noise and Vibration (for the vulnerable groups population);

  - Health and Social Care (for the general population and vulnerable groups population);
- Permanent beneficial, but not significant, effects in respect of -
  - Climate Change Mitigation and Adaption (for the Local Level vulnerable population group);
  - Diet and Nutrition (for the general population and vulnerable groups population);
  - Community Safety (for the general population and vulnerable groups population);
  - Open Space, Leisure and Play (for the general population);
  - Community Identity, Culture, Resilience and Influence (for the general population);
  - Social Participation, Interaction and Support (for the general population);
  - Transport Modes, Access and Connections (for the general population)
- Permanent beneficial and significant effects in respect of:
  - Climate Change Mitigation and Adaption (for the Site Level vulnerable groups population);
  - Diet and Nutrition (for the vulnerable groups population);
  - Open Space, Leisure and Play (for the vulnerable groups population);
  - Community Identity, Culture, Resilience and Influence (for the vulnerable groups population);
  - Social Participation, Interaction and Support (for the vulnerable groups population);
  - Transport Modes, Access and Connections (for the general population); and
  - Transport Modes, Access and Connections (for the vulnerable groups population).

7.66 The efforts made by the Applicant to work with and to engage local communities and the relationships established have been important in the design of the All Phases and they would continue to be important.

Cumulative Effects

7.67 No additional significant cumulative effects are expected to arise.

Transport and Accessibility

7.68 In terms of pedestrian connectivity, it is possible to reach the key transport corridors on the edge of the Site within five minutes. From there, destinations such as Earls Court, West Kensington, Hammersmith and Fulham can be reached within a 20 min walk, whilst parts of Central London and further locations in West London are within a 30 min walking distance.

7.69 For cyclists, the Site is well located with regard to cycle accessibility, in terms of time and distance, to Central London. However, when reviewing at a more detailed level, it is evident that in sections the existing network is not well connected with the Site and links within the study area are vehicular dominant. The closest Santander Cycle Hire Docking Station is at Trebovir Road approximately 100 m from the Site access on Warwick Road.

7.70 In terms of public transport, TfL's online WEBCAT tool shows public transport accessibility level ('PTAL')[13] scores of 2 and 3 adjacent to the LBD; 4 and 5 on North End Road and around West Kensington Station; and 6b and 6a across the eastern and southern areas of the Site around Earl's Court Station and West Brompton Station.

7.71 In terms of rail provision, the Site benefits from access to three London Underground Stations directly adjacent to the Site boundary. These stations provide access to the District Line, with Earl's Court Station also providing access to the Piccadilly Line. In addition, London Overground and National Rail services are accessible from West Brompton Station.

7.72 A review of the off-street parking areas in the study area identified that whilst some parking locations allow users to book in advance, not all guarantee space availability on the day. A parking survey of the local area identified a total of 904 on-street car parking spaces in the survey area.

7.73 In accordance with industry guidance, the following effects have been assessed for links in the study area:

- severance;
- driver delay;

13 A PTAL of 1a indicates extremely poor access by public transport, and a PTAL of 6b indicates excellent access by public transport.

- pedestrian and cyclist delay;
- pedestrian and cyclist amenity;
- pedestrian fear and intimidation;
- accidents and safety;
- parking and servicing demand; and
- public transport demand and capacity.

7.74 The methodology adopted in the assessment seeks to apply a quantified approach to the assessment of environmental effects. This has the benefit of offering a transparent methodology for how environmental effects are derived. However, the disbenefit of this approach is that it does not allow for the consideration of embedded management and control measures. These management and control measures consist of the adoption and implementation of a Framework Travel Plan ('FTP'), Framework Delivery and Servicing Plan ('FDSP'), Framework Parking Design and Management Plan ('FPDMP') and Construction Traffic Logistics Plan ('CTLP') as part of the Proposed Development.

7.75 These documents set out strategies to manage the impacts of the Proposed Development and where possible to reduce the impacts of the Proposed Development on the surrounding transport network. Professional judgement has therefore been applied to the consideration of the mitigating effects of these embedded mitigation measures.

7.76 No hazardous and dangerous loads are anticipated due to the nature and type of the Proposed Development and have therefore been scoped out of the assessment as agreed during the EIA Scoping process.

7.77 The scope of the assessment has been defined through extensive consultations with transport stakeholders (TfL, RBKC and LBHF) as part of strategic transport modelling required by the transport stakeholders. The strategic transport modelling have fed into a parallel, but separate Transport Assessment, prepared in accordance with TfL guidelines

7.78 Through a screening exercise, 67 highway links were identified for assessment. The links were considered as follows:

- 32 Links considered as part of the Early Phases and All Phases demolition and construction assessment,
- 26 Links considered as part of the Early Phases completed development assessment, and
- 42 Links considered as part of the All Phases completed development assessment.

7.79 Consideration was also given to public transport demand and capacity.

7.80 Multi-modal trip generation calculations were made on the basis of a worst-case interpretation of the Proposed Development's area schedule for the Early Phases and the All Phases.

7.81 In terms of baseline transport data, a full and extensive set of transport surveys was collected in March 2022. These surveys covered a series of locations around the Site in both the RBKC and LBHF boroughs. The data collection was completed at the appropriate time and covered all key roads, including but not limited to Warwick Road, Old Brompton Road, Lillie Road, North End Road, A4 West Cromwell Road, Earls Court Road, as well as side streets and further junction counts.

7.82 A validation exercise for the 2022 modelled highway data was undertaken using independent and available 2022 Department for Transport ('DfT') count information. Only DfT sites that had surveyed 2022 information were selected (i.e. those that used estimated flows were discounted) and a comparison against the modelled 2022 baseline line information was completed.

7.83 The exercise concluded that the information used for the highway assessment was representative of other independent counts available. In most cases, the 2022 modelled outputs reported higher traffic volumes than other DfT counts. This is considered robust and provides a suitable basis for use. A similar comparison was completed using recently available 2023 DfT counts. This exercise also confirmed that 2022 surveyed baseline data is robust and fit for use within the modelling and assessments.

7.84 The demolition and construction assessment has been based on a worst-case.

Early Phases

Demolition and Construction Effects

7.85 The Early Phases demolition and construction traffic has been assessed for the future year of 2028, which has been aligned with the future modelled baseline of 2031, at which time peak demolition and construction heavy duty vehicle ('HDV') flows are anticipated. However, parts of the Early Phases would be completed and occupied by 2031. The level of occupancy cannot be predicted accurately and therefore the fully completed Early Phases operational development flows were also added to the 2031 future baseline, in addition to the 2028 peak HDV flows, representing a beyond worst-case scenario for assessment purposes.

7.86 During the demolition and construction stage there are likely to be temporary effects in relation to pedestrian severance, driver delay, pedestrian and cyclist delay and pedestrian and cyclist amenity due to the changes in traffic on the highway network. There may also be temporary diversions required to walking and cycling routes during the demolition and construction stage; however, all existing access would be retained.

7.87 The CEMP and CTLP would outline measures to avoid and reduce the potential impacts from demolition and construction traffic and would be secured by means of appropriately worded planning conditions. A framework CMP and framework CTLP accompany the Hybrid Planning Applications but detailed ones would come forward at the RMA stage. These detailed CEMP and CTLPs would set out the measures required to address impacts arising from those specific plots.

7.88 The CTLP and CEMP as discussed above and within ES Chapter 5: Demolition and Construction Description prioritises the reduction in impact from construction activities on the study area. As such, the measures and strategies that could be adopted as part of the CTLP and CEMP would be extensive.

Severance

7.89 The assessment concluded that there would not be significant adverse effects at 31 of the 32 links considered. Link 1 – Empress Approach was identified as likely to experience a temporary significant adverse effect.

Driver Delay

7.90 The assessment concluded that there would not be significant adverse effects at nine of the nine key junctions considered. In addition, the assessment concluded that there would not be significant adverse effects at six of the eight corridors in respect of journey time changes.

7.91 As no additional mitigation is being proposed, the following two corridor routes would likely experience temporary significant adverse driver delay effects as a result of increased journey times:

- Route 3 NB - Along A3220 Warwick Rd; and
- Route 5 EB - Along A3218 Lillie Rd.

Pedestrian and Cyclist Delay

7.92 The assessment concluded that there would not be significant adverse effects at 31 of the 32 links considered. Link 1 – Empress Approach would likely experience a temporary significant adverse effect.

Pedestrian and Cyclist Amenity

7.93 The assessment concluded that there would not be significant adverse effects at 31 of the 32 links considered. As no additional mitigation is being proposed, Link 1 – Empress Approach would likely experience a temporary significant adverse effect.

Pedestrian Fear and Intimidation

7.94 None of the 32 links assessed would experience significant effects.

Accidents and Safety

7.95 The assessment concluded that at 31 of the 32 links considered, there is unlikely to be any significant adverse pedestrian and cyclist amenity effects. As no additional mitigation is being proposed, Link 1 – Empress Approach would likely experience a temporary significant adverse effect.

Parking and Servicing Demand

7.96 The assessment concluded that there would not be significant adverse effects at 31 of the 32 links considered. As no additional mitigation is being proposed, Link 1 – Empress Approach would likely experience a temporary significant adverse effect.

Public Transport Demand and Capacity

7.97 The assessment concluded that there would not be significant adverse effects following the application of additional mitigation. The completed development additional mitigation is relevant here due to the assumption that the Early Phases would be completed and occupied in 2031.

Completed Development Effects

7.98 The assessment of the completed Early Phases has utilised the 2031 future year and appropriate TfL modelling outputs as agreed with TfL and during the EIA Scoping process.

7.99 The embedded mitigation of the Early Phases would deliver the following:

- Creation of a people first public realm that prioritises active travel across the Early Phases Site;
- Creation of a new network of pedestrian and cycle friendly streets and public realm;
- Provision and access to minimum car parking;
- Delivery of cycle parking in accordance with London Plan requirements; and
- Implementation of a FTP, FDSP and FPDMP.

7.100 The embedded mitigation would have direct, permanent, long-term beneficial effects across the Early Phases Site and study area, including the ability for new and existing users in the area to navigate east / west through the Early Phases.

7.101 The following additional mitigation measures, targeted at pedestrians, cyclists and public transport users, have been considered in the assessment of the Early Phases to identify likely residual effects:

- Widening of the crossing on the western side of the A4 West Cromwell Road/Warwick Road junction;
- Widening of the crossings and incorporating into the traffic signal staging of the northern and western arm crossings at the Warwick Road/Old Brompton Road junction;
- Reconfiguration of Empress Approach to improve pedestrian and cycle connectivity within the Early Phases Site;
- Improvements to Lillie Road, including widening of the bridge, public realm and crossings;
- A two-way cycle track on Warwick Road connecting the Early Phases Site with Trebovir Road and Earls Court Square (where Quietway 15 can be accessed);
- Improved cycle facilities on Old Brompton Road and Lillie Road between Empress Approach and Eardley Crescent.
- Reconfiguration of the Lillie Road Bus Layover and inclusion of a commencing bus stop within the Layover for the Route 190;
- Improvements to bus services and/or bus infrastructure;
- West Brompton Station upgrades which may include the following:
  - Reconfiguration of the ticket hall providing additional gates, new ticket machines and re-provision of staff accommodation;
  - New high-level walkway replacing the stairs to Platform 3 and providing a widened walkway to Platform 4 as well as a further connection to Platform 1; and
  - Potential for step-free access.

7.102 The changes to Lille Road Bus Layover would have a material benefit on both new and existing users in the area.

7.103 The additional mitigation is anticipated to be delivered through financial contributions secured by S106 Agreement or planning condition (if required).

Severance

7.104 The assessment has concluded that there would not be significant adverse effects at 25 of the 26 links considered. Taking into consideration management measures contained within the FTP, FDSP and FPDMP, Link 1 - Empress Approach, would still experience significant adverse effects.

7.105 The effect is considered acceptable given the improvements of the existing baseline situation. This link would be one of the main access points to the Early Phases, as well as being a public transport interchange and access point to the neighbouring ESB. Accordingly, a degree of severance is likely. As the link is part of the Early Phases, it is largely internal and not on the external highway network.

Driver Delay

7.106 The assessment has concluded that there would not be significant adverse effects at nine of the nine key junctions considered.

7.107 In respect of journey times on the corridor routes assessed, the implementation of additional pedestrian and cycle mitigation is likely to increase journey times. Accordingly the following links within the study area would likely experience significant adverse residual driver delay effects:

- Route 1 EB - Along A4;
- Route 5 WB - Along A3218 Lillie Rd.
- Route 3 NB - Along A3220 Warwick Rd; and
- Route 5 EB - Along A3218 Lillie Rd.

7.108 No highway capacity enhancement measures have been identified as part of the additional mitigation. The additional mitigation proposed on the highway network focuses on pedestrian and cyclist amenity. Delay to vehicles may increase along the corridors assessed as a result of the additional mitigation. This is due in part to the introduction of measures that improve conditions for pedestrians and cyclists which inherently add further delay to vehicular journey times.

Pedestrian and Cyclists Delay

7.109 The assessment has concluded that there would not be significant adverse effects at 25 of the 26 links considered. Taking into consideration management measures contained within the FTP, FDSP and FPDMP, Link 1 - Empress Approach, would still result in significant adverse effects, for the reasons set out above.

Pedestrian and Cyclist Amenity

7.110 The assessment has concluded that there would not be significant adverse effects at 25 of the 26 links considered. Taking into consideration management measures contained within the FTP, FDSP and FPDMP, Link 1 - Empress Approach, would still result in significant effects, for the reasons set out above.

Fear and Intimidation

7.111 None of the 26 links assessed would experience significant adverse effects.

Accidents and Safety

7.112 None of the 26 links assessed would experience significant adverse effects.

Parking and Servicing Demand

7.113 Following the application of additional mitigation, none of the 26 links considered, would experience significant effects.

Public Transport Demand and Capacity

7.114 The assessment has concluded that following the application of additional mitigation, there would not be significant adverse effects at 11 of the 11 bus stops considered.

7.115 West Brompton Station would benefit from the additional mitigation package. The modelling of the Earl's Court existing station layout shows that the Warwick Road Entrance could accommodate the demand associated with the All Phases. Key issues identified included congestion levels at District Line platform 3-4 and around the

stairs between the Piccadilly Line mezzanine and District Line platforms. However, these are existing issues and not as a result of the Proposed Development. The micro-simulation modelling shows minimal impacts at this station and as such no mitigation is considered necessary at Earl's Court station to accommodate the Early Phases scenario. Accordingly, applying professional judgement, the effect on all rail stations would not be significant adverse.

Summary

7.116 Overall it is considered that the approach taken aligns with policy set out within the London Plan and Mayor's Transport Strategy by prioritising mitigation that benefits pedestrians, cyclists and public transport users. The consequence of taking this approach is that significant adverse effects remain on some highway links that would affect vehicle drivers.

Cumulative Effects

7.117 The cumulative effects of the Early Phases and cumulative schemes with an influence on the study area has been considered within the assessment, based upon a methodology agreed with RBKC, LBHF and TfL. Cumulative schemes have been incorporated within the modelling process and have been fully accounted for in the assessment.

All Phases

Demolition and Construction Effects

7.118 The All Phases demolition and construction effects conclusion would be the same as the Early Phases stage, as the same worst-case is relevant to both development scenarios.

Completed Development Effects

7.119 The assessment of the All Phases Completed Development stage has utilised the 2041 future year and appropriate TfL modelling outputs as agreed with TfL and during the EIA Scoping process.

7.120 The embedded mitigation for the All Phases would be the same as the Early Phases, but would additionally provide a new north/south access from Lillie Road to North End Road. The accessibility and permeability of the existing Site would be materially enhanced.

7.121 The additional mitigation measures for the All Phases would be the same as the Early Phases, with the following additional measures to be delivered:

- Improved pedestrian crossing facilities at the A4 West Cromwell Road junction with North End Road in the form of widened pedestrian crossings; and
- A new pedestrian and cycle crossing across the A4 West Cromwell Road between the junction with North End Road and Warwick Road.
- Improvements at West Kensington Station which may comprise the following:
  - Reconfiguration of the ticket hall providing additional gates, new ticket machines and re-provision of staff accommodation;
  - New high-level walkway and staircase to replace the stairs to Platform 1; and
  - Potential for step-free access.

7.122 The additional mitigation is anticipated to be delivered through financial contributions secured by S106 Agreement or planning condition (if required).

Severance

7.123 The assessment has concluded that there would not be significant adverse effects at 41 of the 42 links considered. Link 1 – Empress Approach would likely experience significant adverse effects.

Driver Delay

7.124 The assessment has concluded that there would not be significant adverse effects at nine of the nine key junctions considered.

7.125 In respect of corridor journey times, the additional mitigation would increase driver delay effects with significant adverse effects reported at the following receptors:

- Route 2 NB - Along B317 North End Rd);
- Route 2 SB - Along B317 North End Rd);
- Route 3 NB - Along A3220 Warwick Rd;
- Route 5 EB - Along A3218 Lillie Rd; and
- Route 5 WB - Along A3218 Lillie Rd.

7.126 Consistent with the approach for the Early Phases, no highway capacity enhancement measures have been identified as part of the additional mitigation. The additional mitigation proposed on the highway network focuses on pedestrian and cyclist amenity. Delay to vehicles may increase along the corridors assessed as a result of the additional mitigation. This is due in part to the introduction of measures that improve conditions for pedestrians and cyclists which inherently add further delay to vehicular journey times.

Pedestrian and Cycle Delay

7.127 The assessment has concluded that there would not be significant adverse effects at 41 of the 42 links considered. Link 1 – Empress Approach would likely experience significant adverse effects.

Pedestrian and Cyclist Amenity

7.128 The assessment has concluded that there would not be significant adverse effects at 41 of the 42 links considered. Link 1 – Empress Approach would likely experience significant adverse effects.

Fear and Intimidation

7.129 The assessment concluded that there would not be significant adverse effects at any of the 42 links considered, considering the beneficial effects of the proposed package of additional mitigation.

Accidents and Safety

7.130 The assessment concluded that there would not be significant adverse effects at any of the 42 links considered, considering the beneficial effects of the proposed package of additional mitigation.

Change in Parking and Servicing Demand

7.131 The assessment concluded that at 42 of the 42 links considered, there is unlikely to be any significant adverse accidents and safety effects.

Change in Public Transport Demand and Capacity

7.132 In the absence of additional mitigation, the following bus stops would experience significant adverse effects:

- West Cromwell Road (Stop E);
- West Brompton Station (Stop P);
- Empress State Building (Stop BB);
- Empress State Building (Stop BA);
- West Kensington Estate (Stop BS); and
- West Kensington (Stop T).

7.133 Financial contributions, secured by S106 agreement or condition (if required) for improvements to bus services and/or bus infrastructure would be targeted at the stops with the greatest impact. Applying professional judgement, this would reduce the effects to not significant.

7.134 West Brompton and West Kensington Station would benefit from the additional mitigation package.

7.135 The modelling of the Earl's Court existing station layout shows that the Warwick Road Entrance could accommodate the demand associated with the All Phases. Key issues identified included congestion levels at District Line platform 3-4 and around the stairs between the Piccadilly Line mezzanine and District Line platforms. However, these are existing issues and not as a result of the Proposed Development. The micro-simulation modelling shows minimal impacts at this station and as such no mitigation is considered necessary

at this station to accommodate the All Phases scenario. Accordingly, applying professional judgement, the effect on all rail stations would not be significant adverse.

Overall Summary

7.136 Whilst a number of links and transport nodes have been identified in isolation that would experience direct, permanent, long-term adverse effects, a package of additional mitigation measures are proposed. These measures are targeted at pedestrians, cyclists and public transport users. This prioritisation results in some significant residual effects on vehicle users remaining which have not been mitigated.

7.137 The significant effect at Empress Approach is considered acceptable given the improvements of the existing baseline situation. This link would be one of the main access points to the All Phases, as well as being a public transport interchange and access point to the neighbouring ESB. Accordingly, a degree of severance is likely. As the link is part of the All Phases, it is largely internal and not on the external highway network.

7.138 The embedded mitigation would have a beneficial effect on the Al Phase Site and study area, including the ability for new and existing users to navigate east / west and north / south through the All Phases.

Cumulative Effects

7.139 The cumulative effects of the All Phases and schemes with an influence on the study area has been considered within the assessment, based upon a methodology agreed with RBKC, LBHF and TfL. Cumulative schemes have been incorporated within the modelling process and have been fully accounted for in the assessment.

Air Quality

7.140 The Site is located within borough wide Air Quality Management Areas (‘AQMA’) declared by both LBHF and RBKC due to exceedances of National Air Quality targets. In addition to this the north-west of the Site is located within a LBHF air quality focus area, and the east of the Site is located within a RBKC air quality focus area, indicating potential for high air pollutant concentrations in these areas.

7.141 The Site is located within the Ultra Low Emission Zone (‘ULEZ’) which was launched in April 2019 and extended in August 2023. The Site is affected by vehicle emissions from the surrounding highway network, as well as emissions from the combined heat and power (‘CHP’) energy centre at the ESB.

7.142 Air quality monitoring data obtained from LBHF and RBKC show nitrogen dioxide concentrations measured at roadside monitoring locations in the study area have decreased between 2016 to 2022.

7.143 The potential impacts and likely effects of the Proposed Development on air quality and the suitability of the Site for the proposed uses (in particular residential) have been assessed. Potential emission sources have been identified and assessed in the context of existing air quality and the nature and location of existing and future receptors.

7.144 The main air pollutants of concern are dust and particulate matter with an aerodynamic diameter of less than 10 microgram (PM_{10}), typically generated during demolition and construction activities and from industrial sources, and nitrogen dioxide (NO_2), and particulate matter with an aerodynamic diameter of less than 10 and 2.5 ($PM_{2.5}$) micrograms, typically generated by road traffic and combustion engines emissions.

7.145 The following potential impacts and associated likely effects of the Proposed Development on local air quality have been assessed for the Early Phases and All Phases:

- Demolition and construction dust impacts and associated effects on human health, ecological sites, and amenity;
- Traffic emissions generated on the main road network from the Proposed Development and the associated effects on human health and ecological receptors;
- Completed development stage emergency generator emissions; and
- The Site’s suitability for sensitive human health receptors as a result of potential air pollutant impacts from the operation of nearby existing industrial activity, as well as impacts from traffic emissions in the study area.

7.146 Air quality modelling has been carried out to account for the future predicted air quality concentrations (levels) with the completed development and cumulative schemes in place.

Early Phases

Demolition and Construction

7.147 Based on criteria set out in the Institute of Air Quality Management, the demolition and construction stage presents a high risk of adverse effects from dust impacts in the absence of appropriate mitigation. With the implementation of suitable mitigation measures, which have been set out within ES Chapter 5: Demolition and Construction Description and would be secured by means of appropriately worded planning conditions, it is anticipated that dust impacts would be appropriately avoided, reduced and/or mitigated. Accordingly, the Early Phases demolition and construction dust effects would not be significant.

7.148 The assessment of vehicle movements for the demolition and construction stage have been based on peak vehicle movements for the Early Phases demolition and construction stage occurring in combination with Early Phases completed development stage traffic, which represents a worst-case. The peak is anticipated to occur in 2028. Concentrations of NO_2, PM_{10} and $PM_{2.5}$ have been predicted for a number of worst-case locations representing sensitive receptors. Assessment of the predicted change in air pollutant concentrations at sensitive human health receptors due to Early Phases demolition and construction traffic have concluded that the effects would not be significant.

