

Fulton Road EIA Scoping Report

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INTRODUCTION

- 1. Regal Wembley Ltd (hereinafter referred to as the 'Applicant') is seeking full (detailed) planning permission for the proposed redevelopment of an area of land bounded by Wealdstone Brook to the north, light industrial units to the east, Fifth Way to the south and Fulton Road to the west. The Site covers a total area of 1.33 hectares (ha) and falls within the administrative boundary of the London Borough of Brent (LBB).
- 2. The Site is irregular in shape and currently comprises a two-storey commercial warehouse in the southwest corner of the Site, yard space towards the north and east of the Site with access from Fulton Road to the north-west corner of the Site. The Site also contains a small access alleyway connecting the Site to Fourth Way towards the northeast of the Site.
- 3. The scheme proposals (hereafter referred to as the 'Proposed Development') includes the demolition of the existing buildings on the Site and the construction of a residential-led, mixed-use development comprising of 3 buildings arranged around 5 Blocks. Proposals will include up to 800 residential units across the 5 Blocks, together with flexible commercial/light industrial uses which is likely to include retail, storage and/or leisure uses with associated amenity and plant spaces at ground/podium level. The 5 Blocks range in height between ground floor plus 10 and 24 storeys (exclusive of plant).
- **4. Figure 1** and **Figure 2** show the <u>indicative</u> redline planning application boundary and a site location plan respectively.



Figure 1 Indicative Redline Planning Application Boundary





Figure 2 Site Location Plan

- 5. Given the nature of the scheme described, the Proposed Development falls within the classification of Schedule 2, 10(b) (Infrastructure Projects Urban Development Projects) of the EIA Regulations¹. Taking into account the scale of the redevelopment and the nature of the Site and surrounding area, it is considered that there is the potential for significant environmental effects to arise. The Proposed Development is therefore considered to constitute 'EIA development' under the EIA Regulations, and so an Environmental Statement (ES) will be prepared and submitted in support of the planning application.
- 6. Trium Environmental Consulting LLP (Trium) has been commissioned by the Applicant to prepare an EIA Scoping Opinion Request for the redevelopment of the Site in line with the requirements of the EIA Regulations and relevant EIA guidance. This includes submitting a Scoping Opinion Request Report (hereafter referred as the 'Scoping Report') to the LBB that sets out the proposed scope of the EIA and the content and approach to preparing the ES that will be submitted to accompany the application for full planning permission.
- 7. The EIA Regulations require that in order to ensure the completeness and quality of the ES, '(a) the developer must ensure that the environmental statement is prepared by competent experts;' and '(b) the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts.' Trium consider that these requirements are equally important and relevant to the EIA scoping process in addition to the preparation of the ES. As such, in accordance with this requirement, the following statement is provided:

"Trium is an environmental consultancy specialising in urban regeneration and property development

¹ The Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018



projects in the UK, with a specific focus in London. Trium's Partners and Employees have extensive experience in managing the environmental issues and impacts surrounding large scale, high profile urban regeneration development projects. The Partners and Employees of Trium have, over the course of their careers to date (including with former employers), project directed, managed or contributed to over 400 EIAs within the retail, residential, leisure, commercial, cultural, infrastructure and industrial sectors."

 Information on Trium's lead partner and project manager including information for each technical subconsultant will be appended to the ES within ES Volume 3, Appendix: Introduction and EIA Methodology.

Structure of the EIA Scoping Report

- **9.** This Scoping Report is structured as follows and provides:
 - A summary of the EIA purpose and process including EIA Scoping;
 - A description of the location of the Site and the surrounding area's environmental context;
 - An overview of the Proposed Development;
 - An outline of the potential environmental sensitivities and receptors;
 - An outline of the planning context;
 - A description of the EIA methodology;
 - The approach to determining the significance of effects;
 - A description of the environmental topic areas that are considered to potentially result in significant effects on the environment and an explanation of the proposed scope and assessment methodology that will be adopted to predict the magnitude of potential impacts and the resultant scale, nature, geographic extent and duration of potential effects, and the effect significance within the EIA;
 - A description of the environmental topic areas that are considered unlikely to result in significant environmental effects and are therefore 'scoped out' of the EIA;
 - Confirmation of the proposed structure of the ES; and
 - The request for an EIA Scoping Opinion.