7.149 Concentrations of NO_2, PM_{10} and $PM_{2.5}$ have been predicted for future on-site sensitive receptor locations introduced during the Early Phases while construction continues on-site. The predicted concentrations, which include contributions from road traffic, the WLL, the adjacent MOPAC energy centre and background concentrations, would be well below the relevant national air quality targets at all future on-site receptor locations during the Early Phases demolition and construction stage. The Early Phases Site is therefore considered acceptable for the proposed uses during the Early Phases demolition and construction stage.

7.150 The Early Phases demolition and construction stage assessment confirms there would be no need for additional mitigation for dust and amenity, road traffic emissions or Site suitability.

7.151 Accordingly, it is considered that the demolition of the existing Early Phases Site and construction of the Early Phases would not give rise to significant effects on air quality at sensitive receptors.

Completed Development

7.152 Concentrations of NO_2, PM_{10} and $PM_{2.5}$ as a result of testing of the emergency generators would be below national air quality targets due to the limited operating hours and therefore, the effects would not be significant.

7.153 Concentrations of NO_2, PM_{10} and $PM_{2.5}$ have been predicted for a number of worst-case locations representing sensitive receptors. Assessment of the predicted change in air pollutant concentrations at sensitive human health receptors due to Early Phases completed development traffic have concluded that the effects would not be significant.

7.154 Concentrations of NO_2, PM_{10} and $PM_{2.5}$ have been predicted for future on-site sensitive receptor locations introduced during the Early Phases. The predicted concentrations, which include emissions from road traffic, the WLL, MOPAC energy centre and background concentrations, would be well below the relevant national air quality targets at all of the future on-site receptor locations during the Early Phases completed development stage. The Early Phases Site is therefore considered acceptable for the proposed uses during the Early Phases completed development stage.

7.155 The change in nitrogen oxide (NO_x) concentrations, nitrogen deposition and acid deposition due to Early Phases completed development traffic at sensitive ecological receptors has been concluded to be not significant.

7.156 The Early Phases completed development assessment confirms there would be no need for additional mitigation.

7.157 The Early Phases are considered air quality neutral in accordance with the GLA guidelines.

7.158 Accordingly, it is considered that the completed Proposed Development would not give rise to significant effects on air quality at sensitive receptors.

Cumulative

7.159 Significant cumulative effects as a result of demolition and construction dust are unlikely to occur as each scheme is anticipated to employ standard dust and construction mitigation in accordance with standard best practice and relevant guidance such that the individual demolition and construction stage effects would not be significant, in isolation or in combination.

7.160 Traffic flows associated with cumulative schemes have been included in the assessed traffic data explicitly or through background growth factors within the TfL modelling. Road traffic cumulative effects on air quality are not predicted to be significant at sensitive receptors for the Early Phases demolition and construction stage or completed development stage.

All Phases

Demolition and Construction

7.161 Based on criteria set out in the Institute of Air Quality Management, the demolition and construction stage presents a high risk of adverse effects from dust impacts in the absence of appropriate mitigation. With the implementation of suitable mitigation measures, which have been set out within ES Chapter 5: Demolition and Construction Description and would be secured by means of appropriately worded planning conditions, it is anticipated that dust impacts would be appropriately avoided, reduced and/or mitigated. Accordingly, the All Phases demolition and construction effects would not be significant.

7.162 The assessment of vehicle movements for the demolition and construction stage have been based on peak vehicle movements for the All Phases demolition and construction stage in combination with Early Phases completed development stage traffic, which represents a worst-case. The peak is anticipated to occur in 2028. Concentrations of NO_2, PM_{10} and $PM_{2.5}$ have been predicted for a number of worst-case locations representing sensitive receptors. Assessment of the predicted change in air pollutant concentrations at sensitive human health receptors due to All Phases demolition and construction traffic have concluded that the effects would not be significant.

7.163 Concentrations of NO_2, PM_{10} and $PM_{2.5}$ have been predicted for future on-site sensitive receptor locations introduced during the All Phases. The predicted concentrations, which include contributions from road traffic, the WLL, the adjacent MOPAC energy centre and future year background concentrations, would be well below the relevant national air quality targets at all future on-site receptor locations during the All Phases demolition and construction stage. The All Phases Site is therefore considered acceptable for the proposed uses during the All Phases demolition and construction stage.

7.164 The All Phases demolition and construction stage assessment confirms there would be no need for additional mitigation for dust and amenity, road traffic emissions or Site suitability.

7.165 Accordingly, it is considered that the demolition of the existing site and construction of the All Phases would not give rise to significant effects on air quality at sensitive receptors.

Completed Development

7.166 Concentrations of NO_2, PM_{10} and $PM_{2.5}$ as a result of testing of the emergency generators would be below national air quality targets due to the limited operating hours and therefore, the effects would not be significant.

7.167 Concentrations of NO_2, PM_{10} and $PM_{2.5}$ have been predicted for a number of worst-case locations representing sensitive receptors. Assessment of the predicted change in air pollutant concentrations at sensitive human health receptors due to All Phases completed development traffic have concluded that the effects would not be significant.

7.168 Concentrations of NO_2, PM_{10} and $PM_{2.5}$ have been predicted for future on-site sensitive receptor locations introduced during the All Phases. The predicted concentrations, which include contributions from road traffic, the WLL, the adjacent MOPAC energy centre and future year background concentrations, would be well below the relevant national air quality targets at all the future on-site receptor locations during the All Phases completed development stage. The All Phases Site is therefore considered acceptable for the proposed uses during the All Phases completed development stage.

7.169 Considering the limited spatial extent of potentially adverse nitrogen deposition effects at Brompton Cemetery, the change in NO_x concentrations, nitrogen deposition and acid deposition due to All Phases completed development traffic at sensitive ecological receptors is considered not significant.

7.170 The All Phases completed development assessment confirms there would be no need for additional mitigation.

7.171 The All Phases are considered air quality neutral in accordance with the GLA guidelines.

7.172 Accordingly, it is considered that the completed All Phases would not give rise to significant effects on air quality at sensitive receptors.

Cumulative

7.173 Significant cumulative effects as a result of demolition and construction dust are unlikely to occur as each scheme is anticipated to employ standard dust and construction mitigation in accordance with standard best practice and relevant guidance such that the individual demolition and construction stage effects would not be significant, in isolation or in combination.

7.174 Traffic flows associated with cumulative schemes have been included in the assessed traffic data explicitly or through background growth factors s within the TfL modelling. Road traffic cumulative effects on air quality are not predicted to be significant at existing sensitive receptors for the All Phases demolition and construction stage and completed development stage.

Noise and Vibration

7.175 The Site is affected by several sources of existing noise and vibration including road traffic on the local road network, rail traffic on the railway lines running through the Site and underground network, aircraft travelling to and from Heathrow Airport, and industrial operations at LBD.

7.176 Environmental noise surveys were undertaken at the site and surrounding sensitive to establish the existing noise climate. Vibration surveys were undertaken with the site adjacent to key railway corridors.

7.177 The survey data has been used to inform the assessment of demolition and construction stage noise effects and completed development stage noise effects. The survey results have also informed an assessment of the suitability of the Site for residential development from a noise and vibration perspective.

7.178 Noise prediction modelling has been carried out to account for the future predicted road traffic noise levels with the completed development and cumulative schemes in place. These predictions have informed the outline mitigation strategies for proposed residential façades.

7.179 For the sake of proportionality and to avoid duplication of results; where noise sensitive receptor groups have been reported as likely to experience different scales of effect over the duration of the demolition and construction programme, the worst-case effect has been summarised below.

Early Phases

Demolition and Construction

7.180 Based on the expected demolition and construction methods proposed, the impacts of the demolition and construction stage of the Early Phases have been quantified using industry standard noise emission data for typical demolition and construction activities.

7.181 Demolition and construction noise impacts are presented as the worst-case daytime demolition and construction noise levels that is expected to occur within each year of the development programme accounting for all Detailed Plots and Outline Development Zones that could be active during that year, informed by the time slices.

7.182 Considering the proposed embedded mitigation measures that are incorporated into the Early Phases (as set out in ES Chapter 5: Demolition and Construction Description), daytime demolition and construction activity noise is expected to result in significant adverse effects including at parts of the Detailed Component Plots and proposed Outline Component Development Zones. Night-time noise from demolition and construction works required for works near railways would also be expected to result in significant adverse effects.

7.183 Given the extent and quantity of likely significant effects originating from demolition and construction activity noise, additional mitigation has been considered as part of the assessment. This mitigation supplements the

embedded mitigation and comprises additional constraints on methods of work close to the site boundary and noise monitoring with real-time alerts at key receptor locations.

7.184 Once the additional mitigation is accounted for, daytime demolition and construction noise is expected to result in significant residual adverse effects at 17 existing residential receptor groups, two existing non-residential receptors, three proposed Detailed Component Plots and six proposed Outline Component Development Zones. Night-time noise from demolition and construction works required for works near railways is expected to result in significant residual adverse effects at 17 existing residential receptor groups.

7.185 In the absence of contractors being appointed, it is noted that the assessment is based on the following:

- Development programme and time slices, with a high degree of overlap of demolition and construction activities across plots assumed; and
- Worst-case reporting of demolition and construction activity noise effects where NSR groups are likely to experience different scales of effect over the duration of the demolition and construction works.

7.186 The Applicant would seek to minimise the occurrence of significant adverse effects throughout the demolition and construction programme by implementation of best practicable means, secured through appropriately worded planning conditions.

7.187 Demolition and construction vibration impacts have been quantified through application of the empirical methods within best practice guidance considering compaction and vibratory piling as two activities that could result in high levels of ground-borne vibration.

7.188 Considering the proposed embedded mitigation measures that are set out in ES Chapter 5: Demolition and Construction Description, demolition and construction vibration is expected to result in potential significant adverse effects including at parts of the Detailed Component Plots and Outline Component Development Zones.

7.189 As with demolition and construction noise, additional mitigation has been considered as part of the assessment to reduce the potential for significant adverse effects. This mitigation supplements the embedded mitigation and comprises constraints on timing of high vibration works, liaison with receptor occupants, building condition surveys and vibration monitoring with real-time alerts at key receptor locations.

7.190 Once this additional mitigation is accounted for, demolition and construction vibration is expected to result in significant residual adverse effects at nine existing residential receptor groups, one existing non-residential receptors, five proposed Detailed Component Plots and six proposed Outline Component Development Zones.

7.191 The changes in demolition and construction road traffic noise that would occur during the demolition and construction stage are not expected to result in any significant adverse effects.

Completed Development

7.192 The completed development noise impacts of the Early Phases have been quantified considering the following:

- Noise from building services systems associated with the Early Phases;
- Noise from commercial activity associated with the proposed cultural venues; and
- Changes in road traffic noise at the completed development stage.

7.193 In addition, an assessment of the suitability of the Site for residential use from a noise and vibration perspective, has been undertaken.

7.194 An outline assessment of noise from building services associated with the Early Phases identified that, with embedded mitigation (as presented in ES Volume 3: Technical Appendix 11.6), significant adverse effects could occur at 22 existing residential receptors and exceed the expected requirements of both local planning authorities. For this reason, additional mitigation in the form of limiting sound power levels for each potential roof plant area were defined, with the likely constraints on building services design then described. With this additional mitigation, to be secured by means of appropriately worded planning conditions, the Site would be suitable for residential use.

7.195 An worst-case outline assessment of commercial activity noise from proposed commercial, entertainment, community, leisure and cultural uses within the Early Phases identified that the potential for significant adverse effects at ten existing residential receptors should these uses operate with doors open. However, with embedded

mitigation comprising operational management of open doors (kept closed or lobbied) and the adoption of minimum sound insulation ratings of external elements to key commercial activity spaces, commercial activity at existing receptors would not be significant.

7.196 It has been assumed that licencing arrangements would restrict the use of these facilities during the night-time (23:00-07:00), and that further assessment of night-time noise effects from individual venues within the Outline Component could be secured through suitably worded planning conditions. On this basis, no significant residual effects are expected.

7.197 The management of open doors (kept closed or lobbied) and adoption of the minimum sound insulation rating has been assumed as good acoustic design principles that would be adopted as embedded mitigation within the Proposed Development. However, considering the flexibility that the Applicant is seeking in respect of the location of land uses (event space/entertainment venues could be located at lower ground level, ground floor level or upper levels etc.), the impacts on NSRs could vary, especially where these spaces/venues are not delivered in close proximity to existing or proposed NSRs. Additional noise impact assessments would be undertaken at the RMA stage and alternative mitigation measures could be reviewed and explored, if required, to ensure appropriate mitigation is delivered to avoid significant effects. These further additional assessments would be secured by planning condition.

7.198 The changes in road traffic noise that would occur during the completed development stage are not expected to result in any significant adverse effects.

7.199 The site suitability assessment has identified that significant effects due to noise and vibration can be avoided through appropriate design of the proposed buildings. This would be secured through suitably worded planning conditions.

Cumulative

7.200 Four cumulative schemes have been identified within 300 m of the Early Phases and the cumulative effects of the Proposed Development and these cumulative schemes have been assessed qualitatively.

7.201 These cumulative schemes have been assessed as sensitive receptors where these schemes lie within the study area.

7.202 In respect of transport related noise effects, the reported demolition and construction stage and completed development stage noise assessment conclusions have accounted for cumulative schemes.

All Phases

Demolition and Construction

7.203 Based on the expected demolition and construction methods proposed, the impacts of the demolition and construction stage of the All Phases have been quantified using industry standard noise emission data for typical demolition and construction activities.

7.204 Demolition and construction noise impacts are presented as the daytime demolition and construction noise level that is expected to occur within each year of the development programme accounting for all detailed plots and Development Zones that could be active during that year, informed by the time slices.

7.205 Considering the proposed embedded mitigation measures that are incorporated into the All Phases (as set out in ES Chapter 5: Demolition and Construction Description), daytime demolition and construction noise is expected to result in potential significant adverse effects including at parts of the Detailed Component Plots and proposed Outline Component Development Zones. Night-time noise from demolition and construction works required for works near railways is expected to result in potential significant adverse effects including at parts of the Outline Component Development Zones

7.206 Given the extent and quantity of likely significant effects originating from demolition and construction activity noise, additional mitigation has been considered as part of the assessment. This mitigation supplements the embedded mitigation and comprises additional constraints on methods of work close to the site boundary and noise monitoring with real-time alerts at key receptor locations.

7.207 Once the additional mitigation is accounted for, daytime demolition and construction noise is expected to result in significant residual adverse effects at 27 residential receptor groups, two non-residential receptors, three

proposed Detailed Component Plots and 11 proposed Outline Component Development Zones. Night-time noise from demolition and construction works required for works near railways is expected to result in significant residual adverse effects at 21 existing residential receptor groups and four proposed Outline Component Development Zones.

7.208 In the absence of contractors being appointed, it is noted that the assessment is based on the following:

- Development programme and time slices, with a high degree of overlap of demolition and construction activities across plots assumed; and
- Worst-case reporting of demolition and construction activity noise effects where NSR groups are likely to experience different scales of effect over the duration of the demolition and construction works.

7.209 The Applicant would seek to minimise the occurrence of significant adverse effects throughout the demolition and construction programme by implementation of best practicable means secured through appropriately worded planning conditions.

7.210 Demolition and construction vibration impacts have been quantified through application of the empirical methods within best practice guidance considering compaction and vibratory piling as two activities that could result in high levels of ground-borne vibration.

7.211 Considering the proposed embedded mitigation measures that are set out in ES Chapter 5: Demolition and Construction Description, demolition and construction vibration is expected to result in potential significant adverse effects including at parts of the Detailed Component Plots and Outline Component Development Zones.

7.212 As with demolition and construction noise, additional mitigation has been considered as part of the assessment to reduce the potential for significant adverse effects. This mitigation supplements the embedded mitigation and comprises constraints on timing of high vibration works, liaison with receptor occupants, building condition surveys and vibration monitoring with real-time alerts at key receptor locations.

7.213 Once this additional mitigation is accounted for, demolition and construction vibration is expected to result in significant residual adverse effects at 14 existing residential receptor groups, two non-residential receptors, and nine proposed Detailed Component Plots and Outline Component Development Zones.

7.214 The changes in demolition and construction road traffic noise that would occur during the demolition and construction stage are not expected to result in any significant adverse effects.

Completed Development

7.215 The completed development noise impacts of the All Phases have been quantified considering the following:

- Noise from building services systems associated with the Early Phases;
- Noise from commercial activity associated with the proposed cultural venues;
- Noise from the proposed road-to-rail vehicle (‘RRV’) facility; and
- Changes in road traffic noise at the completed development stage.

7.216 In addition, an assessment of the suitability of the Site for residential use from a noise and vibration perspective, has been undertaken.

7.217 An outline assessment of noise from building services associated with the All Phases identified that, with embedded mitigation (as presented in ES Volume 3: Technical Appendix 11.6), potential significant adverse effects could occur at 22 existing residential receptors and exceed the expected requirements of both local planning authorities. For this reason, additional mitigation in the form of limiting sound power levels for each potential roof plant area were defined, with the likely constraints on building services design then described. With this additional mitigation, to be secured by appropriately worded planning conditions, noise from building services would result in negligible adverse effects at all receptors within the study area.

7.218 An worst-case outline assessment of commercial activity noise from proposed commercial, entertainment, community, leisure and cultural uses within the All Phases identified that the potential for significant adverse effects at ten existing residential receptors should these uses operate with doors open. However, with embedded mitigation comprising operational management of open doors (kept closed or lobbied) and the adoption of

minimum sound insulation ratings of external elements to key commercial activity spaces, commercial activity at existing receptors would not be significant.

7.219 It has been assumed that licencing arrangements would restrict the use of these facilities during the night-time (23:00-07:00), and that further assessment of night-time noise effects from individual venues within the Outline Component could be secured through suitably worded planning conditions. On this basis, no significant residual effects are expected.

7.220 The management of open doors (kept closed or lobbied) and adoption of the minimum sound insulation rating has been assumed as good acoustic design principles that would be adopted as embedded mitigation within the Proposed Development. However, considering the flexibility that the Applicant is seeking in respect of the location of land uses (event space/entertainment venues could be located at lower ground level, ground floor level or upper levels etc.), the impacts on NSRs could vary, especially where these spaces/venues are not delivered in close proximity to existing or proposed NSRs. Additional noise impact assessments would be undertaken at the RMA stage and alternative mitigation measures could be reviewed and explored, if required, to ensure appropriate mitigation is delivered to avoid significant effects. These further additional assessments would be secured by planning condition.

7.221 An outline assessment of noise from the proposed RRV facility was carried out based on noise emission levels determined from RRV operations at another TfL operational depot. Embedded mitigation requires that further assessment of noise from the proposed facility is carried out at the reserved matters stage to minimise the likelihood of adverse effects. The effects of proposed RRV facility noise are not expected to be significant when accounting for context and frequency of use.

7.222 The changes in road traffic noise that would occur during the completed development stage are not expected to result in any significant adverse effects.

7.223 The site suitability assessment has identified that significant effects due to noise and vibration can be avoided through appropriate design of the proposed buildings. This can be secured through suitably worded planning conditions.

Cumulative

7.224 Four cumulative schemes have been identified within 300 m of the Early Phases and the cumulative effects of the Proposed Development and these cumulative schemes have been assessed qualitatively.

7.225 These cumulative schemes have been assessed as sensitive receptors where these schemes lie within the study area.

7.226 In respect of transport related noise effects, the reported demolition and construction stage and completed development stage noise assessment conclusions have accounted for cumulative schemes.

Ecology

7.227 The Site is dominated by developed land, sealed surfaces, artificial unvegetated unsealed surface and buildings; along with smaller areas of scrub (mixed and bramble), neutral grassland, modified grassland, sparely vegetated land, built up areas and gardens, broadleaved trees, line of trees, non-native hedgerows and standing waters.

7.228 The Site includes two Sites of Importance for Nature Conservation (‘SINC’); a small portion, approximately 1 % of the West London Line South of Earl’s Court SINC and approximately 20 % of the West London Line in Brompton SINC. These SINCs are located within the WLL railway cuttings directly adjacent to the railway line.

7.229 The Site is used by common invertebrate species, common nesting and foraging birds, small numbers of foraging and commuting bats and potentially by hedgehogs. Black redstart are not present at the Site.

7.230 The assessment has been informed by ecological surveys which served to confirm sensitive receptors within the study area, the on-site habitats and the potential for protected species. In addition, a biodiversity net gain (BNG) assessment of the Detailed Component landscape design and of the Outline Component’s UGF Illustrative Landscape Scheme was undertaken.

7.231 On-site habitats are of negligible, site and local level importance and protected species potential is limited to common bird species and foraging bats. Black redstart surveys confirmed that this protected bird species is not present at the Site.

7.232 A tree survey was undertaken which identified eight high value amenity trees, 86 medium amenity value trees, 60 low amenity value trees, and four unsuitable trees on-site. Tree species include common native and non-native species such as; Lime, Cherry, Leyland Cypress, Monterey Cypress, London Plane, Rowan, Sycamore and Norway Maple.

Early Phases

Demolition and Construction Effects

7.233 During demolition and construction works, direct and indirect adverse effects on ecology and biodiversity are likely to arise as a result of loss and degradation of habitat, loss of connectivity, disturbance and pollution. Potential impacts during the demolition and construction stage would be managed by industry good practice measures and controls as set out in ES Chapter 5: Demolition and Construction Description to minimise the potential for adverse effects.

7.234 The demolition and construction programme for the Early Phases is anticipated to be approximately 13 years. Habitat removal for the Early Phases would be sequenced, with new replacement habitat installed at the earliest opportunity within the appropriate season.

7.235 This would result in temporary adverse effect on designated sites, habitats, invertebrates, birds, bats and other mammals. The effects would not be significant.

Completed Development Effects

7.236 The completed development stage would generate, beneficial effects for ecology and biodiversity. These would arise as a result of the habitat creation and enhancement measures that would be provided as part of the landscaping scheme. Beneficial effects are likely in respect of the following receptors:

- Designated Sites;
- Habitats;
- Invertebrates;
- Birds; and
- Bats.

7.237 Substantial landscaping would be delivered during the Early Phases. This would be introduced through a series of landscaped open spaces, squares, public realm (boulevards, crescents, lanes) and communal residential amenity terraces, with nature playing a key component. Habitats within landscaped open spaces would vary, including areas of mature trees, grassland, climate resilient vegetation and a post-industrial garden area with recreated open-mosaic habitat. SuDS would be included with natural drainage features including rain gardens, detention ponds and swales. These would incorporate biodiversity features, where possible, as well as integrating play, and inviting learning about nature. New habitats would maintain and enhance the north-south green corridor adjacent to the WLL.

7.238 The Applicant has committed to the following for the Early Phases:

- A minimum 10 % Biodiversity Net Gain (BNG) would be achieved, as detailed in the BNG Assessment Report.
- A minimum UGF score of 0.4 would be targeted.
- Delivery of a landscape-led design to ensure ecologically valuable habitats are, where possible, retained, protected and enhanced and otherwise created.
- Enhancement of the on-site Site of Importance for Nature Conservation (SINCs) habitats, incorporating a diverse landscape and planting strategy into the Early Phases which would functionally link with the existing SINC habitats and/or mitigate for small losses.
- Provision of substantiable biodiverse green infrastructure including biodiverse roofs, green walls, rain gardens, swales with diverse native planting, hedgerows and other landscape planting of high

biodiversity value. These features would be designed to maximise biodiversity value, with native species prioritised, non-native species of known biodiversity value otherwise used, and including features such as standing deadwood, log piles/stumperies, boulders, stone and sand piles and exposed soil which would benefit invertebrates and birds. The inclusion of fruiting species would support foraging birds, and the inclusion of dense areas of vegetation would support nesting birds. A wide range of native species would be utilised, providing flowers across the season to support pollinators. Night-flowering species would be included to attract moths and in turn support foraging bats.

- Planting of 144 trees within the Early Phases Detailed Component.
- Indicatively, planting of 723 trees Early Phases Outline Component based on the UGF Illustrative Landscape Scheme.
- Sensitive lighting design following guidance and principles provided in the BCT and Institution of Lighting Professionals Guidance, with an assumption against lighting of areas of important retained and new habitats and minimising light spill from lit areas.
- Interpretation boards to inform the public of sensitive and ecologically important habitats on-site.
- Appropriate maintenance/management and monitoring of retained habitats and of created wildlife habitats to maximise biodiversity value (including adherence to a Habitat Management and Monitoring Plan ('HMMP')). This would include monitoring and management of biodiverse roofs and replacement SINC habitat to ensure they remain suitable for wildlife.
- Demonstrating net gain for biodiversity to be managed appropriately throughout the completed development stage to maintain value, for a minimum of 30 years and beyond.
- Introducing a minimum of 50 bat boxes.

7.239 Overall, the Early Phases would result in beneficial effects on designated sites, habitats, invertebrates, birds and bats, although not significantly so. The BNG assessment confirms that a net gain of 90.38 % can be achieved based on the Detailed Component landscape design and UGF Illustrative Landscape Scheme.

Cumulative Effects

7.240 Cumulative effects are not considered likely to be significant for ecology.

All Phases

Demolition and Construction Effects

7.241 During demolition and construction works, adverse effects on ecology biodiversity are likely to arise as a result of loss and degradation of habitat, loss of connectivity, disturbance and pollution. Potential impacts during the demolition and construction stage would be managed by industry good practice measures and controls to limited direct habitat loss, noise, vibration, and visual disturbance (including lighting) habitat degradation and pollution.

7.242 Potential impacts during the demolition and construction stage would be managed by industry good practice measures and controls as set out in ES Chapter 5: Demolition and Construction Description to minimise the potential for adverse effects.

7.243 The demolition and construction programme for the All Phases is anticipated to be approximately 19 years. Habitat removal for the All Phases would be sequenced, with new replacement habitat installed at the earliest opportunity within the appropriate season during the demolition and construction programme.

7.244 This would result in non-significant adverse effect on designated sites, habitats, invertebrates, birds, bats and other mammals.

Completed Development Effects

7.245 Following completion of the development, beneficial effects on biodiversity are likely to arise as a result of the introduction of habitat creation and enhancement. Beneficial effects are likely in respect of the following receptors:

- Designated Sites;
- Habitats;
- Invertebrates;

- Birds; and
- Bats.

7.246 Substantial landscaping would be delivered during the All Phases. This would be introduced through a series of landscaped open spaces, squares, public realm (boulevards, crescents, lanes), communal residential amenity terraces, with nature playing a key component. Habitats within landscaped open spaces would vary, including areas of mature trees, grassland, climate resilient vegetation and a post-industrial garden area with recreated open-mosaic habitat. SuDS would be included with natural drainage features including rain gardens, detention ponds and swales. These would incorporate biodiversity, as well as integrating play, and inviting learning about nature. New habitats would maintain and enhance the north-south green corridor adjacent to the WLL.

7.247 The Applicant has committed to the following for the All Phases:

- A minimum 10 % BNG would be achieved, as detailed in the BNG Assessment Report.
- A minimum UGF score of 0.4 would be targeted.
- Delivery of a landscape-led design to ensure ecologically valuable habitats are, where possible, retained, protected and enhanced and otherwise created.
- Enhancement of the on-site SINC habitats, incorporating a diverse landscape and planting strategy into the Early Phases which would functionally link with the existing SINC habitats and/or mitigate for small losses.
- Provision of significant biodiverse green infrastructure including biodiverse roofs, green walls, rain gardens, swales with diverse native planting, hedgerows and other landscape planting of high biodiversity value. These features would be designed to maximise biodiversity value, with native species prioritised, non-native species of known biodiversity value otherwise used, and including features such as standing deadwood, log piles/stumperies, boulders, stone and sand piles and exposed soil which would benefit invertebrates and birds. The inclusion of fruiting species would support foraging birds, and the inclusion of dense areas of vegetation would support nesting birds. A wide range of native species would be utilised, providing flowers across the season to support pollinators. Night-flowering species would be included to attract moths and in turn support foraging bats.
- Planting of 144 trees within the All Phases Detailed Component.
- Indicatively planting of 1,343 trees within the All Phases Outline Component based on the UGF Illustrative Landscape Scheme.
- Sensitive lighting design following guidance and principles provided in the BCT and Institution of Lighting Professionals Guidance Note, with an assumption against lighting of areas of important retained and new habitats and minimising light spill from lit areas.
- Interpretation boards to inform the public of sensitive and ecologically important habitats on-site.
- Appropriate maintenance/management and monitoring of retained habitats and of created wildlife habitats to maximise biodiversity value (including adherence to a Habitat Management and Monitoring Plan (HMMP)). This would include monitoring and management of biodiverse roofs and replacement SINC habitat to ensure they remain suitable for wildlife.
- Demonstrating net gain for biodiversity to be managed appropriately throughout the completed development stage to maintain value, for a minimum of 30 years and beyond.
- Introducing a minimum of 50 bat boxes.

7.248 Overall, the All Phases would result in beneficial effects on designated sites, habitats, invertebrates, birds and bats, although not significantly so. The BNG assessment confirms that a net gain of 98.97 % can be achieved based on Detailed Component landscape design and UGF Illustrative Landscape Scheme.

Cumulative Effects

7.249 Cumulative effects are not considered likely to be significant for ecology.

Ground Conditions

7.250 On-site historical land uses primarily comprise rail infrastructure in the north, west, centre and the various forms of the Earl’s Court Exhibition Centres in the east.

7.251 The Site is not located within a groundwater protection area.

7.252 The majority of the Site has been subject to historical investigation as part of the Consented Scheme, including the demolition of the previous Earls Court Exhibition Centres. It is therefore well understood from a contamination perspective.

7.253 Completed development and inter-project cumulative effects were scoped out of the assessment.

7.254 Risks to future Site users and adjacent Site users is considered to be Low to Moderate due to the areas of soft landscaping being proposed as part of the Proposed Development which could create potential contamination pathways. There is the potential for ground gas to be present on-site owing to the presence of Made Ground, potential fuel spills from on-site tanks and the historical land uses. The risk from ground gas to future site users and adjacent site users is considered to be Low to Moderate.

7.255 There is considered to be a Moderate risk to demolition and construction workers and maintenance workers during the redevelopment of the Site.

7.256 The Proposed Development would include areas of soft landscaping. In these areas rainfall would be able to infiltrate though Made Ground deposits which could aid the vertical migration of contaminants from shallow soils to underlying groundwater. Given this, the risk to groundwater is considered to be Low to Moderate.

7.257 The Site is underlain by the London Clay Formation which has the potential to contain elevated sulphate levels, therefore, there is the potential for chemical attack on below ground concrete. Given the historical uses of the Site, there is the potential for hydrocarbons to be present in shallow soils which have the potential to permeate into plastic pipes. The risk to building fabric is considered to be Low to Moderate.

7.258 Given the historical land uses and the unknown quantity and composition of Made Ground at the Site, the risk to plant life is considered to be Moderate.

7.259 Given the identified off-site sources of contamination, there is the potential for on-site receptors to be influenced. The overall risk from off-site sources is considered to be Low to Moderate.

7.260 The Site is located within an area deemed to be at a High risk of unexploded ordnance (UXO).

7.261 The contamination potential and risk profile of the Site is considered typical for a central London brownfield site. The Site is not considered to be grossly contaminated.

Early Phases

Demolition and Construction

7.262 During demolition and construction works, there is the potential for ground conditions to impact demolition and construction workers, on- and off-site users and controlled waters (ground water and surface water features).

7.263 Potential effects to the demolition and construction workers and adjacent Site users would be mitigated through the adoption of standard practice site management controls (to be secured by means of the CEMP), further ground investigation, detailed risk assessment, confirmation of active contamination pathways, the implementation of a remediation strategy (if confirmed to be required), as well as the implementation of a Detailed Unexploded Threat Assessment.

7.264 Potential effects to controlled waters would be mitigated through the implementation a foundation works risk assessment (‘FWRA’) to assess the risks to controlled waters from piling activities. Furthermore, additional mitigation measures comprising the use of clean drilling techniques and pressure testing would be employed during the construction of the ambient loop system (including the thermal heat boreholes).. In addition, radon mitigation measures would be adopted within the detailed design comprising waterproofing of the basement structures.

7.265 These embedded mitigation measures are considered standard for brownfield sites and would be secured by means of appropriately worded planning conditions.

7.266 Overall, it is considered that the demolition of the existing Site and construction of the Earl Phases would not give rise to significant effects on the identified receptors on the basis that the embedded mitigation measures are implemented.

All Phases

Demolition and Construction

7.267 During demolition and construction works, there is the potential for ground conditions to impact demolition and construction workers, on- and off-site users and controlled waters.

7.268 Potential effects to the demolition and construction workers and adjacent Site users would be mitigated through the adoption of standard practice site management controls (to be secured by means of a CEMP), further ground investigation, detailed risk assessment, confirmation of active contamination pathways, the implementation of a remediation strategy (if identified as required), as well as the implementation of a Detailed Unexploded Threat Assessment.

7.269 Potential effects to controlled waters would be mitigated through the implementation of a FWRA to assess the risks to controlled waters from piling activities. Furthermore, additional mitigation measures comprising the use of clean drilling techniques and pressure testing would be employed during the construction of the ambient loop system (including the thermal heat boreholes). In addition, radon mitigation measures would be adopted within the detailed design comprising waterproofing of the basement structures.

7.270 These embedded mitigation measures are considered standard for brownfield sites and would be secured by means of appropriately worded planning conditions.

7.271 Overall, it is considered that the demolition of the existing Site and construction of the All Phases would not give rise to significant effects on the identified receptors assuming that the mitigation measures are implemented.

Water Resources

7.272 The Site is located partially within Flood Zone 2 and Flood Zone 3a; however, it is located within a defended area where the Thames Tidal Barrier and river walls mitigate the flood risk.

7.273 The River Thames is located approximately 1.5 km south of the Site. In addition, Counters Creek is shown to have historically flowed through the Site; however it was drained and filled between 1828 and 1863.

Early Phases

Demolition and Construction

7.274 The predominant flood risk in the study area is from sewer and surface water flooding. Whilst some parts of the Early Phases are located within Flood Zone 3a, the study area benefits from flood defences such that the risk of fluvial or tidal flooding would be effectively managed during the demolition and construction stage.

7.275 Given that the baseline conditions at the Early Phases Site (large areas of made ground drained through a combination of infiltration and pumping to the local sewer network) are comparable to what would typically be expected at a construction site, the effect of the demolition and construction stage to surface water run-off rates, therefore on- and off-site flood risk, would not be significant. Groundwater pumping may be needed during basement construction; however, likely effects would be proportionately mitigated through the implementation of the CEMP.

7.276 The temporary surface water drainage that would be provided through demolition and construction would be of a similar nature and offer a comparable degree of surface water flood protection to sub-surface and at-grade rail infrastructure as the existing on-site drainage. Therefore effects to these assets in terms of water resources and flood risk, would not be significant.

7.277 Potable water demand and foul water generation during demolition and construction is not likely to be significant relative to the available capacity of the respective local water supply and combined sewer networks considering the historic use of the Early Phases Site as a major exhibition centre. With the phased implementation of the proposed surface water drainage strategy, surface water run-off rates from the Early Phases Site would gradually decrease as construction progresses, providing a slight betterment in terms of impact on local drainage infrastructure. Furthermore, the quality of surface water run-off to the combined sewer network would be managed through implementation of the CEMP such that effects would not be significant.

7.278 During demolition and construction works, there is potential for impacts to groundwater receptors , and groundwater abstractions for non-potable use.

7.279 Potential effects to groundwater quality and quantity would be mitigated through the implementation of embedded mitigation comprising a FWRA and Basement Impact Assessment that would be implemented on completion of a construction stage ground investigation, and as part of RMAs. The ground investigation would be secured by means of appropriately worded planning conditions. The CEMP, which would be implemented by Contractors, would mitigate the potential impacts to the environment.

7.280 Likely effects to groundwater receptors, and groundwater abstractions for non-potable use would be managed, as part of embedded mitigation measures, through further ground investigations that would be undertaken in advance of works commencing on-site. In addition, the implementation of a CEMP, including monitoring of groundwater levels, would mitigate effects. The ambient loop system (including the thermal heat boreholes) would be installed using industry best practice which employs clean drilling techniques to provide protection to controlled waters receptors from contamination (existing and introduced sources), that would be incorporated into the construction method statement.

7.281 There is potential for the Early Phases to impact shallow groundwater receptors affecting groundwater quantity and quality. Potential effects relating to the introduction of groundwater flow barriers (i.e., below ground structures such as basements and piled foundations), infiltration and impact to groundwater quality would be mitigated through the implementation of the CEMP and further ground investigations (ES Chapter 5: Demolition and Construction Description). The embedded mitigations associated with groundwater quality (specifically controlled waters) are provided in ES Chapter 13: Ground Conditions and Soils. Given that much of the existing Early Phases Site drains through infiltration, and the prevailing low groundwater gradients across the Early Phases Site, the effect of the proposed surface water drainage strategy (which includes significant provision for infiltration) on groundwater receptors would not be significant.

7.282 Overall, it is considered that the demolition and construction of the Early Phases would not give rise to significant effects on water resource and identified receptors on the basis that the proposed embedded mitigation measures are implemented.

Completed Development

7.283 The effects on flood risk in the study area in the completed development stage of the Early Phases have been considered in detail in a site-specific flood risk assessment and ODS, which presents an assessment of flood risk associated with the Proposed Development, outlines embedded flood risk mitigations measures and summarises the approach to the on-site management of both surface and foul water drainage. Whilst some parts of the Early Phases are located within Flood Zone 3a, the study area benefits from flood defences such that the risk of fluvial or tidal flooding is residual only, with a very localised area of the Early Phases Site at risk of shallow flooding in the predicted 2100 breach event. To manage this residual risk on-site, minimum building threshold and external levels have been defined where necessary. Land raising is only proposed for the purposes of providing an accessible Site (to span over the WLL), and is not proposed within areas at risk of flooding in the 2100 breach event. Therefore, the change to off-site residual flood levels as a result of the Early Phases would not be significant.

7.284 The flood risk to sensitive receptors within the study area from sewer and surface water flooding would be mitigated through the implementation of the surface water drainage strategy, which would result in a substantial reduction in surface water run-off rates from the completed development. Thus, the Early Phases would have a significant beneficial effect on the risk of sewer and surface water flooding in the study area. The proposed surface water drainage strategy would also provide a slight betterment in terms of flood risk to the sub-surface and at-grade rail infrastructure in the study area and the quality of surface water run-off. While foul water generation rates would substantially increase as a result of the completed development, this would be more than offset by the reduction in peak surface water run-off rates such that the combined net discharge rate from the Early Phases to the combined TW sewer network would be substantially reduced.

7.285 The substantial potable water demand that would be generated by the Early Phases would be managed in a sustainable manner through rainwater harvesting, grey-water recycling and water efficient fixings. The water supply strategy has been developed through consultation with TW to agree an approach that minimises the risk of upstream reinforcement for the water network and allows on-site infrastructure to be sized efficiently for the

Early Phases. Given that TW is a third party, regulated utility provider who own and operate the water supply infrastructure that serves the Early Phases Site and would need to provide consent for any new connections in line with their processes and controls, the effect of the increase in potable demand on water supply infrastructure would not be significant.

7.286 Overall, it is considered that the completed Early Phases would not give rise to significant adverse effects on water resource and identified receptors assuming that proposed embedded mitigations are implemented. Significant beneficial effects in respect of off-site flood risk and existing drainage infrastructure would result from the implementation of the proposed surface water drainage strategy for the Early Phases.

Cumulative

7.287 Review of the cumulative schemes has concluded that there would be no significant cumulative adverse effects in relation water resources; however, there would be significant cumulative beneficial effects in respect of off-site flood risk and drainage infrastructure due to the implementation of sustainable surface water drainage strategies and the resulting reduction in surface water run-off from these development sites in the completed development stage.

All Phases

Demolition and Construction

7.288 The predominant flood risk in the study area is from sewer and surface water flooding. Whilst a substantial portion of the All Phases Site is located within Flood Zone 3a, the study area benefits from flood defences such that the risk of fluvial or tidal flooding would be effectively managed during the demolition and construction stage.

7.289 Given that the baseline conditions at the All Phases Site (comprising hardstanding, roof areas and areas of made ground drained through a combination of infiltration and pumping to the local sewer network) are comparable to what would typically be expected at a construction site, the effect of the demolition and construction stage to surface water run-off rates, therefore on- and off-site flood risk, would not be significant. Groundwater pumping may be needed during basement construction; however, likely effects would be proportionately mitigated through the implementation of the CEMP. The temporary surface water drainage that would be provided through demolition and construction would be of a similar nature and offer a comparable degree of surface water flood protection to sub-surface and at-grade rail infrastructure as the existing on-site drainage. Therefore effects to these assets in terms of water resources and flood risk would not be significant.

7.290 Potable water demand and foul water generation during demolition and construction is not likely to be significant relative to the available capacity of the respective local water supply and combined sewer networks considering the current and historic uses of the All Phases Site. With the phased implementation of the proposed surface water drainage strategy, surface water run-off rates from All Phases Site would gradually decrease as construction progresses, providing a slight betterment in terms of impact on local drainage infrastructure. Furthermore, the quality of surface water run-off to the combined sewer network would be managed through implementation of the CEMP such that effects would not be significant.

7.291 Likely effects to groundwater quality and quantity on the superficial deposit and bedrock aquifers would be mitigated through the implementation of embedded mitigation comprising a FWRA and Basement Impact Assessment that would be implemented on completion of a construction stage ground investigation, and as part of detailed planning applications respectively. The ground investigation would be secured by means of appropriately worded planning conditions. The CEMP, which would be implemented by the contractors, would mitigate the potential impacts to the environment.

7.292 Likely effects to groundwater receptors and groundwater abstractions for non-potable use would be managed, as part of embedded mitigation measures, through further ground investigations that would be undertaken in advance of works commencing on-site. In addition, the implementation of a CEMP, including monitoring of groundwater levels, would mitigate potential effects. The ambient loop system (including the thermal heat boreholes), would be installed using industry best practice which employs clean drilling techniques to provide protection to controlled waters receptors from contamination (existing and introduced sources), that would be incorporated into the construction method statement.

7.293 There is potential for the All Phases to impact to shallow groundwater receptors affecting groundwater quantity and quality. Potential effects relating to the introduction of groundwater flow barriers (i.e., below ground

structures such as basements and piled foundations), infiltration and impact to groundwater quality would be mitigated through the implementation of the CEMP and further ground investigations (ES Chapter 5: Demolition and Construction Description). The embedded mitigations associated with groundwater quality (specifically controlled waters) are provided in ES Chapter 13: Ground Conditions and Soils. Given that much of the existing All Phases Site drains through infiltration, and the prevailing low groundwater gradients across the All Phases Site, the effect of the proposed surface water drainage strategy (which includes significant provision for infiltration) on groundwater receptors would not be significant.

7.294 Overall, it is considered that the demolition and construction of the All Phases would not give rise to significant effects on water resource and identified receptors on the basis that the proposed embedded mitigation measures are implemented.

Completed Development

7.295 The effects on flood risk in the study area in the completed development stage of the All Phases have been considered in detail in a site-specific flood risk assessment and outline drainage strategy, which presents an assessment of flood risk associated with the Proposed Development, outlines embedded flood risk mitigations measures and summarises the approach to the on-site management of both surface and foul water drainage. Whilst much of the western and northern areas of the All Phases Site sit within Flood Zone 3a, the study area benefits from flood defences such that the risk of fluvial or tidal flooding is residual only, with very localised areas of the All Phases Site at risk of flooding in the predicted 2100 breach event. To manage this residual risk on-site, minimum building threshold and external levels have been defined where necessary. Land raising is only proposed for the purposes of providing an accessible All Phases Site (to span over the WLL and infill cuttings with the LBD). Whilst filling of the cuttings within the LBD locally coincides with areas of predicted flooding in the 2100 breach event, the limited extent of this coincidence is such that the change to off-site residual flood levels as a result of the All Phases would not be significant.

7.296 The flood risk to sensitive receptors within the study area from sewer and surface water flooding would be mitigated through the implementation of the surface water drainage strategy, which would result in a substantial reduction in surface water run-off rates from the completed development. Thus, the All Phases would have a significant beneficial effect on the risk of sewer and surface water flooding in the study area. The proposed surface water drainage strategy would also provide a slight betterment in terms of surface water flood risk to the sub-surface and at-grade rail infrastructure in the study area and the quality of surface water run-off. While foul water generation rates would substantially increase as a result of the completed development, this would be more than offset by the reduction in peak surface water run-off rates such that the combined net discharge rate from the All Phases to the combined TW sewer network would be substantially reduced.

7.297 The substantial potable water demand that would be generated by the All Phases would be managed in a sustainable manner through rainwater harvesting, grey-water recycling and water efficient fixings. The water supply strategy has been developed through consultation with TW to agree an approach that minimises the risk of upstream reinforcement for the water network and allows on-site infrastructure to be sized efficiently for the All Phases. Given that TW is a third party, regulated utility provider who own and operate the water supply infrastructure that serves the All Phases Site, and would need to provide consent for any new connections in line with their processes and controls, the effect of the increase in potable demand on water supply infrastructure would not be significant.

7.298 There is potential for the All Phases to impact shallow groundwater receptors affecting groundwater quantity and quality within the superficial deposit aquifers. Likely effects relating to the introduction of groundwater flow barriers (i.e., below ground structures such as basements and piled foundations), infiltration and impact to groundwater quality would be mitigated through the implementation of CEMP and further ground investigations (ES Chapter 5: Demolition and Construction Description). The embedded mitigation associated with groundwater quality (specifically controlled waters) are provided in ES Chapter 13: Ground Conditions. Given that much of the existing All Phases Site drains through infiltration, and the prevailing low groundwater gradients across the All Phases Site, the effect of the proposed All Phases surface water drainage strategy (which includes significant provision for infiltration) on groundwater receptors is not considered significant.

7.299 Overall, it is considered that the completed All Phases would not give rise to significant adverse effects on water resource and identified receptors assuming that proposed embedded mitigations are secured and implemented.

Significant beneficial effects in respect of off-site flood risk and existing drainage infrastructure would result from the implementation of the proposed surface water drainage strategy for the All Phases.

Cumulative

7.300 Review of the cumulative schemes has concluded that there would be no significant cumulative adverse effects in relation water resources; however, there would be significant cumulative beneficial effects in respect of off-site flood risk and drainage infrastructure due to the implementation of sustainable surface water drainage strategies and the resulting reduction in surface water run-off from the cumulative scheme sites in the completed development stage.

Daylight, Sunlight, Overshadowing, Light Spill and Solar Glare

7.301 A two stage approach has been adopted in relation to the daylight, sunlight and overshadowing assessments, as recommended in national and regional policy and guidance.