EIA AND THE SCOPING PROCESS

EIA Purpose and Process

- 10. Environmental Impact Assessment is a process carried out which examines available environmental information to ensure that the likely significant environmental effects of projects are identified and assessed before a decision is taken on whether a project is granted planning permission. This means environmental issues can be identified at an early stage and projects can be designed to avoid or to minimise significant environmental effects, and appropriate mitigation and monitoring can be utilised.
- **11.** Regulation 4 of the EIA Regulations sets out the EIA process. Specifically, Regulation 4(2) states that "the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the Proposed Development on the following factors:
 - (a) population and human health;
 - (b) biodiversity;
 - (c) land, soil, water, air and climate;
 - (d) Material assets, cultural heritage and the landscape;
 - (e) The interaction between the factors referred to in sub-paragraphs (a) to (d)."
- 12. The potential for likely significant effects on the aforementioned factors, during both the demolition and construction works associated with the Proposed Development and once the Proposed Development is complete and operational, is considered within the following relevant environmental topics addressed within this Scoping Report:
 - Air Quality;
 - Archaeology (Buried Heritage);
 - Aviation;
 - Climate Change;
 - Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare;
 - Ecology and Biodiversity;
 - Effect Interactions
 - Geoenvironmental (Ground Conditions, Groundwater and Land Take and Soils);
 - Health;
 - Noise and Vibration;
 - Project Vulnerability;
 - Socio Economics;
 - Townscape, Built Heritage and Visual;
 - Traffic and Transport;
 - Electronic Interference;
 - Waste;
 - Water Resources, Drainage and Flood Risk; and



- Wind Microclimate.
- 13. The method behind the EIA process generally² takes into account the existing conditions of the area into which the development is being introduced (*the baseline*) and makes reasonable predictions of the likely change (*the impact* in terms of magnitude) that may occur, during both its construction and when the development is completed and operating as proposed. The predicted impact is considered in terms of key environmental and social aspects (*receptor / resource*) found within the surrounding area, and based on their sensitivity to change, the resulting change experienced by the receptor / resource (*the effect*) is then determined. Any mitigation measures required in order to reduce or eliminate adverse effects are then considered and assessed, with the resulting residual effect being determined as significant or not. The likely significant effects are then reported (within an *environmental statement*) for consideration by the relevant planning authority when considering whether to grant planning permission for a development.

The Scoping Process

- **14.** EIA Scoping forms one of the first stages of the EIA process. Requesting an EIA Scoping Opinion Request from a local planning authority, under Regulation 15 of the EIA Regulations, involves the preparation of a Scoping Report and its submission to the local planning authority is part of a formal request for their opinion on the content or 'scope' and approach to the EIA.
- **15.** The purpose of scoping is to identify:
 - the important environmental issues and topics for consideration in the EIA;
 - the baseline conditions and assessment methodology to be used for assessment;
 - any potentially sensitive receptors that may be affected by the development being proposed;
 - the appropriate space boundaries of the EIA: the Site boundary and surrounding environmental context;
 - the information necessary for decision-making; and
 - the potential significant effects which are likely to result from the development both during its demolition and construction and operation.
- 16. This Scoping Report constitutes a formal request for an EIA Scoping Opinion from the LBB.
- 17. In accordance with the requirements of the Town and Country Planning (Development Management Procedure) Order 2015 (article 18, Schedule 4), this Scoping Report will need to be issued by the LBB to the statutory consultees that are considered to have an interest in the EIA of the Proposed Development and should be consulted as part of the EIA Scoping process. It is expected that the LBB will also issue the Scoping Report to non-statutory and key, local stakeholders and interest groups who are deemed to similarly have an interest in the EIA of the Proposed Development.
- **18.** The process of consultation is a key requirement of the EIA process and the views of statutory consultees and stakeholders help to identify specific issues, as well as identifying additional information in their possession, or of which they have knowledge, which may be of use in progressing the EIA.
- **19.** The ES will append the Scoping Opinion and include a summary of any other consultation undertaken as part of the EIA process.

² There may be exceptions to the general approach described. Where there are exceptions, this will be clearly described within the relevant methodology section, outlining both the departure from the general EIA methodology and the description of the alternative approach. This is discussed further within 'EIA Process and Methodology' section of this Scoping Report.