7.302 Stage 1 is a calculation to confirm whether a daylight, sunlight or overshadowing impact at a receptor would be noticeable and significant, by applying acontextual industry guideline criteria[14]. This assessment has been undertaken by comparing the change in conditions with the Proposed Development built out, against the existing baseline.

7.303 Stage 2 is a matter of professional judgement and contextual research (based on other broadly comparable residential typologies, caselaw, the recommendations of the acontextual industry standard guidelines, as well as a Pre-Existing Baseline (with the Exhibition Centres on-site) and an Alternative Baseline (in the event that the Consented Scheme is physically implemented on-site)), in order to conclude whether a noticeable impact (as determined by Stage 1) would be acceptable in the particular context of the Site and the receptor properties..

7.304 The eastern and south-eastern parts of the Site (roughly triangular shaped and to the west of the WLL) comprises extensive areas of open hard standing. This area of hard standing was previously occupied by the Earl's Court Exhibition Centres and the buildings at 344-350 Old Brompton Road. This area of the Site is predominantly cleared or comprises low rise buildings. This is uncharacteristic of such an urban location meaning that some of the immediately surrounding receptors receive unobstructed access to daylight and sunlight from across the Site.

7.305 It is also relevant to note that there is an extant consent for the Site and the West Kensington and Gibbs Green Estates were to be redeveloped as part of this Consented Scheme.

7.306 For daylight, the existing baseline values within 438 surrounding existing residential, religious and hotel receptors have been considered. For the Vertical Sky Component (VSC) assessment[15], 55 % windows would meet the acontextual industry standard criterion the existing baseline condition and for the No Sky Line (NSL) assessment[16], 76.9 % rooms, where layouts were obtained, would meet the acontextual industry standard criteria.

7.307 For sunlight, 271 surrounding existing properties have been considered and 83.5 % of the rooms assessed would meet the acontextual industry standard criteria for the Annual and Winter Probable Sunlight Hours (APSH and WPSH) assessment[17] .

7.308 For overshadowing in the existing baseline scenario, there are 400 outdoor private and public amenity areas, of which 281 (70.3 %) would meet the acontextual industry standard criteria of half the area receiving 2 hours + of sun on March 21st .

7.309 These baseline daylight, sunlight and overshadowing compliance values are typical of the receptors, which comprise terraced houses or low-rise apartment buildings, and outdoor amenity areas in an inner-city location, where densification is taking place.

Future Baseline

7.310 The future baseline daylight and sunlight values within the three future residential receptors (cumulative schemes) have been considered.

14 Building Research Establishment Guidelines, 2022.
15 The assessment measures from a single point at the centre of the window, the quantum of sky visible taking into account all external obstructions.
16 The assessment measures from a single point at the centre of the window, the quantum of sky visible taking into account all external obstructions.
17 An assessment that measures the amount of sunlight that a given south-facing window may expect over a year period and during winter.

7.311 In relation to daylight, for VSC 84.3 % windows would meet the BRE recommendation of 27 % in the existing baseline condition and 99.6 % rooms would meet the BRE recommendation for NSL. For sunlight, all rooms would meet the BRE recommendations for APSH and WPSH.

7.312 It is relevant to note that a large portion of the Site is cleared or comprising low rise buildings. This is uncharacteristic of such an urban location, meaning that some receptors receive unobstructed access to daylight and sunlight across the Site.

Early Phases

Demolition and Construction Effects

7.313 During demolition and construction works, daylight, sunlight, overshadowing and solar glare effects would vary, gradually increasing as the building structures are built out and clad, until reaching those effects reported for the Completed Early Phases, representing the worst-case in terms of daylight, sunlight, overshadowing and solar glare effects. Therefore, the daylight, sunlight and overshadowing effects would range from not significant to significant adverse. The solar glare effects would range from not significant to not significant .

7.314 There is potential for temporary, short-medium term light spill effects arising from lighting used during demolition and construction works. This would be controlled through the CEMP, resulting in not significant effects.

Completed Development Effects

7.315 For daylight, Stage 1 of the assessment has concluded that of the 438 properties assessed, there would be no significant adverse effects to 334 properties. Of the remaining 104 properties which would experience noticeable and significant adverse daylight effects, the alternative target criteria assessment (Stage 2) has concluded the following:

- 73 properties would meet the alternative daylight target criteria and would be acceptable in consideration of context;
- 25 properties would substantially (for the most part) meet the alternative daylight target criteria and would be acceptable in consideration of context; and
- six properties would not meet the alternative daylight target criteria.

7.316 In summary, 76 % of the properties would see no significant adverse effects. Where there are significant effects, 22 % of the properties assessed would meet or would substantially meet the alternative target criteria. The remaining 2 % would not meet the alternative target criteria. These are:

- 40-42 Lillie Road (LBHF);
- 7 Aisgill Avenue (LBHF);
- 7-9 Lillie Road (LBHF);
- 1 and 55 Eardley Crescent (RBKC); and
- 25 Philbeach Gardens (RBKC).

7.317 For sunlight, Stage 1 of the assessment has concluded that of the 271 properties have been assessed, there would be no significant effects to 211 properties. Of the remaining 60 properties which would experience noticeable and significant adverse effects to sunlight, the alternative target criteria assessment has concluded that:

- 38 properties would meet the alternative sunlight target criteria and would be acceptable in consideration of context;
- 17 properties would substantially (for the most part) meet the alternative sunlight target criteria and would be acceptable in consideration of context ; and
- five properties would not meet the alternative target criteria

7.318 In summary, 78 % of the properties would see no significant adverse effects. Where there are significant adverse effects, 20% of the properties assessed meet, or substantially meet the alternative target criteria. The remaining 2 % would not meet the alternative sunlight target criteria. These are:

- 21 Philbeach Gardens (RBKC);

- 25 Philbeach Gardens (RBKC);
- 30-31 Philbeach Gardens (RBKC);
- 42 Philbeach Gardens (RBKC); and
- 46 Philbeach Gardens (RBKC).

7.319 For overshadowing, 400 amenity areas have been assessed. The Stage 1 assessment has concluded that effects would not be significant in respect of 383 amenity areas. Of the remaining 17 amenity areas which would experience noticeable and significant adverse overshadowing effects, the alternative target criteria assessment has concluded that:

- 12 amenity areas would meet the alternative overshadowing target criteria and would be acceptable in consideration of context;
- two amenity areas would substantially (for the most part) meet the alternative overshadowing target criteria and are acceptable in consideration of context; and
- two would not meet the alternative target criteria.

7.320 A total of 21 road viewpoints and 32 railway viewpoints have been assessed in respect of the potential for the Detailed Component to create solar glare. The modelling has concluded that no significant solar glare effects would occur.

7.321 Two proposed on-site buildings have been assessed for light spill effects from potential commercial uses onto proposed residential uses. The modelling has concluded that no significant effects would occur.

Cumulative Effects

7.322 Three cumulative schemes were considered due to their proximity to the Early Phases Site. The assessment concluded that there would be no cumulative effects from the Early Phases and the three schemes, together, on existing receptors.

7.323 However, the Early Phases would result in significant adverse effects to the consented scheme at 1-9 Lillie Road Blocks M and N. However, this consented scheme would meet the alternative daylight target criteria set out in the contextual report.

7.324 These consented schemes would not be affected in respect of sunlight changes.

All Phases

Demolition and Construction Effects

7.325 During demolition and construction works, daylight, sunlight, overshadowing and solar glare effects would vary, gradually increasing as the structures are built out and clad, until reaching those effects reported for the completed All Phases, representing the worst-case in terms of daylight, sunlight, overshadowing and solar glare effects. Therefore, the daylight, sunlight and overshadowing effects would range from not significant to significant. The solar glare effects would range from not significant to not significant.

7.326 There is potential for temporary, short-medium term light spill effects arising from lighting used during demolition and construction works. This would be controlled through the CEMP, resulting in Negligible effects.

Completed Development Effects

7.327 For daylight, Stage 1 of the assessment have concluded that of the 438 properties assessed, there would be no significant effects to 283 properties. Of the remaining 155 properties which would experience noticeable and significant adverse effects to daylight, the alternative target criteria assessment has concluded that:

- 97 properties would meet the alternative daylight target criteria and would be acceptable in consideration of context;
- 36 properties would substantially (for the most part) meet the alternative daylight target criteria and would be acceptable in consideration of context; and
- 22 properties would not meet the alternative daylight target criteria.

7.328 In summary, 65% of the properties would see no significant effects. Where there are significant effects, 30% of the properties assessed would meet, or substantially meet the alternative target criteria. The remaining 5% would not meet the alternative target criteria. These are:

- Flats 1-10 and Flats 46-55, Kensington Hall Gardens (LBHF);
- 177 North End Road (LBHF – within the Site boundary);
- 40-42 Lillie Road (LBHF);
- 9-28, 29-38 Gibbs Green (LBHF);
- 1, 2, 3-8, 9, 10 and 14 Dieppe Close (LBHF);
- 7 Garsdale Terrace (LBHF);
- 14B, 14C and 14D Aisgill Avenue (LBHF);
- 7 Aisgill Avenue (LBHF);
- 7-9 Lillie Road (LBHF);
- 1 and 55 Eardley Crescent (RBKC); and
- 25 and 35 Philbeach Gardens (RBKC).

7.329 For sunlight, Stage 1 of the assessment has concluded that of the 271 properties assessed, there would be no significant effects to 198 properties. Of the remaining 73 properties which would experience noticeable and significant adverse effects to sunlight, the alternative target criteria assessment concludes that:

- 40 properties would meet the alternative sunlight target criteria and would be acceptable in consideration of context;
- 25 properties would substantially (for the most part) meet the alternative sunlight target criteria and would be acceptable in consideration of context; and
- eight properties would not meet the alternative target criteria

7.330 In summary, 73% of the properties would see no significant effects. Where there are significant effects, 24% of the properties assessed would meet, or substantially meet the alternative target criteria. The remaining 3% would not meet the alternative sunlight target criteria. These are:

- 21 Philbeach Gardens (RBKC);
- 25 Philbeach Gardens (RBKC);
- 30-31 Philbeach Gardens (RBKC);
- 37 Philbeach Gardens (RBKC);
- 40 Philbeach Gardens (RBKC);
- 42 Philbeach Gardens (RBKC);
- 46 Philbeach Gardens (RBKC); and
- 48 Philbeach Gardens (RBKC).

7.331 For overshadowing, 400 amenity areas have been assessed. The Stage 1 assessment has concluded that effects would be not significant in respect of 374 amenity areas. Of the remaining 24 amenity areas which would experience noticeable and significant adverse overshadowing effects, the alternative target criteria assessment has concluded that:

- 17 amenity areas would meet the alternative overshadowing target criteria and would be acceptable in consideration of context;
- four amenity areas would substantially (for the most part) meet the alternative overshadowing target criteria and would be acceptable in consideration of context; and
- five would not meet the alternative target criteria and are reviewed in detail within Section 9 and Appendix 01 of the contextual report.

7.332 A total of 21 road viewpoints and 32 railway viewpoints have been assessed in respect of the potential for the Detailed Component to create solar glare. Modelling has concluded that no significant solar glare effects would occur.

7.333 Two proposed on-site buildings have been assessed for light spill effects from potential commercial uses onto proposed residential uses. Modelling has concluded that no significant effects would occur.

Cumulative Effects

7.334 There are no cumulative effects to existing buildings.

7.335 The All Phases would result in significant adverse effects to the consented scheme, 1-9 Lillie Road Blocks M and N, however, this consented scheme would meet the alternative daylight target criteria set out in Section 9 of the Contextual report.

7.336 These consented schemes would not be affected in respect of sunlight changes.

Wind Microclimate

7.337 The meteorological data for London indicates that the prevailing wind direction throughout the year is from the south-west quadrant and secondary winds blow, particularly during the springtime and winter, from the north-easterly direction.

7.338 Wind tunnel modelling of the existing wind conditions at the Site (at 272 measurement locations) and surrounding study area (at 62 measurement locations, 334 locations total) indicates that existing conditions are suitable for sitting to walking use during the windiest season and generally one category calmer during the summer season.

7.339 There are two existing areas that have occurrences of strong winds with the potential to be a safety concern to pedestrians and cyclist. The two areas are off-site and located at the southern corner and to the north of the ESB.

7.340 Wind tunnel testing of the existing Site, the Detailed Component and the Outline Component was undertaken within the context of existing and cumulative surrounding buildings to quantify the local wind microclimate (as shown in Figure 7.2).

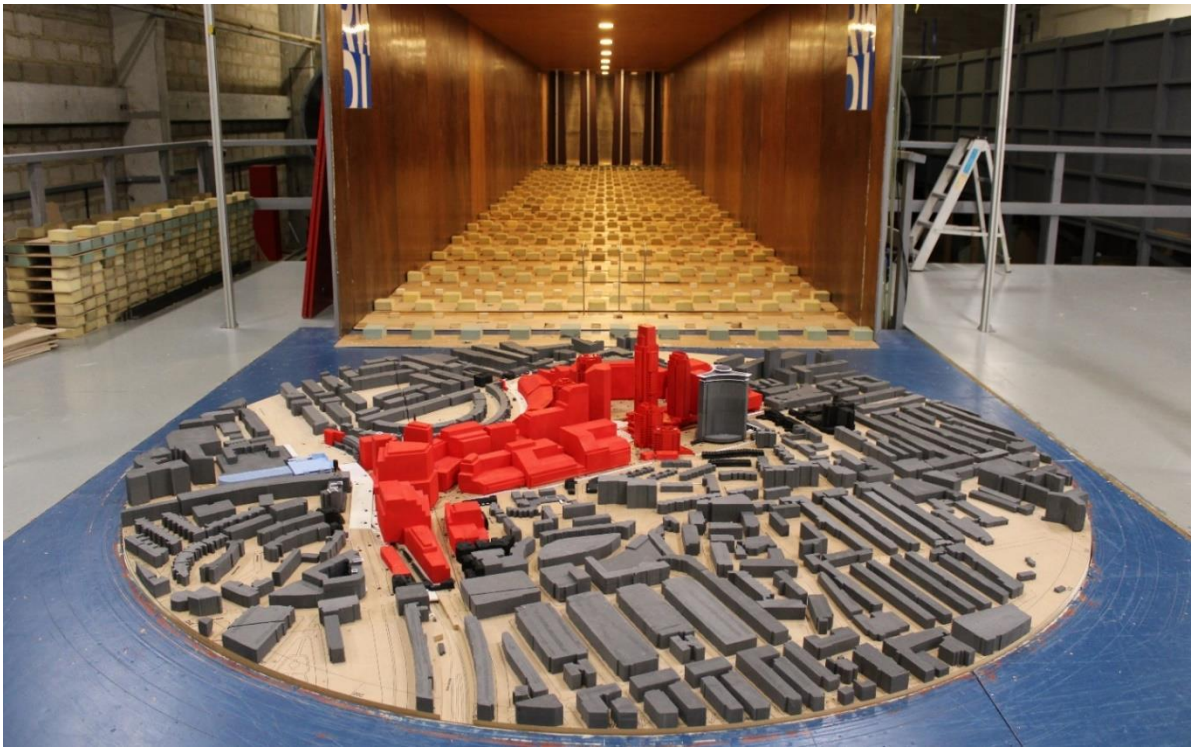


Figure 7.2: Wind Tunnel Model of Proposed Development and Surroundings

7.341 The wind tunnel tests provide a detailed assessment of the average wind speed and gust wind speed conditions around the Proposed Development and within the surrounding study area. These wind speeds conditions are considered in terms of pedestrian comfort, as well as pedestrian and cyclists safety. This provides a basis to assess the effects of the Proposed Development when compared to the existing and future, on-site and off-site conditions and the suitability of wind microclimate for various proposed pedestrian and cyclist use. ‘Pedestrians’,

in the context of this assessment, also include occupants of buildings (residents and workers), as well as the general public.

7.342 The required wind microclimate conditions for the existing and proposed uses (e.g. sitting use at amenity space, standing use at entrances and mixed-use communal amenity spaces and walking/strolling use on thoroughfares) have been undertaken by adopting the well-established industry criteria and application of professional judgment..

7.343 The assessment has considered the windiest season (in northern Europe, generally winter; specifically, December, January and February), to represent a 'worst-case' scenario, and the summer season (June, July and August) for amenity spaces, when they are expected to be most frequently used. Spring and autumn comfort conditions have been reported upon; however, the assessment has focussed on summer season wind conditions as is standard practice.

7.344 The wind tunnel testing was initially undertaken in the absence of landscaping on-site, within the study area to represent a worst-case. Landscaping was then introduced to establish the required additional mitigation and confirm the effectiveness of the mitigation.

7.345 In addition to assessing the Early and All Phases development scenarios of the Proposed Development (Detailed Component and Outline Component), the Illustrative Scheme has been assessed. The Illustrative Scheme comprises the Detailed Component and an illustrative version of how the Outline Component could be delivered.

7.346 Nine configurations were tested for the Proposed Development (with 491 receptor locations) and four for the Illustrative Scheme.

Early Phases

Demolition and Construction Effects

7.347 During demolition and construction works wind conditions are expected to gradually change from those around the existing Site to those of the completed Early Phases. It is expected that there would be typical appropriate health and safety measures implemented to ensure that the demolition and construction workers are adequately protected. Surrounding pedestrian uses would remain suitable for their existing uses. Accordingly, the demolition and construction works would not give rise to any significant adverse effects in respect of pedestrian comfort and pedestrian and cyclist safety.

7.348 Upon completion of Phase 1, which would include the key public realm and central open space works with associated landscaping, new on-site receptors would be introduced within completed buildings (see Figure 5.1 in ES Chapter 5: Demolition and Construction Description) while construction works continue on the remainder parts of the Site.

7.349 Phase 1 would comprise the Detailed Component which has been considered in this assessment. The Outline Components of Phase 1 would have been subject to detailed design and desk-top or wind tunnel testing (secured by planning condition) as part of the RMA stages and would be implemented in parallel/soon after the Detailed Component. Mitigation would be embedded and implemented within Phase 1 as a whole and each of the subsequent phases informed by desk-top or wind tunnel testing to be undertaken as part of the RMA stages.

7.350 Accordingly on-site receptors of occupied units, meanwhile uses and construction workers would not be significantly affected.

Completed Development Effects

7.351 Wind tunnel testing of 397 locations (62 existing off-site and 335 proposed on-site locations including 14 podium, 29 roof top and 35 balcony locations) were undertaken. The initial modelling was undertaken without landscaping to represent a worst-case.

7.352 Receptor locations at the existing LBD, 9 Beaumont Avenue, North End Road and West Kensington Station which would remain operational in the Early Phases, would be suitable for standing, thoroughfare and strolling use which would be acceptable for the continued operation of the existing uses.

7.353 The assessment of the Early Phases in the context of existing surrounding buildings concluded that there would be 376 locations with suitable wind conditions for the proposed uses. However, there would be 21 locations with significant adverse effects at proposed ground level seating areas, and proposed podium /terrace level seating and mixed use amenity areas at the Detailed Component plots.

7.354 To mitigate these significant effects, the detailed (associated with the Detailed Component) and illustrative (associated with the Outline Component) landscaping schemes were included in Early Phases 3D model. In addition a range of mitigation measures were developed.

7.355 With additional mitigation in place, 18 of the 21 locations would be suitable for their proposed use.

7.356 Based on professional judgement, it is expected that the remaining three locations could be successfully mitigated, subject to confirmatory desk-top or wind tunnel testing to be secured by planning condition.

Cumulative Effects

7.357 Consented cumulative schemes identified up to 200 m from the Site boundary were assessed in the wind tunnel.

7.358 Receptor locations at the existing LBD, 9 Beaumont Avenue, North End Road and West Kensington Station which would remain operational in the Early Phases would be suitable for standing, thoroughfare and strolling use which would be acceptable for the continued operation of the existing uses.

7.359 The assessment of the Early Phases in the context of cumulative buildings concluded that there would be 375 locations with suitable wind conditions for the proposed uses. However, there would be 22 locations with significant adverse effects at proposed entrances, ground level seating areas, and proposed podium /terrace/roof level seating and mixed use amenity areas at the Detailed Component plots.

7.360 Proposed additional mitigation would remain the same as that assessed in the context of the existing surrounding buildings. Similarly a small number of areas would require further mitigation.

7.361 The additional mitigation and further confirmatory testing would be secured by planning condition.

All Phases

Demolition and Construction Effects

7.362 The effects reported for the Early Phases would be the same for the All Phases and have not been repeated for the sake of proportionality.

Completed Development Effects

7.363 The assessment of the All Phases in the context of existing surrounding buildings concluded that there would be 373 locations with suitable wind conditions for the intended uses. However, there would be 17 locations with significant adverse effects at proposed ground level, podium and roof level seating amenity areas at the Detailed Component plots.

7.364 Proposed additional mitigation would remain the same as that assessed in the Early Phases assessment and would be secured by means of appropriately worded planning conditions. With additional mitigation in place, 10 of the 17 locations would be suitable for their proposed use.

7.365 Based on professional judgement, it is expected that the remaining seven locations could be successfully mitigated, subject to confirmatory desk-top or wind tunnel testing to be secured by planning condition.

Cumulative Effects

7.366 The assessment of the All Phases in the context of cumulative buildings concluded that there would be 373 locations with suitable wind conditions for the intended uses. However, there would be 17 locations with significant adverse effects. Proposed additional mitigation would remain the same as that assessed in the context of the existing surrounding buildings. Similarly seven areas would require further mitigation.

7.367 The additional mitigation and further confirmatory testing would be secured by planning condition.

Climate

7.368 The Site is diverse in terms of its land cover, uses and building typology. Taking into consideration the existing built development, the existing greenhouse gas ('GHG') emissions over 60 years have been estimated as 193,929 tCO_2e[18].

7.369 National carbon dioxide emissions statistics are published by the UK Government and contain historic emissions data covering 2005-2021 for all Local Authorities and Councils. This shows that LBHF and RBKC emitted 629 $ktCO_2e$ and 745 $ktCO_2e$ respectively in 2021.

Early Phases

7.370 During the EIA Scoping process cumulative climate assessment was scoped out of the ES, with the exception of cumulative greenhouse gas assessment.

Demolition and Construction

Climate Change Resilience

7.371 The climate change resilient ('CCR') assessment has reviewed the potential vulnerability of the Early Phases to extreme weather and projected climate change during the demolition and construction works. Consideration was given to environmental and human health; buildings and infrastructure; heatwaves and drought conditions. Taking into account embedded mitigation measures, it has been concluded that the effects are likely to be adverse, but not significantly so.

In-Combination Climate Impact

7.372 The in combination climate impact ('ICCI') assessment has reviewed the potential for climate change to exacerbate the demolition and construction effects reported within each of the individual technical topics assessments of the EIA as a whole, in respect of topic specific receptors. Taking into account embedded mitigation measures and the conclusions of these assessments, it has been concluded that the Early Phases would not result in a significant effect on climate and identified receptors.

Greenhouse Gas Emissions

7.373 The Proposed Development's embedded mitigation relevant to the greenhouse gas ('GHG') assessment are summarised within the Sustainability Statement that accompanies the Hybrid Planning Applications. The carbon mitigation hierarchy to be adopted by the Proposed Development, includes the following:

- Responsible use and reuse of resources, embodying principles of durability, disassembly, re-use, and adaptability;
- Use of low carbon materials, e.g., use cement replacements and timber structures, as well as materials with high recycled content; and
- Use of alternative fuels (e.g., Hydrogen or biofuels) or electricity for construction equipment.

7.374 Opportunities would be explored for the re-use of materials in new-build plots, minimising carbon impacts by using, for example, reconstituted stone, reused/recycled glass, reclaimed furniture, fixtures and equipment such as raised access flooring and internal doors, targeting 20 % of materials that are reused and/or contain recycled content.

7.375 A minimum of 95 % of construction waste would be diverted from landfill for reuse, recycling or recovery, with an aspiration for a higher level of diversion.

7.376 The embodied carbon of buildings would be targeted at <500 kg CO^2/m^2 for domestic and <650 $kgCO^2/m^2$ for non-domestic uses, delivering ahead of policy expectations .

7.377 The Whole Life Carbon and Circular Economy ('WLC' and 'CE') Assessments that accompany the Hybrid Planning Applications set out measures to recycle materials from demolished buildings on-site. For example, concrete and bricks would be crushed and used as pile mats. The assessments also commit to minimisation of

18 A carbon dioxide equivalent or CO2 equivalent, is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential, by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming .

excavation waste, material circularity, responsible procurement, sustainable and sourcing, and supply chain engagement.

7.378 WLC and CE assessments would be undertaken for the Outline Component at the RMA stage, informed by detailed design development, where further opportunities for reduction in GHG emissions are expected to be identified.

7.379 The Early Phases would result in demolition and construction GHG emissions from the raw materials required, transport and demolition and construction processes. The estimate of emissions from the demolition and construction stage is 515,234 tCO_2e.

7.380 Due to the low percentage of the GHG emissions in comparison to the UK, London and projected buildings sector carbon budgets and the embedded mitigation measures, the Early Phases is considered to be compatible with the budgeted, science-based 1.5 °C trajectory in terms of rate of emissions reduction.

7.381 Although the effect of the Early Phases in respect of avoiding severe climate change, aligning with a science-based 1.5 °C compatible trajectory and achieving net zero by 2050, is considered to be temporary, adverse, the effect would not be significant.

Completed Development

Climate Change Resilience

7.382 The CCR assessment has reviewed the potential vulnerability of the Early Phases to extreme weather and projected climate change upon completion and operation. Consideration was given to buildings, infrastructure, human health , increased sea levels, intense rainfall evens, flooding and extreme heat events.

7.383 Taking into account embedded mitigation measures (e.g. drainage strategy, ventilation strategy, landscape strategy, including the selection of drought resistant planting), water neutrality strategy) adverse effects would not be significant.

In-Combination Climate Impact

7.384 The ICCI assessment has reviewed the potential for climate change to exacerbate the completed development effects reported within each of the individual technical topics assessments of the EIA as a whole, in respect of topic specific receptors. Taking into account embedded mitigation measures and the conclusions of these assessments, the Early Phases would not result in a significant effect on climate and identified receptors.

Greenhouse Gas Emissions

7.385 Once the Early Phases is completed, operational GHG emissions would be generated primarily from the use of the Early Phases and from its maintenance. The estimate of emissions from the operation of the Early Phases over the 60 year design life (including end of life) is 833,742 tCO_2e.

7.386 When comparing the Early Phases GHG emissions against the existing Site emissions, it is considered that the completed Early Phases would result in an adverse effect on climate change and identified receptors; however, this effect would not be significant.

7.387 WLC and CE assessments would be undertaken for the Outline Component at the RMA stage, informed by detailed design development, where further opportunities for reduction in GHG emissions are expected to be identified.

7.388 Overall, it is considered that the completed Early Phases would result in an adverse, but not significant, effect on climate and identified receptors.

Cumulative

7.389 The atmospheric concentration of GHGs and resulting effect on climate change is affected by all sources and sinks globally, anthropogenic and otherwise. As GHG emission impacts and resulting effects are global rather than affecting one localised area, the approach to cumulative effects assessment for GHGs differs from that for many EIA topics where only projects within a geographically bounded study area of, for example, 1-2 km would be included.

7.390 Therefore, effects of GHG emissions from specific cumulative schemes have not been individually assessed as agreed through the EIA scoping process. However, GHG emissions, have been contextualised within the UK, London, sector-based and local carbon budgets.

All Phases

Demolition and Construction

Climate Change Resilience

7.391 Consistent with the Early Phases assessment, the CCR assessment has reviewed the potential vulnerability of the All Phases to extreme weather and projected climate change. Taking into account embedded mitigation measures, it was concluded that effects would be adverse, but not significant.

In-Combination Climate Impact

7.392 Consistent with the Early Phases assessment, the ICCI assessment has reviewed the potential for climate change to exacerbate the effects from other environmental disciplines on identified receptors. Taking into account embedded mitigation measures, the All Phases would not result in a significant effect on climate and identified receptors.

Greenhouse Gas Emissions

7.393 The All Phases would result in GHG emissions during demolition and construction from the raw materials required, transport and demolition and construction processes. The provisional estimate of emissions from the demolition and construction stage is 711,197 tCO_2e.

7.394 WLC and CE assessments would be undertaken for the Outline Component at the RMA stage, informed by detailed design development, where further opportunities for reduction in GHG emissions are expected to be identified.

7.395 Overall, it is considered that the demolition of the existing Site and construction of the All Phases would result in an adverse, but not significant effect on climate and identified receptors.

Completed Development

Climate Change Resilience

7.396 The CCR assessment has reviewed the potential vulnerability of the All Phases to extreme weather and projected climate change. Taking into account embedded mitigation measures, the All Phases would result in a permanent, long-term, adverse, direct but Not Significant effect on climate and identified receptors.

In-Combination Climate Change Impact

7.397 The ICCI assessment has reviewed the potential for climate change to exacerbate the effects from other environmental disciplines on identified receptors. Taking into account embedded mitigation measures, the All Phases would result not result in a significant effect on climate and identified receptors.

Greenhouse Gas Emissions

7.398 Once the All Phases is operational, GHG emissions would be generated primarily from the use of the All Phases and from its maintenance. The provisional estimate of emissions from the operation of the All Phases over the 60 year design life (including end of life) are 1,228,092 tCO_2e.

7.399 When comparing the All Phases GHG emissions against the existing Site condition, it is considered that the completed All Phases would result in an adverse effect on climate change and identified receptors; however this effect would not be significant.

7.400 WLC and CE assessments would be undertaken for the Outline Component at the RMA stage, informed by detailed design development, where further opportunities for reduction in GHG emissions are expected to be identified.

7.401 Overall, it is considered that the completed All Phases would result in an adverse, but not significant effect on climate and identified receptors.

Cumulative

7.402 The approach to the cumulative schemes for the GHG emissions assessment for the All Phases scenario are in line with the approach set out for the Early Phases scenario.

Built Heritage

7.403 During the EIA Scoping process 93 heritage receptors were scoped in for full assessment. Of particular relevance on-site, are the following (as shown in Figure 7.3):

- Two small parts of Earl's Court Station, a Grade II listed building - a below ground ticket hall, escalator hall and pedestrian subway tunnel (excluded from the Hybrid Planning Applications and no longer in use) and a small, single storey structure that provides a fire escape from the below ground ticket hall;
- Small parts of Philbeach Conservation Area ('CA') in the east and south east;
- Barons Court CA in the north-west;
- 9 Beaumont Avenue in the north-west (a non-designated heritage asset); and
- Lille Bridge Depot Train Maintenance Shed in the west (a non-designated heritage asset).

7.404 Conservation areas within 500 m of the Site boundary comprise; Brompton Cemetery CA; Nevern Square CA; Earl's Court Square CA; Olympia and Avonmore CA; and Queen's Club Gardens CA

7.405 The Church of St Cuthbert and St Matthias, a Grade I listed building, is located to the north-east of the Site. Brompton Cemetery, a Registered Park and Garden, is located to the south-east of the Site.

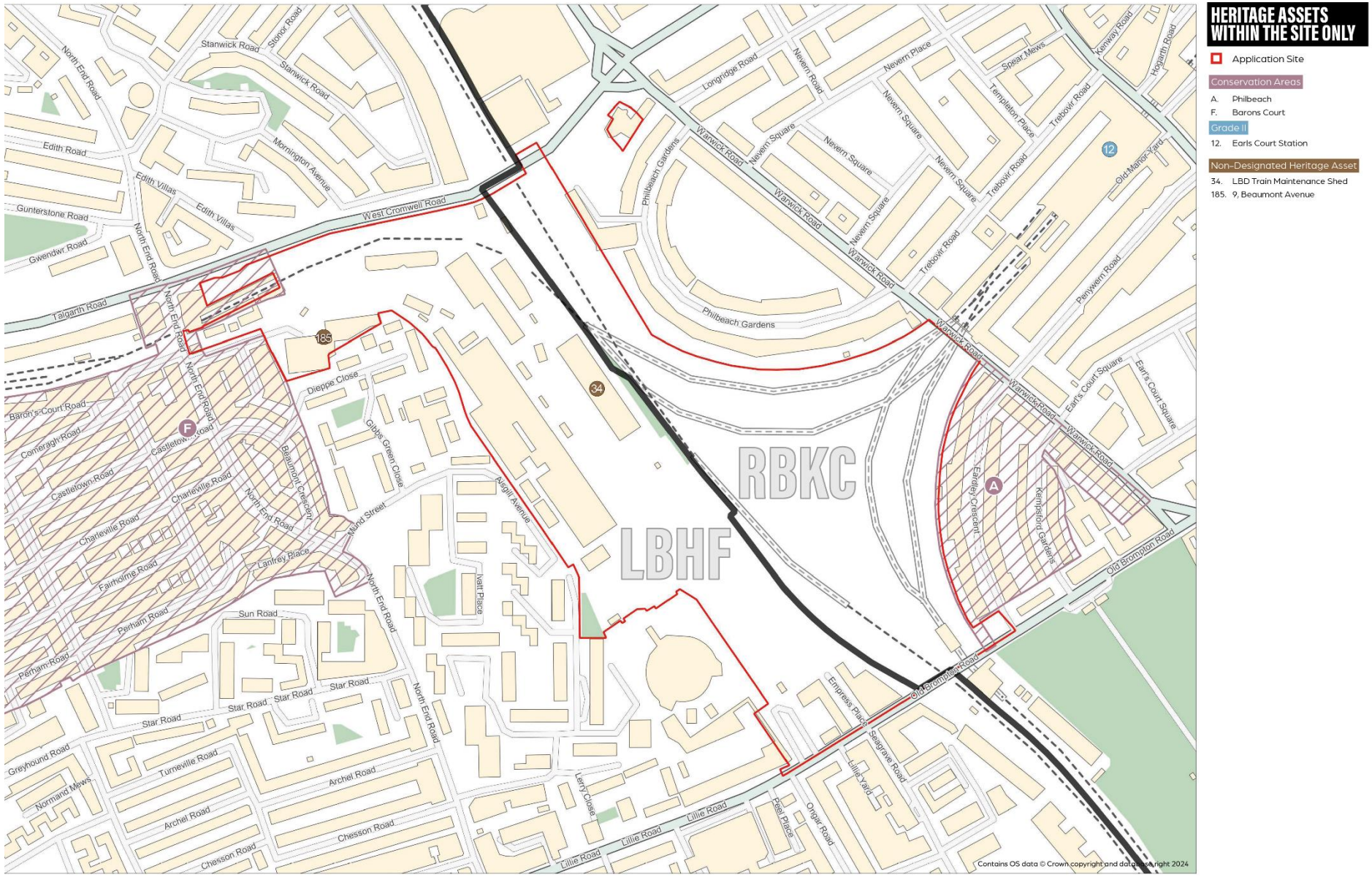


Figure 7.3: Key Built Heritage Receptors

7.406 The ES considers how the Proposed Development would affect the special heritage interest (or 'heritage value') of five on-site receptors and 93 off-site heritage receptors as a result of introducing a change to the setting of the receptors, with the setting considered to make a contribution to their heritage value.

7.407 Impacts on the 93 off-site receptors are considered in a detailed Heritage Impact Assessment ('HIA') at ES Volume 2: Technical Appendix 1.1. The ES chapter only reproduces the full analysis of the effects on 12 heritage receptors that have been a main consideration in the design of the Proposed Development (as shown in Figure 8.3). This to ensure that the ES is proportionate and focusses on the identification of likely significant effects. A summary of the effects on the remaining 81 receptors is presented in the ES chapter.

7.408 The 12 heritage receptors are:

- On-site (direct and indirect (setting) impacts):
  - Part of Earl's Court Station (Grade II listed building);
  - Philbeach CA;
  - Barons Court CA;
  - LBD Train Maintenance Shed (non-designated heritage receptor); and
  - 9, Beaumont Avenue (non-designated heritage receptor).
- Off-site (indirect (setting) impacts):
  - Church of St Cuthbert and St Matthias (Grade I listed building);
  - Brompton Cemetery (Grade I Registered Park and Garden ('RPG'));
  - Brompton Cemetery CA;
  - Nevern Square CA;
  - Earl's Court Square CA;
  - Olympia and Avonmore CA; and
  - Queen's Club Gardens CA.

Early Phases

Demolition and Construction Effects

7.409 The demolition and construction of the Early Phases would not result in any likely significant effects on any built heritage receptor.

7.410 There would be adverse, but not significant, effects on the following heritage receptors which are located nearest to the Early Phases where the visibility of demolition and construction activity and/or movement and noise associated with it, would change the appreciation of their heritage value:

- RBKC:
  - Church of St Cuthbert and St Matthias (Grade I listed building);
  - West Brompton Station including Booking Hall and Train Shed and Staircases and Retaining Wall (Grade II listed building):
  - Arcade Forming North West Quarter of Circle and Avenue (Grade II* listed building);
  - Arcade Forming North East Quarter of Circle and Avenue (Grade II* listed building);
  - Brompton Cemetery (Grade I RPG);
  - Philbeach CA;
  - Nevern Square CA;
  - Earl's Court Square CA;
  - Brompton Cemetery CA;
  - Courtfield CA; and
- LBHF:
  - Queen's Club Garden CA.

Completed Development Effects

7.411 The Early Phases would not result in any likely significant effects on any built heritage receptor scoped in for assessment.

7.412 There would be adverse, but not significant, effects on the following heritage receptors in the study area arising from the contrast in height and scale between the Early Phases and the historic buildings or townscape elements, and how this would distract attention from and appreciation of the historical and architectural interest of the receptors:

- RBKC:
  - Church of St Cuthbert and St Matthias (Grade I listed building);
  - Arcade Forming North West Quarter of Circle and Avenue (Grade II* listed building);
  - Arcade Forming North East Quarter of Circle and Avenue (Grade II* listed building);
  - Church of England Chapel (Grade II* listed building);
  - Brompton Cemetery (Grade I RPG);
  - Philbeach CA;
  - Nevern Square CA;
  - Earl's Court Square CA;
  - Earl's Court Village CA;
  - Brompton Cemetery CA;
  - Courtfield CA;
- LBHF:
  - Parish Church of All Saints (Grade II* listed building); and
  - Queen's Club Gardens CA.

7.413 There would be beneficial effects on the following heritage receptors which are Grade II listed train stations:

- RBKC:
  - West Brompton Station including Booking Hall and Train Shed and Staircases and Retaining Wall (Grade II listed building); and
  - Earl's Court Station (Grade II listed building).

7.414 The benefit to their heritage value is derived from the change to their setting which would improve the character and appearance of the arrival experience to the area, which part of the buildings' original and continuing function, and provide better opportunities to admire and appreciate the buildings through new public realm. This benefit would be particularly apparent for Earl's Court Station where the proposed Warwick Square would transform the hoarded, cleared condition of the Site and reintroduce a connection between the Warwick Road entrance to the station and the former Exhibition Centres which had a historical association.

Cumulative Effects

7.415 There would be no change to the likely effects as a result of cumulative schemes.

All Phases

Demolition and Construction Effects

7.416 The demolition and construction of the All Phases would have a significant adverse effect on the LBD Train Maintenance Shed and 9, Beaumont Avenue, which are non-designated heritage receptors located within the All Phases Site boundary. This is because this assessment has considered the worst-case scenario that the buildings would be fully demolished.

7.417 The effect would be subject to additional mitigation through Historic Building Recording to maintain the historic interest of the building as part of local archives. This would not change the scale and nature of the adverse effect, however.

7.418 There would be adverse, but not significant, effects on the following heritage receptors which are located nearest to the All Phases, or where the visibility of construction activity and/or movement and noise associated with it would change the appreciation of their heritage value:

- RBKC:
  - Church of St Cuthbert and St Matthias (Grade I listed building);
  - St Cuthbert's Clergy House (Grade II listed building);
  - West Brompton Station including Booking Hall and Train Shed and Staircases and Retaining Wall (Grade II listed building);
  - Arcade Forming North West Quarter of Circle and Avenue (Grade II* listed building);
  - Arcade Forming North East Quarter of Circle and Avenue (Grade II* listed building);
  - Brompton Cemetery (Grade I RPG);
  - Philbeach CA;
  - Nevern Square CA;
  - Earl's Court Square CA;
  - Brompton Cemetery CA; and
  - Courtfield CA.
- LBHF:
  - Olympia and Avonmore CA;
  - Barons Court CA; and
  - Queen's Club Garden CA.

7.419 There would be a beneficial effect on the following heritage receptors, because of the demolition of Ashfield House in the setting of the receptors which would improve the appreciation of the receptors in their historic context:

- LBHF:
  - 8 Avonmore Road (locally listed building);
  - 20 Avonmore Road (locally listed building);
  - Avonmore Gardens (locally listed building); and
  - Kensington Village (locally listed building).

Completed Development Effects

7.420 The All Phases would not result in any likely significant effects on any built heritage receptor scoped in for assessment.

7.421 There would be adverse, but not significant, effects on the following heritage receptors arising from the contrast in height and scale between the All Phases and the historic buildings or townscape elements, and how this would distract attention from and appreciation of the historical and architectural interest of the assets:

- RBKC:
  - Church of St Cuthbert and St Matthias (Grade I listed building);
  - St Cuthbert's Clergy House (Grade II listed building);
  - Arcade Forming North West Quarter of Circle and Avenue (Grade II* listed building);
  - Arcade Forming North East Quarter of Circle and Avenue (Grade II* listed building);
  - Church of England Chapel (Grade II* listed building);
  - Brompton Cemetery (Grade I RPG);
  - Philbeach CA;
  - Nevern Square CA;
  - Earl's Court Square CA;
  - Earl's Court Village CA;
  - Brompton Cemetery CA;
  - Courtfield CA; and
  - Parish Church of All Saints (Grade II* listed building).
- LBHF:

- Olympia and Avonmore CA;
- Gunter Estate CA;
- Barons Court CA;
- Queen's Club Gardens CA;
- 8 Avonmore Road (locally listed building);
- 20 Avonmore Road (locally listed building);
- Avonmore Gardens (locally listed building);
- Kensington Village (locally listed building);
- Baron's Court House (locally listed building);
- 2 Baron's Court Road (locally listed building);
- 23 Baron's Court Road (locally listed building);
- 5 Barton Road (locally listed building);
- 13 Castletown Road (locally listed building);
- 2 Castletown Road (locally listed building);
- 6 Castletown Road (locally listed building);
- 1 Challoner Crescent (locally listed building);
- 1 Challoner Street (locally listed building);
- Institute of Indian Culture (locally listed building);
- 43 Comeragh Road (locally listed building);
- 24 Comeragh Road (locally listed building);
- 30 Comeragh Road (locally listed building).

7.422 There would be beneficial effects on the following heritage receptors which are Grade II listed train stations.

- RBKC:
  - West Brompton Station including Booking Hall and Train Shed and Staircases and Retaining Wall (Grade II listed building); and
  - Earls Court Station (Grade II listed building).

7.423 The benefit to their heritage value is derived from the change to their setting which would improve the character and appearance of the arrival experience to the area, which part of the buildings' original and continuing function, and provide better opportunities to admire and appreciate the buildings through new public realm. This benefit would be particularly apparent for Earl's Court Station where the proposed Warwick Square would transform the hoarded, cleared condition of the Site and reintroduce a connection between the Warwick Road entrance to the station and the former exhibition centre site which had a historical association.

Cumulative Effects

7.424 There would be no change to the likely effects as a result of cumulative schemes.

Townscape and Visual

7.425 The townscape to the east of the Site largely comprises historic residential townscape with a fine grain, arranged in a regular highly legible and well-connected layout of streets and garden squares. It is largely within conservation area designations but with only a few individually listed buildings.

7.426 To the west of the Site, the townscape is more varied with large pockets of discontinuous post-war redevelopment.

7.427 West Cromwell Road is a broad busy highway (A4) with an elevated section to the north of the Site and which is an important route into central London from the west. It forms a significant detracting feature running east-west through both boroughs creating strong visual and physical separation between the townscape to its north and south, particularly to the west of Earls Court Road. Lillie Road-Old Brompton Road, the east west route passing to the south of the Site, is less heavily trafficked and creates less severance in the townscape.

7.428 Much of the townscape lining the WLL forms part of a seam of industrial and post-industrial townscape containing larger scale modern development that extends well beyond the study area, and includes the Site itself. To the north and south of the Site are ribbons of taller or larger scale modern development on former railway land.

7.429 In terms of the visual baseline, the study area is generally flat and densely built-up such that the greatest visibility towards the Site is at short to medium range, and there are limited opportunities for long range views towards it, other than from streets aligned on the Site and areas of open space such as Brompton Cemetery, Normand Park and some points along the River Thames. Mature street trees are common within the study area, and these frequently screen short and medium range views towards the Site to a considerable extent.

7.430 The visual assessment study area has not been defined by a radius from the Site boundary because differences in the scale and alignment of the existing townscape result in variation in the distance from which the Early

Phases and All Phases would be visible, for example there is usually greater visibility along aligned routes and across open spaces. Assessment views from a total of 59 locations have been provided as verified images for individual assessment. The selected views allow a methodical 360-degree view analysis of near, middle and distant views of the Early Phases and All Phases on representative visual receptors in the area likely to be affected by the visibility of the Early Phases and All Phases. The visual assessment is not intended as an exhaustive assessment of all potential visual effects but rather an assessment of a sufficient number of views from a variety of distances and directions that allow a proportionate assessment of changes to visual amenity. Additional verified and non-verified views (not individually assessed), have also informed the townscape and visual assessments.

7.431 The existing townscape character of the Site and its surroundings has been appraised and divided into areas of broadly similar character and quality; these 'townscape character areas' ('TCA's), are the townscape receptors for assessment. A total of 16 TCAs were identified, as shown in Figure 7.4, two of which have been subdivided where they cross the borough boundary.

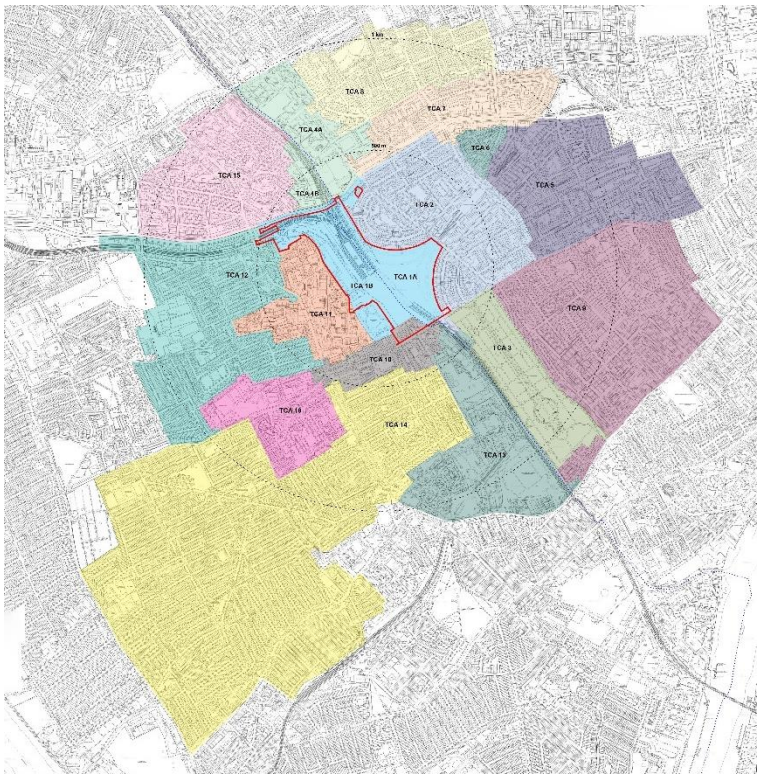


Figure 7.4: Townscape Character Areas

7.432 There was extensive engagement with stakeholders during the pre-application design evolution that included iterative visual impact testing and design development. This has resulted in embedded design mitigation that has reduced or eliminated adverse effects on townscape and visual amenity.

Early Phases

7.433 During demolition and construction works, there would be significant adverse effects in respect of the following due to the change in character and visibility of demolition and construction works:

- RBKC:
  - TCAs 1A, 2, 3 and 5; and
  - Views 3 (Holland Park), 4 (The Round Pond), 5 (Chelsea Bridge), 7 (Brompton Cemetery, Central Avenue, southern end outside chapel), 8 (Brompton Cemetery, Central Avenue, southern end of Arcade), 9 (Brompton Cemetery, Central Avenue, centre of Arcade), 10 (Brompton Cemetery, Central Avenue, north of Arcade position 3), 11 (Brompton Cemetery, south of the Anglican Chapel), 16 (Kenway Road), 17 (Collingham Place), 18 (Bramham Gardens), 19 (Bolton Gardens), 20 (Harrington Gardens), 22 (Nevern Square, north-east corner), 23 (Nevern Square, south side), 24 (Trebivor Road, including 24N dusk), 26 (Philbeach Gardens, outside No.61), 27 (Philbeach

Gardens, south end junction with Warwick Road), 29 (Penywern Road), and 30 (Outside No. 40 Earls Court Square).

- LBHF:
  - TCAs 1B, 10, 11, 12; and
  - Views 31 (Thames Path west of Hammersmith Bridge including 31N dusk), 38 (Eel Brook Common), 39 (Kings Road), 40 (Avonmore Road), 42 (North End Road, near junction of Fitzjames Ave), 44 (Talgarth Road, junction with Gliddon Road), 46 (Barons Court Road, junction with Barton Road), 49 (Ivatt Place), 50 (The Queen's Club), 51 (Greyhound Road including 51N dusk), 52 (Queen's Club Gardens, north side), 53 (Archel Road), 54 (Normand Park), 58 (Farm Lane), 59 (Ongar Road).

7.434 While these effects would be adverse in nature, such effects are commonplace in London and would be temporary.

Completed Development Effects

7.435 The Early Phases would be based on a coherent landscape-led design with a legible movement framework that would stitch an existing underused brownfield site into its townscape context to the south, east and west by creating new routes through an area with no existing permeability or connectivity. Within the Early Phases a distinctive new elevated open space 'Table Park', would be located at the heart of the Site, and smaller pieces of new or enhanced public realm would be created at key locations of orientation on the edges of the Early Phases at its interfaces with the surrounding context to the south, east and west. The Early Phases would repair the edges of the Site where it interfaces with the adjacent townscape, better defining existing fragmented streetscapes to Lillie Road and West Cromwell Road.

7.436 The tallest buildings within the Early Phases would be located close to the existing 31-storey ESB, to the west and north of the new Table Park, at the crossing of new east-west route and a connection from Lillie Road-Old Brompton Road to the south, marking this as a new destination and crossing point between RBKC and LBHF. The tall building cluster would have a single taller focal point on Plot WB04 of 42-storeys. Plot WB04 would have a distinctive stepped crown and would form the peak of the cluster seen from all directions. A lower datum of tall buildings of equivalent height to the ESB would integrate the existing tall building in the new cluster. The dramatic juxtaposition of the existing ESB with the slender vertical counterpoint on Plot WB04 would create a distinctive form on the skyline. The tall building cluster would visibly signal the development of the long-vacant brownfield site of the former Earl's Court Exhibition Centres and mark the new east-west route through the Early Phases, the new Table Park and destination cultural uses within the Early Phases. Lower development would step down in scale towards the edges of the Site to manage the change in scale from the tall building cluster to the existing smaller scale townscape context around the Early Phases Site.

7.437 As required by the Design Code, buildings coming forward within the Outline Component would be of high-quality design and would appropriately address sensitive views from the townscape surrounding the Site in their articulation and materiality.

7.438 There would be some localised adverse effects on visual amenity and townscape character due to the high contrast in scale and form of the Early Phases seen in close proximity to parts of the low scale fine grain townscape of its surrounding context, particularly where this existing townscape is designated townscape of high homogeneity and high sensitivity, with limited appreciation of a taller modern setting. With the potential for adverse effects in mind, the Early Phases has been designed over a long process of iterative testing and design development to reduce and minimise adverse effects on townscape character and visual amenity wherever possible, while balancing these considerations with the strategic requirements for the Early Phases to optimise its capacity to deliver new homes and jobs.

7.439 The Townscape Assessment has assessed the likely long-term significant effects of the Early Phases on townscape character and quality in the vicinity of the Early Phases Site. This assessment has been informed by verified views of the Early Phases. Other than in the TCAs identified below, effects would not be significant.

7.440 Townscape effects would be significant in respect of the following:

- RBKC:
  - TCAs 1A (beneficial in nature), 2 (adverse in nature), 3 (neutral in nature), and 5 (neutral in nature).

- LBHF:
  - TCAs 1B (beneficial in nature), 10 (beneficial in nature), 11 (beneficial in nature), and 12 (neutral in nature).

7.441 Each assessment view permit the Early Phases to be assessed in the round and its effect on visual amenity to be tested. A proportionate selection of views is presented in Figures 7.5 - 7.16. The assessed verified views demonstrate that significant effects for the Early Phases would arise from 35 of the 59 assessed viewpoints (some only in winter conditions), comprising the following -

- RBKC:
  - Views 3 (Holland Park), 4 (The Round Pond), 5 (Chelsea Bridge), 7 (Brompton Cemetery, Central Avenue, southern end outside chapel) (Figure 7.5 and 7.6), 8 (Brompton Cemetery, Central Avenue, southern end of Arcade), 9 (Brompton Cemetery, Central Avenue, centre of Arcade), 10 (Brompton Cemetery, Central Avenue, north of Arcade position 3), 11 (Brompton Cemetery, south of the Anglican Chapel), 16 (Kenway Road), 17 (Collingham Place) (Figure 7.7 and 7.8), 18 (Bramham Gardens), 19 (Bolton Gardens), 20 (Harrington Gardens), 22 (Nevern Square, north-east corner), 23 (Nevern Square, south side), 24 (Trebivor Road, including 24N dusk), 26 (Philbeach Gardens, outside No.61) (Figure 7.9 and 7.10) , 27 (Philbeach Gardens, south end junction with Warwick Road), 29 (Penywern Road), and 30 (Outside No. 40 Earls Court Square).
- LBHF:
  - Views 31 (Thames Path west of Hammersmith Bridge including 31N dusk), 38 (Eel Brook Common), 39 (Kings Road), 40 (Avonmore Road), 42 (North End Road, near junction of Fitzjames Ave), 44 (Talgarth Road, junction with Gliddon Road) (Figure 7.11 and 7.12), 46 (Barons Court Road, junction with Barton Road), 49 (Ivatt Place) (Figure 7.13 and 7.14), 50 (The Queen's Club) (Figure 7.15 and 7.16), 51 (Greyhound Road including 51N dusk), 52 (Queens Club Gardens, north side), 53 (Archel Road), 54 (Normand Park), 58 (Farm Lane), 59 (Ongar Road).

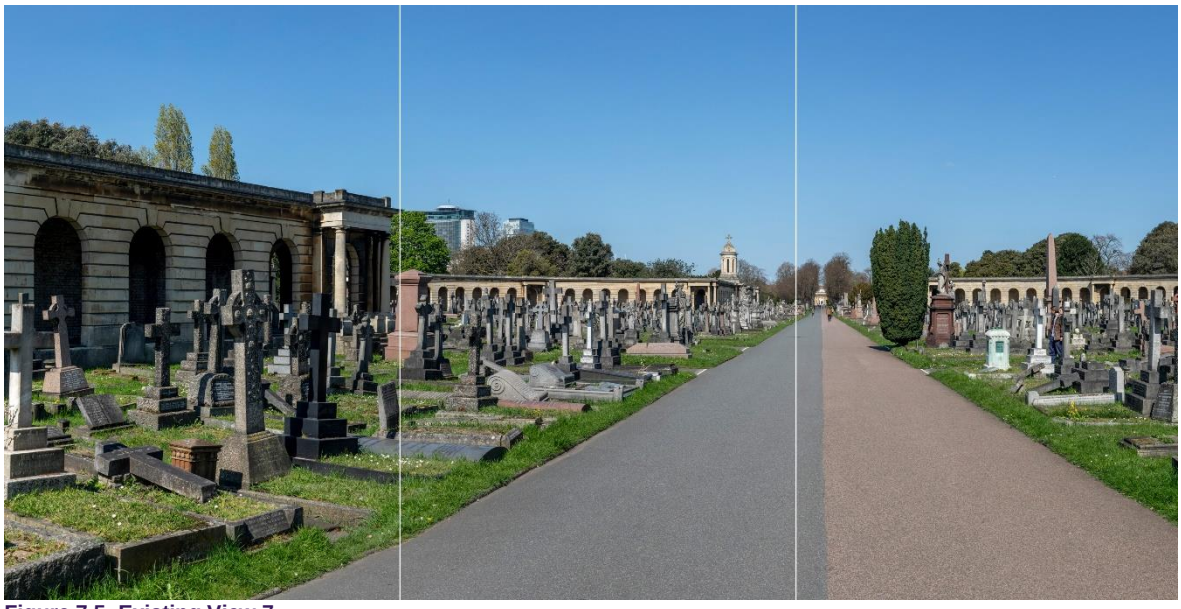


Figure 7.5: Existing View 7

Figure 7.6: Proposed Early Phases View 7

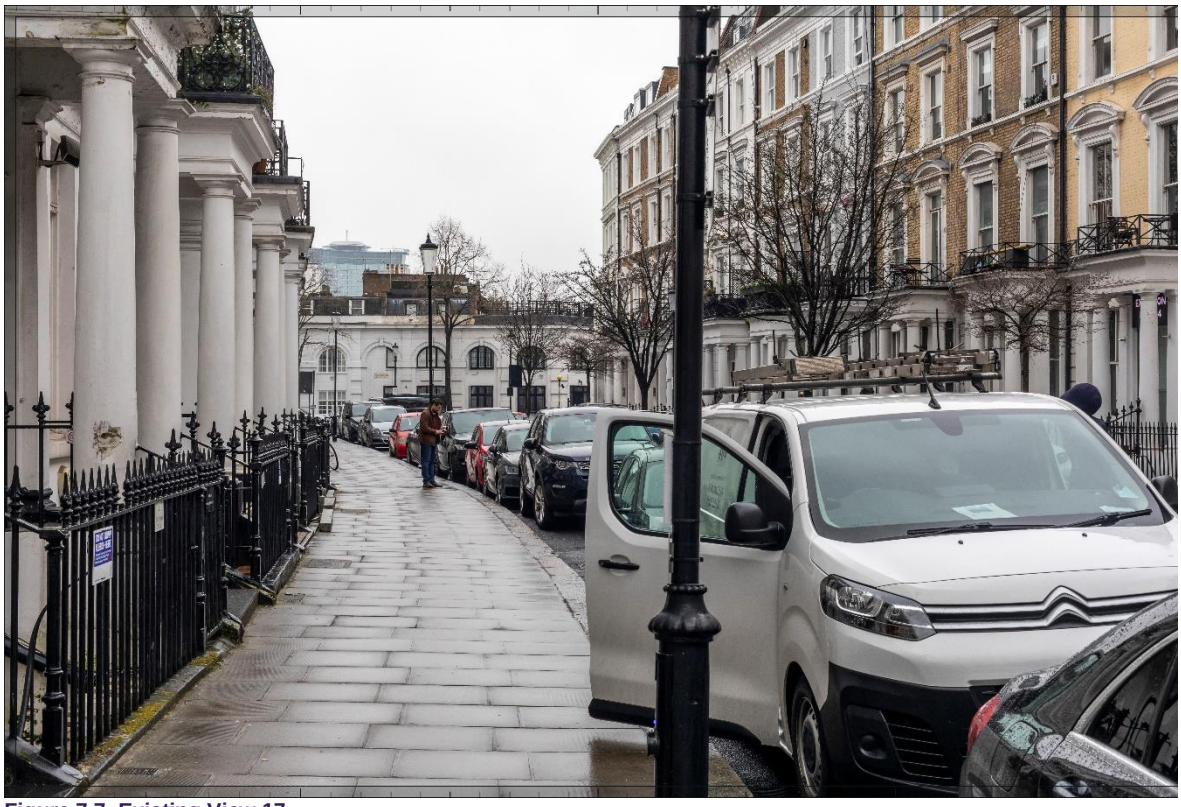


Figure 7.7: Existing View 17

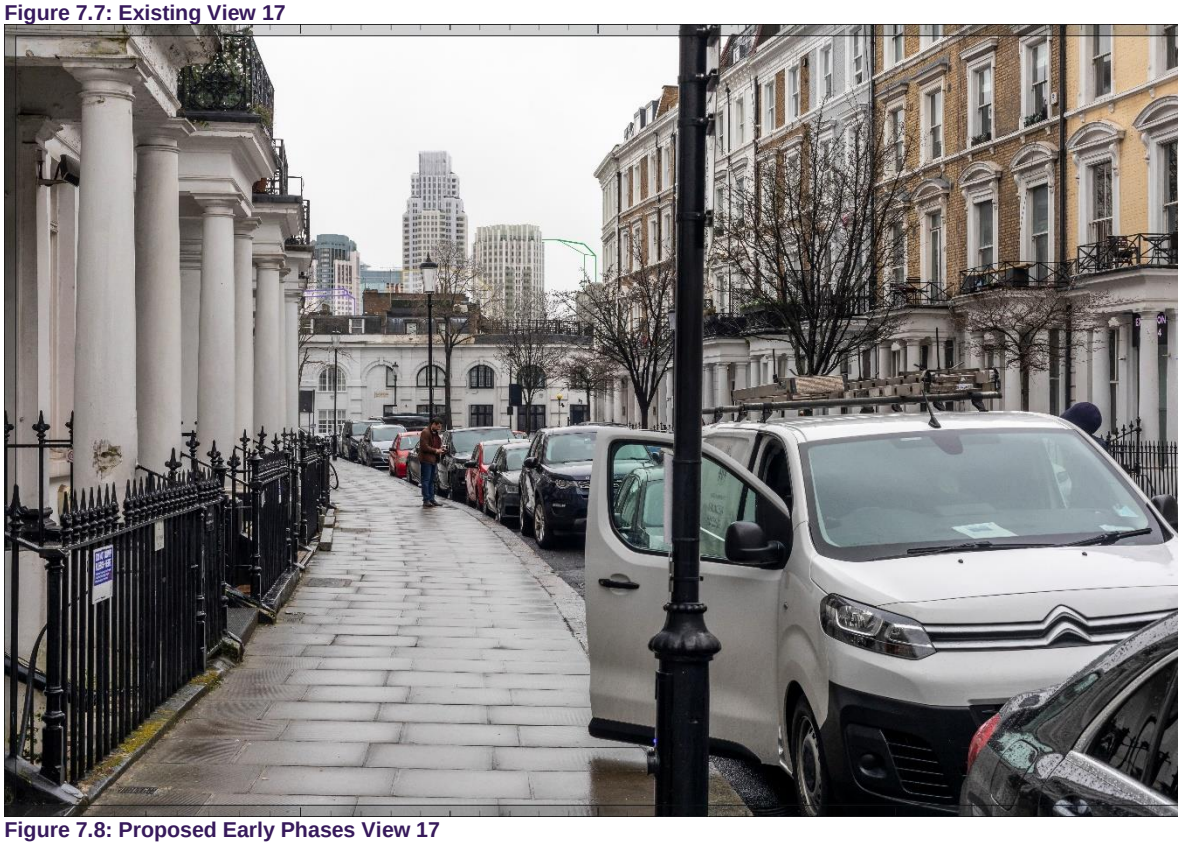


Figure 7.8: Proposed Early Phases View 17

Figure 7.9: Existing View 26

Figure 7.10: Proposed Early Phases View 26

Figure 7.11: Existing View 44

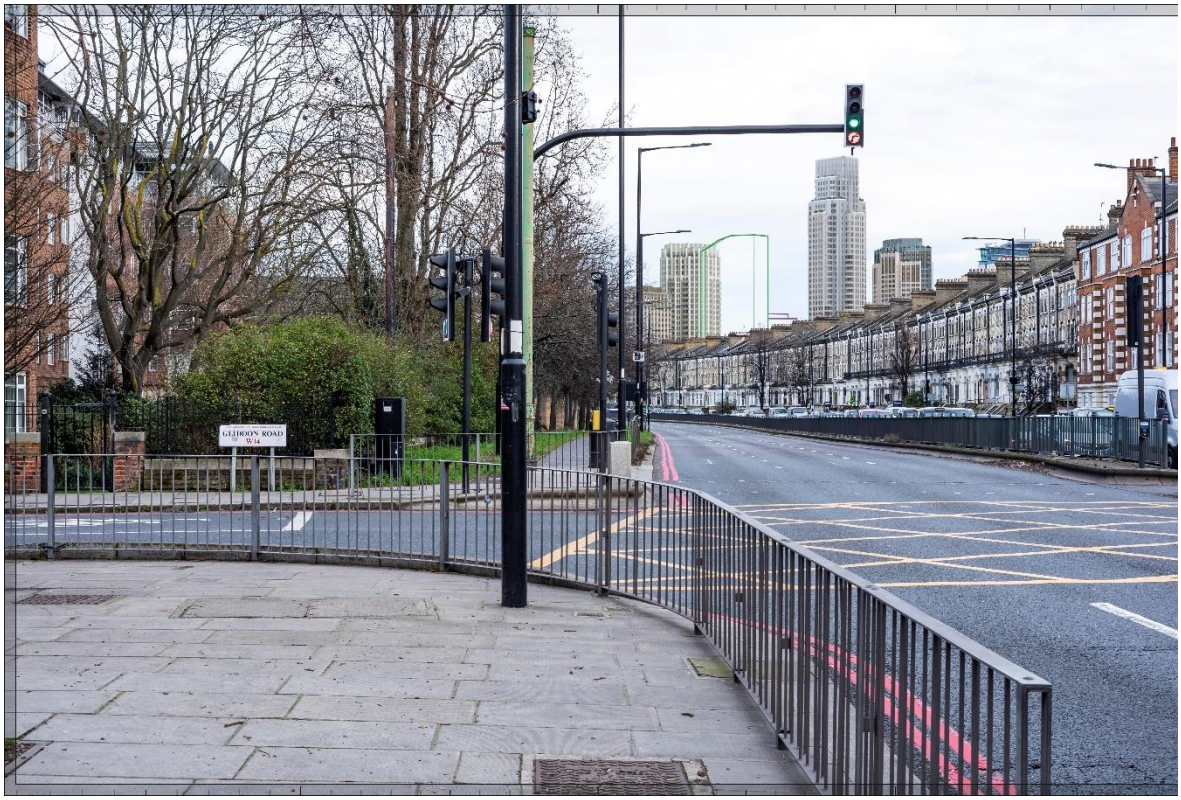


Figure 7.12: Proposed Early Phases View 44

Figure 7.13: Existing View 49

Figure 7.14: Proposed Early Phases View 49

Figure 7.15: Existing View 51

Figure 7.16: Proposed Early Phases View 51

7.442 In three cases, Views 24N, 31N and 51N, significant effects have been assessed from the same viewpoints at night, as well as during the day.

7.443 The effects on 53 of the 59 views would be beneficial or neutral. There would be significant adverse effects on six views (Views 11, 23, 24 (and 24N), 26, 27 and 29). Potential mitigation of likely adverse effects on visual amenity was identified and embedded mitigation measures considered throughout the pre-application design development process. The architectural quality of the Detailed Component of the Early Phases would be high.

The Parameter Plans and Design Codes for the Outline Component Plots would ensure that the form and architectural treatment of the Outline Component would respond appropriately to the sensitive historic contexts. As a result, the Early Phases would create a layered townscape in views, managing the increase in scale, and would achieve a good balance of familial character, local distinctiveness and architectural coherence, and enough visual variety to minimise any potential visual coalescence between the individual plots. Through these measures, adverse effects on visual amenity have been iteratively reduced and minimised. Nonetheless, on balance, due to the scale and proximity of the Early Phases, in a limited number of views, it is considered that the potential for an adverse effect on the viewer would not be completely mitigated and the nature of the effect would be Adverse.

7.444 The Early Phases would have no effects on regionally designated LVMF views.

Cumulative

7.445 While a number of the cumulative schemes – primarily 100 West Cromwell Road, Edith Summerskill House, 70-80 Lillie Road, 1-9 Lillie Road and Car, Coach, and Lorry Park and 20 Seagrave Road – would be visible in conjunction with the Early Phases from within particular TCAs or within particular views, the extent of the resulting impact in townscape and visual terms would not be sufficient to change whether any effects are considered significant or not significant. The significant effects of the Early Phases on TCAs and views in the context of cumulative schemes would therefore be the same as for the Early Phases considered in isolation.

All Phases

Demolition and Construction

7.446 During demolition and construction works, there would be significant adverse effects due to the change in character and visibility of demolition and construction works: in respect of the following:

- RBKC:
  - TCAs 1A, 2, 3 and 5; and
  - Views 3 (Holland Park), 4 (The Round Pond), 5 (Chelsea Bridge), 7 (Brompton Cemetery, Central Avenue, southern end outside chapel), 8 (Brompton Cemetery, Central Avenue, southern end of Arcade), 9 (Brompton Cemetery, Central Avenue, centre of Arcade), 10 (Brompton Cemetery, Central Avenue, north of Arcade position 3), 11 (Brompton Cemetery, south of the Anglican Chapel), 16 (Kenway Road), 17 (Collingham Place), 18 (Bramham Gardens), 19 (Bolton Gardens), 20 (Harrington Gardens), 21 (Longridge Road), 22 (Nevern Square, north-east corner), 23 (Nevern Square, south side), 24 (Trebivor Road, including 24N dusk), 25 (Philbeach Gardens, outside No. 65), 26 (Philbeach Gardens, outside No.61), 27 (Philbeach Gardens, south end junction with Warwick Road), 29 (Penywern Road), and 30 (Outside No. 40 Earls Court Square).
- LBHF
  - TCAs 1B, 4B, 10, 11, 12 and 15; and
  - Views 31 (Thames Path west of Hammersmith Bridge including 31N dusk), 38 (Eel Brook Common), 39 (Kings Road), 40 (Avonmore Road), 41 (Mornington Avenue), 42 (North End Road, near junction of Fitzjames Ave), 43 (Trevanion Road overlooking Gwendwr Gardens), 44 (Talgarth Road, junction with Gliddon Road), 45 (Talgarth Road A4, junction with Trevanion Road), 46 (Barons Court Road, junction with Barton Road), 47 (Palliser Road, junction with Comeragh Road), 48 (North End Road, junction with Mund Street), 49 (Ivatt Place), 50 (The Queen's Club), 51 (Greyhound Road including 51N dusk), 52 (Queen's Club Gardens, north side), 53 (Archel Road), 54 (Normand Park), 58 (Farm Lane), 59 (Ongar Road).

7.447 While these effects would be adverse in nature, such effects are commonplace in London and would be temporary.

Completed Development Effects

7.448 The All Phases would be based on a coherent landscape-led design with a legible movement framework that would stitch an existing underused brownfield site into its townscape context by creating new routes through an area with no existing permeability or connectivity. Within the All Phases a distinctive new elevated open space would be located at the heart of the All Phases Site, and smaller pieces of new or enhanced public realm would

be created at key locations of orientation both within and on the edges of the All Phases at its interfaces with the surrounding context. The All Phases would repair the edges of the All Phases Site where it interfaces with the adjacent townscape, better defining existing fragmented streetscapes to Lillie Road and West Cromwell Road and creating a softer more permeable edge with the Gibbs Green and West Kensington Estates to the west.

7.449 The tallest buildings within the All Phases would be located close to the existing 31 storey ESB, to the west and north of a new central park, at the crossing of new east-west and north-south routes, marking this as a new destination and crossing point between RBKC and LBHF. The tall building cluster would have a single taller focal point on Plot WB04 of 42-storeys. Plot WB04 would have a distinctive stepped crown and would form the peak of the cluster seen from all directions. A lower datum of tall buildings of equivalent height to ESB would integrate the existing tall building in the new cluster. The dramatic juxtaposition of the existing ESB with the slender vertical counterpoint on Plot WB04 would create a distinctive form on the skyline. The tall building cluster would visibly signal the development of the long-vacant brownfield site of the former exhibition centres and mark the new east-west and north-south routes through the All Phases, the new Table Park and destination cultural uses within the All Phases. Lower development would step down in scale towards the edges of the All Phases Site to manage the change in scale from the tall building cluster to the existing smaller scale townscape context around the All Phases Site.

7.450 A secondary cluster of predominantly commercial large-scale Outline Plots would be located at the northern end of the All Phases Site. The larger scale of the All Phases on its northern edge would reflect the importance of the A4 route into central London from the west and would mark the All Phases as a new destination on this approach.

7.451 As demonstrated by the illustrative views in Appendix E, as required by the Design Code, buildings coming forward within the Outline Component would be of high-quality design and would appropriately address sensitive views from the townscape surrounding the All Phases Site in their articulation and materiality.

7.452 There would be some localised adverse effects on visual amenity and townscape character due to the high contrast in scale and form of the All Phases seen in close proximity to parts of the low scale fine grain townscape of its surrounding context, particularly where this existing townscape is designated townscape of high homogeneity and high sensitivity, with limited appreciation of a taller modern setting. With the potential for adverse effects in mind, the All Phases has been designed over a long process of iterative testing and design development to reduce and minimise adverse effects on townscape character and visual amenity wherever possible, while balancing these considerations with the strategic requirements for the site to optimise its capacity to deliver new homes and jobs.

7.453 The Townscape Assessment has assessed the likely long-term significant effects of All Phases on townscape character and quality in the vicinity of the All Phases Site. This assessment has been informed by verified views.

7.454 Townscape effects would be significant in respect of the following –

- RBKC:
  - TCAs 1A (beneficial in nature), 2 (adverse in nature), 3 (neutral in nature), and 5 (neutral in nature)
- LBHF:
  - TCAs 1B, (beneficial in nature), 4B (beneficial in nature), 10 (beneficial in nature), 11 (beneficial in nature), 12 (neutral in nature), and 15 (beneficial) in LBHF.

7.455 In the Visual Assessment, the effects of All Phases on visual amenity have been assessed using 59 viewing positions. These views permit the All Phases to be assessed in the round and its effect on visual amenity to be tested. A proportionate selection of views is presented in Figure 7.17 – 7.28. As the assessed verified views demonstrate, significant effects for All Phases would arise from 42 of the 59 assessed viewpoints (some only in winter conditions), comprising the following:

- RBKC:

- Views 3 (Holland Park), 4 (The Round Pond), 5 (Chelsea Bridge), 7 (Brompton Cemetery, Central Avenue, southern end outside chapel) (Figure 7.17 and 7.18), 8 (Brompton Cemetery, Central Avenue, southern end of Arcade), 9 (Brompton Cemetery, Central Avenue, centre of Arcade), 10 (Brompton Cemetery, Central Avenue, north of Arcade position 3), 11 (Brompton Cemetery, south of the Anglican Chapel), 16 (Kenway Road), 17 (Collingham Place) (Figure 7.19 and 7.20), 18 (Bramham Gardens), 19 (Bolton Gardens), 20 (Harrington Gardens), 21 (Longridge Road), 22 (Nevern Square, north-east corner), 23 (Nevern Square, south side), 24 (Trebivor Road, including 24N dusk), 25 (Philbeach Gardens, outside No. 65), 26 (Philbeach Gardens, outside No.61) (Figure 7.21 and 7.22), 27 (Philbeach Gardens, south end junction with Warwick Road), 29 (Penywern Road), and 30 (Outside No. 40 Earls Court Square).

- LBHF:
  - Views 31 (Thames Path west of Hammersmith Bridge including 31N dusk), 38 (Eel Brook Common), 39 (Kings Road), 40 (Avonmore Road), 41 (Mornington Avenue), 42 (North End Road, near junction of Fitzjames Ave), 43 (Trevanion Road overlooking Gwendwr Gardens), 44 (Talgarth Road, junction with Gliddon Road) (Figure 7.23 and 7.24), 45 (Talgarth Road A4, junction with Trevanion Road), 46 (Barons Court Road, junction with Barton Road), 47 (Palliser Road, junction with Comeragh Road), 48 (North End Road, junction with Mund Street), 49 (Ivatt Place) (Figure 7.25 and 7.26), 50 (The Queen's Club), 51 (Greyhound Road including 51N dusk) (Figure 7.27 and 7.28), 52 (Queens Club Gardens, north side), 53 (Archel Road), 54 (Normand Park), 58 (Farm Lane), 59 (Ongar Road).

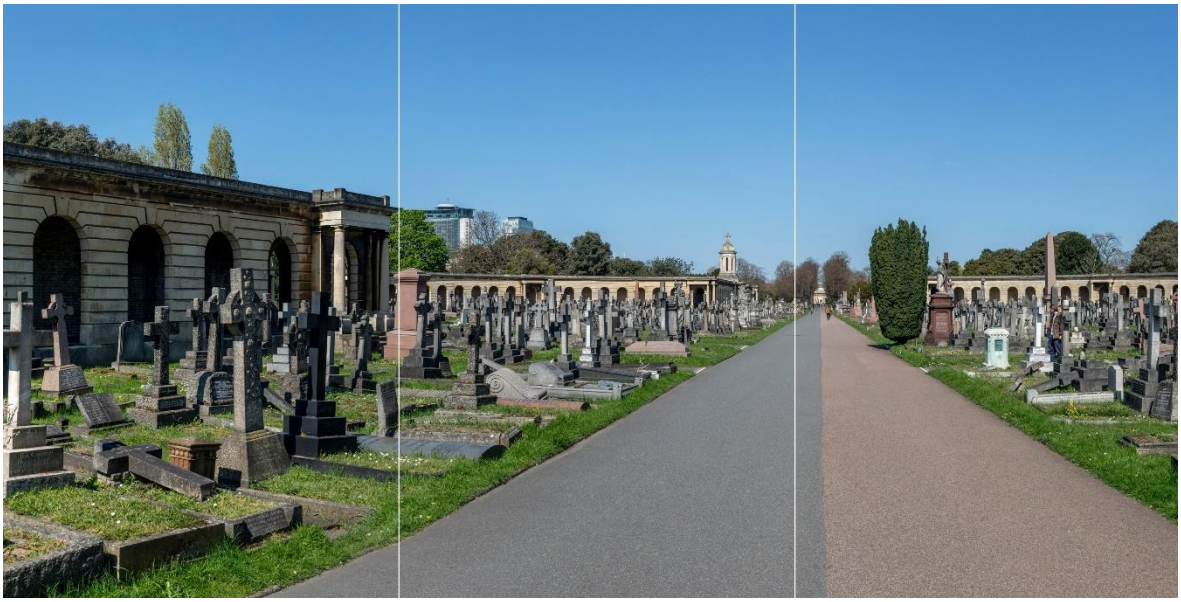


Figure 7.17: Existing View 7

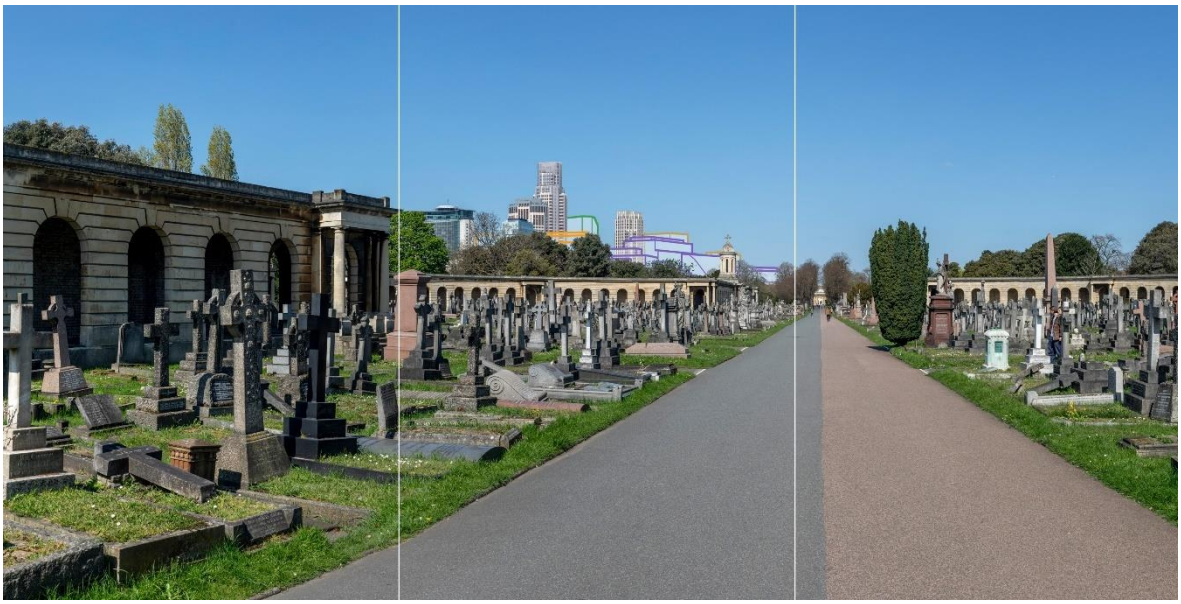


Figure 7.18: Proposed All Phases View 7

Figure 7.19: Existing View 17

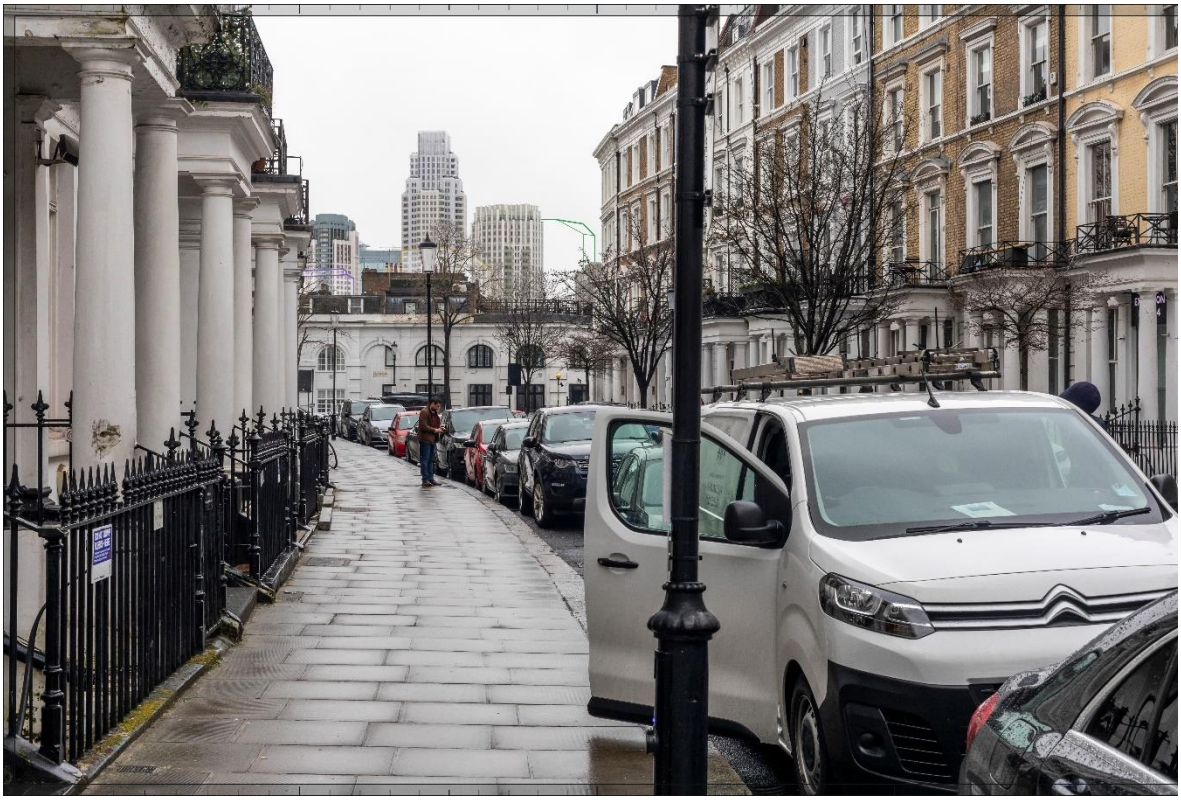


Figure 7.20: Proposed All Phases View 17

Figure 7.21: Existing View 26

Figure 7.22: Proposed All Phases View 26

Figure 7.23: Existing View 44

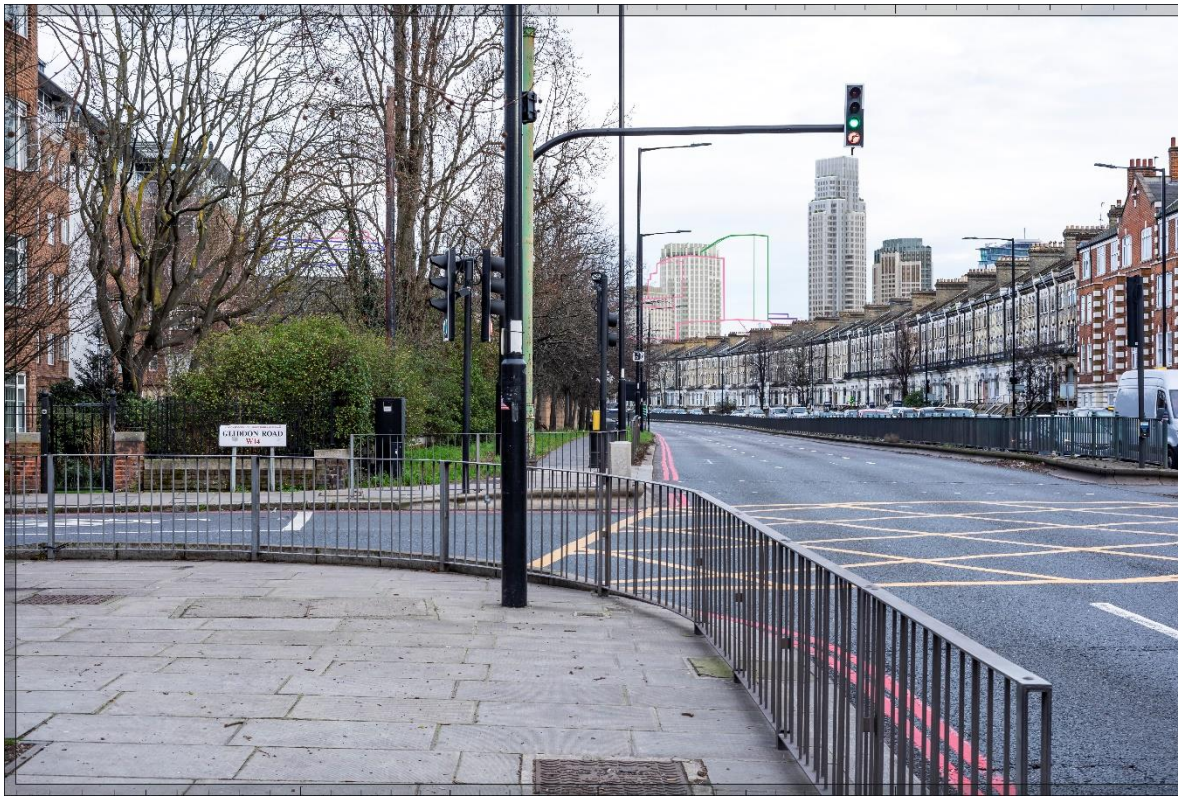


Figure 7.24: Proposed All Phases View 44

Figure 7.25: Existing View 49

Figure 7.26: Proposed All Phases View 49

Figure 7.27: Existing View 51

Figure 7.28: Proposed All Phases View 51

7.456 In three cases, Views 24N, 31N and 51N, significant effects have been assessed from the same viewpoints at night, as well as during the day.

7.457 The effects on 51 of the 59 views would be beneficial or neutral. There would be significant adverse effects on eight views (Views 11, 21, 23, 24 (and 24N), 26, 27, 29 and 47). Potential mitigation of likely adverse effects on visual amenity was identified and embedded mitigation measures considered throughout the design development process. The architectural quality of the Detailed Component of the All Phases would be high. The

Parameter Plans and Design Codes for the Outline Component Plots would ensure that the form and architectural treatment of the Outline Component would respond appropriately to the sensitive historic contexts. As a result, the All Phases would create a layered townscape in views, managing the increase in scale, and would achieve a good balance of familial character, local distinctiveness and architectural coherence, and enough visual variety to minimise any potential visual coalescence between the individual plots. Through these measures, adverse effects on visual amenity have been iteratively reduced and minimised. Nonetheless, on balance, due to the scale and proximity of the All Phases, in a limited number of views, it is considered that the potential for an adverse effect on the viewer would not be completely mitigated and the nature of the effect would be adverse.

7.458 All Phases would have no effects on regionally designated LVMF views.

Cumulative

7.459 While a number of the cumulative schemes – primarily 100 West Cromwell Road, Edith Summerskill House, 70-80 Lillie Road, 1-9 Lillie Road and Car, Coach, and Lorry Park and 20 Seagrave Road – would be visible in conjunction with the Completed Development - All Phases from within particular TCAs or within particular views, the extent of the resulting impact in townscape and visual terms would not be sufficient to change whether any effects are considered significant or not significant. The significant effects of All Phases on TCAs and views in the context of cumulative schemes would therefore be the same as for All Phases considered in isolation.

8.0 Cumulative Effects

Inter-Project Effects

8.1 The inter-project cumulative effects have been summarised in each of the relevant technical topics in section 7 of this NTS.

8.2 No additional significant effects have been reported when combined or additive cumulative effects are considered.

Intra-Project Cumulative Effects

8.3 Intra-project cumulative effects from the Proposed Development itself on sensitive receptors and receptor groups during the demolition and construction stage and the completed development stage, have been considered. A summary of the conclusions are presented below.

Demolition and Construction

8.4 During the demolition and construction stage, both beneficial and adverse effects are likely to arise in respect of existing off-site users (including residential uses); existing vulnerable off-site users (including residential uses); existing and future on-site users (including residential uses); future vulnerable on-site users (including residential uses); existing and future pedestrians and cyclists; existing drivers on the highway network; as well as, existing on-and off-site ecological receptors.

8.5 It is generally accepted that as part of any demolition and construction works, receptors in close proximity would be affected to some degree by a combination of traffic, noise, vibration, dust and visual disturbance. However, by minimising these effects at source through application of control measures in the CEMP and CTLP, and additional mitigation measures identified for each of the technical topics, these effects would be mitigated.

8.6 Four significant adverse effects have been identified during the Early Phases demolition and construction stage in respect of existing vulnerable off-site users (including residential uses); future vulnerable on-site users (including residential uses); existing and future on-site pedestrians, as well as existing and future on-site cyclists. All other effects would not be significant.

8.7 Five significant adverse effects have been identified during the All Phases demolition and construction stage in respect of existing vulnerable off-site users (including residential uses); future vulnerable on-site users(including residential uses); future on-site users(including residential uses); existing and future on-site pedestrians, as well as existing and future on-site cyclists. All other effects would not be significant.

Completed Development

8.8 Upon completion of the Proposed Development both beneficial and adverse effects are likely to arise in respect of existing off-site users; existing vulnerable off-site users (including residential uses); existing and future on-site users (including residential uses); future vulnerable on-site users (including residential uses); existing and future pedestrians and cyclists; existing drivers on the highway network; existing on-and off-site ecological receptors.

8.9 In respect of the Early Phases completed development stage, one significant adverse effect have been identified in respect of the vulnerable existing off-site users (including residential uses) and two significant beneficial effects have been identified in respect of future on-site users (including residential uses) and future vulnerable on-site users (including residential uses).

8.10 Two significant beneficial effects have been identified for the All Phases completed development stage in respect of future vulnerable on-site users (including residential uses) and future on-site users (including residential uses). All other effects would not be significant.

9.0 Summary

Additional Mitigation

9.1 The EIA process has identified the need for additional mitigation as summarised in Table 9.1.

Table 9.1: Summary of Proposed Additional Mitigation

Topic	Proposed Additional Mitigation
Demolition and Construction	
Archaeology	**Early Phases**
	Implementation of an archaeological mitigation strategy comprising the following: • A programme of archaeological investigation, with dissemination at an appropriate level to increase knowledge and appreciation of the buried heritage assets; and • A programme of research and education about the industrial and leisure heritage of the Site for public benefit. The programme of archaeological investigation is anticipated to comprise the following: • Archaeological monitoring of geotechnical pits dug for engineering purposes; • Archaeological evaluation trenches/pits; and • Watching briefs during earth works. The geoarchaeological monitoring and archaeological evaluation would inform an appropriate strategy to offset the removal of buried heritage assets by targeted investigation, recording, and dissemination of the results for public benefit. This would comprise archaeological excavation for remains of medium significance and watching briefs during groundworks for remains of lesser significance. • All archaeological work would be undertaken in accordance with an approved WSI. • The archaeological mitigation strategy would be secured by means of appropriately worded planning conditions associated with each of the two Hybrid Planning Applications.
	All Phases
	• The above additional mitigation presented for the Early Phases development scenario is also relevant to the All Phases development scenario and have not been repeated for the sake of proportionality. • Building Recording of the remains of A World War 2 bunker in the north-western part of the Site if required by Historic England
Socio-Economics	**Early Phases**
	None.
	All Phases
	None; however, the following is noted: • A minor adverse effect has been identified in relation to the displacement of LBD, Ashfield House and 175-177 North End Road from the Site. TfL is working with ECPL to develop a vacant possession strategy which identifies operational needs and suitable locations within TfL's wider estate for relocation. Details are set out within the Lillie Bridge Depot Relocation Statement. • The occupants at 175-177 North End Road are on short term leases. It is anticipated that the businesses would relocate and employees would either relocate with the business or would move to a similar type of job within the labour market. The residential unit is currently subject to a periodic tenancy with no rent being charged. The impact of the temporary loss of employment and floorspace as result of the demolition and construction would not require specific mitigation as this is part of the normal churn of the labour and property market in London.
Human Health	**Early Phases**
	None.
	All Phases
	None.
	Early Phases

Table 9.1: Summary of Proposed Additional Mitigation	
Topic	**Proposed Additional Mitigation**
Transport and Accessibility	None.
	All Phases
	None.
Air Quality	**Early Phases**
	None.
	All Phases
	None.
Noise and Vibration	**Early Phases**
	• In respect of demolition and construction noise and vibration, additional prescriptive working practices to minimise adverse noise and vibration activity effects. • The additional mitigation would be secured by means of appropriately worded planning conditions associated with each of the two Hybrid Planning Applications.
	All Phases
	• In respect of demolition and construction noise and vibration, additional prescriptive working practices to minimise adverse noise and vibration activity effects. • The additional mitigation would be secured by means of appropriately worded planning conditions associated with each of the two Hybrid Planning Applications.
Ecology	**Early Phases**
	None.
	All Phases
	None.
Ground Conditions	**Early Phases**
	• Additional working practice requirements associated with the installation of the closed-loop thermal heat source to mitigate effects on controlled waters. • The additional mitigation would be secured by means of appropriately worded planning conditions associated with each of the two Hybrid Planning Applications.
	All Phases
	• Additional working practice requirements associated with the installation of the closed-loop thermal heat source to mitigate effects on controlled waters: • The additional mitigation would be secured by means of appropriately worded planning conditions associated with each of the two Hybrid Planning Applications.
Water Resources	**Early Phases**
	None.
	All Phases
	None.
Daylight, Sunlight, Overshadowing, Solar Glare and Light Spill	**Early Phases**
	None
	All Phases
	None
Wind Microclimate	**Early Phases**
	None.
	All Phases
	None.
Climate	**Early Phases**
	None.
	All Phases
	None.
Built Heritage	**Early Phases**
	None.

Table 9.1: Summary of Proposed Additional Mitigation	
Topic	**Proposed Additional Mitigation**
	All Phases
	• In respect of the demolition of non-designated heritage receptors (LBD and 9 Beaumont Avenue), a historic building record would be required. • The additional mitigation would be secured by means of appropriately worded planning conditions associated with each of the two Hybrid Planning Applications.
Townscape and Visual	**Early Phases**
	None.
	All Phases
	None.
Completed Development	
Socio-Economics	**Early Phases**
	No significant adverse effects have been predicted and consequently no additional mitigation is required. A minor adverse effect has been identified with regard to secondary education and primary healthcare. Financial contributions towards additional secondary education and primary healthcare capacity could be secured through the S106 if deemed necessary.
	All Phases
	No significant adverse effects have been predicted and consequently no additional mitigation is required. A minor adverse effect has been identified with regard to secondary education and primary healthcare. Financial contributions towards additional secondary education and primary healthcare capacity could be secured through the S106 if deemed necessary.
Human Health	**Early Phases**
	None.
	All Phases
	None.
Transport and Accessibility	**Early Phases**
	The following additional mitigation measures have been relied upon to inform the residual assessment and would be secured through the completion of the S106 agreement and highway agreements under section 278 of the 1980 Highways Act: **Pedestrians** Financial contributions, secured by S106 agreement for the following (if required): • Widening of the crossing on the western side of the A4 West Cromwell Road/Warwick Road junction; • Widening of the crossings and incorporating into the traffic signal staging of the northern and western arm crossings at the Warwick Road/Old Brompton Road junction; • Reconfiguration of Empress Approach to improve pedestrian and cycle connectivity within the Early Phases Site; and • Improvements to Lillie Road, including widening of the bridge, public realm and crossings. **Cyclists** Financial contributions, secured by S106 agreement for the following (if required): • Reconfiguration of Empress Approach to improve pedestrian and cycle connectivity; • A two-way cycle track on Warwick Road connecting the Early Phases Site with Trebovir Road and Earls Court Square (where Quietway 15 can be accessed); and • Improved cycle facilities on Old Brompton Road and Lillie Road between Empress Approach and Eardley Crescent **Bus Improvements** • Financial contributions, secured by S106 agreement for the following (if required):Reconfiguration of the Lillie Road Bus Layover and inclusion of a commencing bus stop within the Layover for the Route 190; and • Financial contributions, secured by S106 agreement for improvements to bus services and/or bus infrastructure. **West Brompton Station Improvements** Financial contributions, secured by S106 agreement for the following (if required): • Reconfiguration of the ticket hall providing additional gates, new ticket machines and re-provision of staff accommodation;

Table 9.1: Summary of Proposed Additional Mitigation	
Topic	**Proposed Additional Mitigation**
	• New high-level walkway replacing the stairs to Platform 3 and providing a widened walkway to Platform 4, as well as a further connection to Platform 1; and • Potential for step-free access.
	All Phases
	The following mitigation measures have been relied upon to inform the residual assessment and would be secured through the completion of the S106 agreement and highway agreements under section 278 of the 1980 Highways Act: **Pedestrians** Financial contributions, secured by S106 agreement for the following (if required): • Widening of the crossing on the western side of the A4 West Cromwell Road/Warwick Road junction; • Widening of the crossings and incorporating into the traffic signal staging of the northern and western arm crossings at the Warwick Road/Old Brompton Road junction; • Reconfiguration of Empress Approach to improve pedestrian and cycle connectivity within the All Phases Site; • Improvements to Lillie Road, including widening of the bridge, public realm and crossings; • Improved pedestrian crossing facilities at the A4 West Cromwell Road junction with North End Road in the form of widened pedestrian crossings; and • A new pedestrian and cycle crossing across the A4 West Cromwell Road between the junction with North End Road and Warwick Road.. **Cyclists** Financial contributions, secured by S106 agreement for the following (if required): • Reconfiguration of Empress Approach to improve pedestrian and cycle connectivity; • A two-way cycle track on Warwick Road connecting the All Phases Site with Trebovir Road and Earls Court Square (where Quietway 15 can be accessed); • Improved cycle facilities on Old Brompton Road and Lillie Road between Empress Approach and Eardley Crescent; and • A new pedestrian and cyclist crossing across the A4 West Cromwell Road between the junction with North End Road and Warwick Road. **Bus Improvements** • Reconfiguration of the Lillie Road Bus Layover and inclusion of a commencing bus stop within the Layover for the Route 190; and • Financial contributions, secured by S106 agreement for improvements to bus services and/or bus infrastructure. **West Brompton Station Improvements** Financial contributions, secured by S106 agreement for the following (if required): • Reconfiguration of the ticket hall providing additional gates, new ticket machines and re-provision of staff accommodation; • New high-level walkway replacing the stairs to Platform 3 and providing a widened walkway to Platform 4, as well as a further connection to Platform 1; and • Potential for step-free access. **West Kensington Station Improvements** Financial contributions, secured by S106 agreement for the following (if required): • Reconfiguration of the ticket hall providing additional gates, new ticket machines and re-provision of staff accommodation; • New high-level walkway and staircase to replace the stairs to Platform 1; and • Potential for step-free access. • Financial contributions secured through the S106 agreement.
Air Quality	**Early Phases**
	None.
	All Phases
	None.
Noise and Vibration	**Early Phases**
	In respect of building services noise, the following additional mitigation measures would be required to be implemented to reduce the likelihood of significant effects: • Detailed assessment of building services noise on a plot-by-plot basis for the Outline Component .

Table 9.1: Summary of Proposed Additional Mitigation	
Topic	**Proposed Additional Mitigation**
	• To ensure that cumulative building services noise levels achieve the targets required by RBKC and LBHF, roof plant systems would be selected to not exceed the sound power level limits presented in Table 11.28 of ES Chapter 11: Noise and Vibration. • Noise from low-level building services would be controlled to not exceed a sound pressure level of 50 dB $L_{Aeq,T}$ within the public realm or within any proposed outdoor amenity space. The additional mitigation would be secured by means of appropriately worded planning conditions associated with each of the two Hybrid Planning Applications.
	All Phases
	In respect of building services noise, the following additional mitigation measures would be required to be implemented to reduce the likelihood of significant effects: • Detailed assessment of building services noise on a plot-by-plot basis for the Outline Component . • To ensure that cumulative building services noise levels achieve the targets required by RBKC and LBHF, roof plant systems would be selected to not exceed the sound power level limits presented in Table 11.28 of ES Chapter 11: Noise and Vibration. • Noise from low-level building services would be controlled to not exceed a sound pressure level of 50 dB $L_{Aeq,T}$ within the public realm or within any proposed outdoor amenity space. The additional mitigation would be secured by means of appropriately worded planning conditions associated with each of the two Hybrid Planning Applications.
Ecology	**Early Phases**
	None.
	All Phases
	None.
Ground Conditions	**Early Phases**
	None.
	All Phases
	None.
Water Resources	**Early Phases**
	None.
	All Phases
	None.
Daylight, Sunlight, Overshadowing, Solar Glare and Light Spill	**Early Phases**
	None
	All Phases
	None
Wind Microclimate	**Early Phases**
	In respect of achieving required on-site rooftop/terrace/podium and ground level seating amenity conditions in the summer season, the following additional mitigation measures are required to be secured • Proposed Detailed Component landscaping to be secured by means of appropriately worded planning conditions or S106 obligation, including the additional mitigation identified in the wind mitigation testing. • UGF and BNG minimum commitments to be secured by means of appropriate planning conditions or S106 obligation. • Detailed landscaping proposals to be submitted alongside future RMAs (as relevant) with updated wind assessment (desk-top or wind tunnel) if considered necessary by a technical specialist.
	All Phases
	In respect of achieving required on-site rooftop/terrace/podium and ground level seating amenity conditions in the summer season, the following additional mitigation measures are required to be secured • Proposed Detailed Component landscaping to be secured by means of appropriately worded planning conditions or S106 obligation, including the additional mitigation identified in the wind mitigation testing.

Table 9.1: Summary of Proposed Additional Mitigation	
Topic	**Proposed Additional Mitigation**
	• UGF and BNG minimum commitments to be secured by means of appropriate planning conditions or S106 obligation. • Detailed landscaping proposals to be submitted alongside future RMAs (as relevant) with updated wind assessment (desk-top or wind tunnel) if considered necessary by a technical specialist.
Climate	**Early Phases**
	None.
	All Phases
	None.
Built Heritage	**Early Phases**
	None
	All Phases
	The additional mitigation presented for the Early Phases development scenario is also relevant to the All Phases development scenario and have not been repeated for the sake of proportionality.
Townscape and Visual	**Early Phases**
	None.
	All Phases
	None.

Significant Demolition and Construction Effects

Early Phases

9.2 The following temporary significant beneficial environmental effects have been identified:

- Changes in community identity due to a changing relationship with the Site for vulnerable groups population; and
- Community participation and interaction opportunities.

9.3 The following temporary significant adverse environmental effects have been identified:

- Demolition and construction noise and vibration on vulnerable groups population;
- Severance at Link 1 - Empress Approach receptor;
- Driver delay on account of corridor delay at:
  - Route 3 NB – Along A3220 Warwick Rd receptor;
  - Route 5 EB – Along A3218 Lillie Rd receptor;
- Change in pedestrian and cycle delay at Link 1 - Empress Approach receptor;
- Changes in pedestrian and cycle amenity at Link 1 - Empress Approach receptor;
- Changes in accidents and safety at Link 1 - Empress Approach receptor;
- Changes to parking demand and load at Link 1 - Empress Approach receptor;
- Generation of daytime demolition and construction activity noise at:
  - 17 existing residential receptor groups;
  - two existing non-residential receptors;
  - three proposed Detailed Component receptor plots;
  - six proposed Outline Component Development Zones;
- Generation of night-time activity noise at 17 existing residential receptor groups;
- Generation of vibration effects at:
  - nine existing residential receptor groups;
  - one existing non-residential receptors;

  - five proposed Detailed Component Plots;
  - six proposed Outline Component Development Zones;
- Changes in daylight and sunlight amenity at residential, educational and hotel receptors;
- Overshadowing at outdoor amenity spaces;
- Temporary changes to townscape character at TCA 2, TCA 3, TCA 1 A, TCA 1B, TCA 10, TCA 11, TCA 5 and TCA 12; and
- Temporary changes to visual amenity at 38 views:

9.4 From the assessment of intra-project cumulative effects, four significant adverse effects have been identified during the Early Phases demolition and construction stage in respect of the following receptors and receptor groups:

- Vulnerable existing off-site users, including residential uses;
- Vulnerable future on-site users including residential uses;
- Existing and future on-site pedestrians; and
- Existing and future on-site cyclists.

All Phases

9.5 The following temporary significant beneficial environmental effects have been identified:

- Changes in community identity due to a changing relationship with the Site for vulnerable groups; and
- Community participation and interaction opportunities.

9.6 The following temporary significant adverse environmental effects have been identified:

- Demolition and construction noise and vibration on vulnerable groups;
- Severance at Link 1 – Empress Approach receptor;
- Driver delay on account of corridor delay at:
  - Route 3 NB – Along A3220 Warwick Rd receptor;
  - Route 5 EB – Along A3218 Lillie Rd receptor;
- Change in pedestrian and cycle delay at Link 1 – Empress Approach receptor;
- Changes in pedestrian and cycle amenity at Link 1 – Empress Approach receptor;
- Changes in accidents and safety at Link 1 – Empress Approach receptor;
- Changes to parking demand and load at Link 1 – Empress Approach receptor;
- Generation of daytime demolition and construction activity noise at:
  - 27 existing residential receptor groups;
  - two existing non-residential receptors;
  - three proposed Detailed Component receptor plots;
  - 11 proposed Outline Component Development Zones;
- Generation of night-time activity noise at 21 existing residential receptor groups and four proposed Outline Component Development Zones;
- Generation of vibration effects at:
  - 14 existing residential receptor groups;
  - Two existing non-residential receptors;
  - Nine proposed Detailed Component Plots and proposed Outline Component Development Zones;
- Changes in daylight and sunlight amenity at residential, educational and hotel receptors;
- Overshadowing at outdoor amenity spaces;
- Based on a worst-case, demolition of the LBD Train Maintenance Shed, a non-designated heritage receptor;
- Demolition of 9, Beaumont Avenue, a non-designated heritage receptor;

- Temporary changes to townscape character at TCA 2, TCA 3, TCA 12, TCA 1 A, TCA 1B, TCA 10, TCA 11, TCA 4B, TCA 5 and TCA 15; and
- Temporary changes to visual amenity at 50 views.

9.7 From the assessment of intra-project cumulative effects, five significant adverse effects have been identified during the All Phases demolition and construction stage in respect of the following receptors and receptor groups:

- Vulnerable existing off-site users, including residential uses;
- Future on-site users including residential uses;
- Vulnerable future on-site users including residential uses;
- Existing and future on-site pedestrians; and
- Existing and future on-site cyclists.

Significant Completed Development Effects

9.8 The likely significant completed development effects of the Proposed Development can be summarised as follows:

Early Phases

9.9 The following permanent significant beneficial environmental effects have been identified:

- Delivery of new homes within LBHF and RBKC;
- Increase access to and provision of open space on a Site and Local level;
- Provision of floorspace likely to support a minimum of 4,860 FTE net additional jobs at the Local and Borough level;
- Additional spending by residents, students and employees on a Local level;
- Increased climate change mitigation and adaptation for the Site level vulnerable groups population to effects arising from extreme weather events;
- Provision of open space for physical activity, use of open space and networking;
- Changes in community identity due to a changing relationship at Site level for vulnerable groups population;
- Community interaction and participation support opportunities for the vulnerable groups population;
- Provision of active, safe and sustainable transport and access for the existing off-site general population;
- Provision of active, safe and sustainable transport and access for existing off-site vulnerable groups;
- Effect of Early Phases on off-site flood risk;
- Change in townscape character at TCA 1A, TCA1B, TCA 10 and TCA 11; and
- Change to visual amenity at 11 views.

9.10 From the assessment of intra-project cumulative effects, two significant beneficial effects have been identified during the Early Phases completed development stage in respect of the following receptors and receptor groups:

- Future on-site users, including residential uses; and
- Vulnerable future on-site users, including residential uses.

9.11 The following permanent significant adverse environmental effects have been identified:

- Severance at Link 1 - Empress Approach receptors;
- Driver delay due to corridor delays at:
  - Route 1 EB - Along A4;
  - Route 5 WB - Along A3218 Lillie Road;
  - Route 3 NB - Along A3220 Warwick Road;
  - Route 5 EB - Along A3218 Lillie Road;
- Change in pedestrian and cycle delay at Link 1 - Empress Approach receptors;

- Changes in pedestrian and cycle amenity at Link 1 - Empress Approach receptors;
- Changes in public transport demand and capacity at local bus stops and railway stations (Earl's Court);
- Changes in daylight amenity at104 receptors when assessed against the acontextual BRE Guidelines. When the 104 properties are assessed against the alternative contextual target criteria:
  - 73 properties would meet the alternative daylight target criteria and would be acceptable in consideration of context;
  - 25 properties would substantially (for the most part) meet the alternative daylight target criteria and would be acceptable in consideration of context;
  - six properties would not meet the alternative daylight target criteria.

  The six properties are:
  - 40-42 Lillie Road;
  - 7 Aisgill Avenue;
  - 7-9 Lillie Road;
  - 1 and 55 Eardley Crescent;
  - 25 Philbeach Gardens;
- Changes in sunlight amenity at 60 receptors when assessed against the acontextual BRE Guidelines. When the 60 properties are assessed against the alternative contextual target criteria:
  - 38 properties would meet the alternative sunlight target criteria and would be acceptable in consideration of context;
  - 17 properties would substantially (for the most part) meet the alternative sunlight target criteria and would be acceptable in consideration of context; and
  - five properties would not meet the alternative target criteria

  The five properties are:
  - 21 Philbeach Gardens;
  - 25 Philbeach Gardens;
  - 30-31 Philbeach Gardens;
  - 42 Philbeach Gardens;
  - 46 Philbeach Gardens;
- Changes in overshadowing at 17 receptors when assessed against the acontextual BRE Guidelines. When the 17 amenity areas are assessed against the alternative contextual target criteria:
  - 12 amenity areas would meet the alternative overshadowing target criteria and would be acceptable in consideration of context;
  - two amenity areas would substantially (for the most part) meet the alternative overshadowing target criteria and are acceptable in consideration of context;
  - two would not meet the alternative target criteria;
- Sitting to standing use in the Summer season at three proposed on-site rooftop/terrace level amenity locations;
- Change in townscape character at TCA 2; and
- Change to visual amenity at seven views.

9.12 The following permanent significant neutral environmental effects have been identified:

- Change in townscape character at TCA 3 and TCA 5; and
- Change to visual amenity in 20 views;

9.13 From the assessment of intra-project cumulative effects, one significant adverse effect has been identified during the Early Phases completed development stage in respect of the following receptors and receptor group:

- Vulnerable existing off-site users, including residential uses.

All Phases

9.14 The following permanent significant beneficial environmental effects have been identified:

- Delivery of new homes within LBHF and RBKC;
- Increase access to and provision of open space on a Site and Local level;
- Provision of floorspace likely to support a minimum of 6,960 FTE net additional jobs within the Borough level;
- Additional spending by residents, students and employees on a Local level;
- Provision of open space for physical activity, use of open space and networking;
- Changes in community identity due to a changing relationship at Site level for the vulnerable groups population;
- Community interaction and participation support opportunities for the vulnerable groups population;
- Provision of active, safe and sustainable transport and access for the existing off-site general population;
- Provision of active, safe and sustainable transport and access for existing off-site vulnerable groups;
- Effect of the All Phases on off-site flood risk;
- Effect of the All Phases on the local Thames Water sewer network, through consideration of the proposed drainage strategy;
- Change in townscape character at TCA 1A, TCA 1B, TCA 4B, TCA 10, TCA 11, TCA 15; and
- Change to visual amenity at 11 views.

9.15 From the assessment of intra-project cumulative effects, two significant beneficial effects have been identified during the All Phases completed development stage in respect of the following receptors and receptor groups:

- Future on-site users, including residential uses; and
- Vulnerable future on-site users, including residential uses.

9.16 The following permanent significant adverse environmental effects have been identified:

- Severance at Link 1 - Empress Approach receptors;
- Driver Delay due to Corridor delays at:
  - Route 5 EB - Along A3218 Lillie Road;
- Change in pedestrian and cycle delay at Link 1 - Empress Approach receptors;
- Changes in pedestrian and cycle amenity at Link 1 - Empress Approach receptors;
- Changes in daylight amenity at 155 receptors when assessed against the acontextual BRE Guidelines. When the 155 properties are assessed against the alternative contextual target criteria:
  - 97 properties would meet the alternative daylight target criteria and would be acceptable in consideration of context;
  - 36 properties would substantially (for the most part) meet the alternative daylight target criteria and would be acceptable in consideration of context; and
  - 22 properties would not meet the alternative daylight target criteria.

  These 22 properties are:
  - Flats 1-10 and Flats 46-55, Kensington Hall Gardens;
  - 177 North End Road (within the Site boundary);
  - 40-42 Lillie Road;
  - 9-28, 29-38 Gibbs Green;
  - 1, 2, 3-8, 9, 10 and 14 Dieppe Close;
  - 7 Garsdale Terrace;
  - 14B, 14C and 14D Aisgill Avenue;
  - 7 Aisgill Avenue;
  - 7-9 Lillie Road;

  - 1 and 55 Eardley Crescent;
  - 25 and 35 Philbeach Gardens;
- Changes in sunlight amenity at 73 receptors when assessed against the acontextual BRE Guidelines. When the 73 properties are assessed against the alternative contextual target criteria:
  - 40 properties would meet the alternative sunlight target criteria and would be acceptable in consideration of context;
  - 25 properties would substantially (for the most part) meet the alternative sunlight target criteria and would be acceptable in consideration of context; and
  - eight properties would not meet the alternative target criteria

  The eight properties are:
  - 21 Philbeach Gardens (RBKC);
  - 25 Philbeach Gardens (RBKC);
  - 30-31 Philbeach Gardens (RBKC);
  - 37 Philbeach Gardens (RBKC);
  - 40 Philbeach Gardens (RBKC);
  - 42 Philbeach Gardens (RBKC);
  - 46 Philbeach Gardens (RBKC);
  - 48 Philbeach Gardens (RBKC);
- Changes in overshadowing at 24 receptors when assessed against the acontextual BRE Guidelines. When the 24 amenity areas are assessed against the alternative contextual target criteria:
  - 17 amenity areas would meet the alternative overshadowing target criteria and would be acceptable in consideration of context;
  - four amenity areas would substantially (for the most part) meet the alternative overshadowing target criteria and would be acceptable in consideration of context; and
  - five would not meet the alternative target criteria.
- Sitting to strolling use in the summer season at six proposed on-site ground level seating areas;
- Sitting to standing use in the summer season at proposed on-site rooftop level seating amenity areas at receptor 409;
- Change in townscape character at TCA 2; and
- Change to visual amenity in six views.

9.17 The following permanent significant neutral environmental effects have been identified:

- Change in townscape character at TCA 3, TCA 5, TCA 12; and
- Change to visual amenity in 25 views.

EARLS COURT

Thank you

Ramboll
EC.PA.12D
July 2024

The
Earls Court
Development
Company