SITE CONTEXT

Site Location

- 20. The Site covers a total area of 1.33 hectares (ha) and falls within the administrative boundary of the London Borough of Brent (LBB). The Site is centred on Ordnance Survey National Grid Reference TQ197859.
- **21.** The Site is bordered by:
 - Wealdstone Brook along the northern boundary of the Site with a number of residential and light industrial units beyond the Brook and railway lines serving Wembley Park underground station via the Jubilee and Metropolitan lines;
 - Several light industrial and commercial units immediately to the east with Fourth Way, more industrial units and Wealdstone brook further east;
 - Fifth Way to the south with on-going construction of Kelaty House, a development comprising student accommodation beyond this.
 - Fulton Road to the west, beyond which lies a small number of retail units and a large car park serving Wembley Stadium.
- 22. The Site is currently occupied by a large industrial warehouse (approximately 5,300m²) recently used for Euro Car Parts (Figure 3, Figure 4, Figure 5 and Figure 6). With the warehouse located towards the southwestern portion of the Site, the remainder of the Site is predominantly hardstanding including an ancillary car park towards the northwest of the Site to serve the warehouse. To the east of the Site is an area of yard space which once served the warehouse. Access to the Site can be gained via Fulton Road towards the north-west of the Site. There is an additional area of land that comprises of a small alley towards the north-east of the Site which extends from the main Site towards Fourth Way.

Figure 3 View of the Site from southwest at the corner of First Way, Fifth Way and Fulton Road







Figure 4 View of the Site from northwest on Fulton Road

Figure 5 View of the warehouse and associated hardstanding from within the Site



Figure 6 View from east of the Site from Fourth Way





Site Environmental Context

Environmental Context and Description of the Surrounding Area

- **23.** The Site is located adjacently to the northeast of Quintain's Wembley Masterplan area, an area covering a large amount of land surrounding Wembley Stadium. Consequently, the surrounding area is currently undergoing a large amount of regeneration, with the majority of this regeneration located to the southwest, west and northwest of the Site. Additionally, the Site is located within the Wembley Area Action Plan (WAAP) and is listed under site allocation W27 by the LBB.
- **24.** The key environmental features and designations associated with the Site and its surroundings are presented within **Table 1**.

Environmental Topics	Key Considerations/ Potential Issues
Air quality	The Site is located within the London Borough of Brent Air Quality Management Area (AQMA) which encompasses all main roads within the borough and covers the entire south and east areas of the borough.
Buried Heritage (Archaeology)	The proposed site is not located within an Archaeological Priority Area (APA) The closest Archaeological Priority Area is located roughly 1.1km to the northeast of the Site on Old Church Lane.
Built Heritage/ Townscape	 There are no listed buildings within the Site. There are no listed buildings within 500m of the Site. There are 3 Grade II listed buildings within 1km of the Site: Wembley Arena located roughly 630m to the west of the Site. Brent Town Hall located roughly 780m to the north of the Site. 3x K6 Telephone Kiosks located roughly 795m to the west of the Site. The nearest Conservation Area (CA) is located at Barn Hill, roughly 800m northwest of the Site with a Conservation Area located at Neasden, 920m east of the Site.
Ecology	The Site is not statutorily designated for any ecological interest and does not fall within the boundaries of any statutory or non-statutory sites, including Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR) (as defined in Part 1 of the EIA Regulations). The Wealdstone Brook which bounds the Site to the north is designated as a Site of Importance for Nature Conservation (SINC). There are a number of additional SINC's within a 1km radius of the Site.
Flood Risk and Surface Water Drainage	The majority of the Site is located within an area designated as 'Flood Zone 1 - land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%)" ³ . There is a small area of land towards the northern boundary of the Site designated as Flood Zone 2 and 3. Environment Agency (EA) information for the Site indicates that there is a low risk of surface water flooding across site ³ with predicted depths less than 300mm. The EA's Groundwater Source Protection Zone Map confirms that the Site does not lie within a protected zone. The Site is not within a flood risk management priority area.
Ground Conditions	Consists of London Clay Formation (LCF) - Clay, Silt and Sand.
Noise and Vibration	Potential causes for noise and vibration surrounding the Site include the railway lines associated with Wembley Park station which at their nearest point to the Site are located roughly 270m north of the Site. During events, Wembley Stadium is a potential source of noise located 535m southwest of the Site. Roads adjacent to the Site have relatively little traffic.
Planning designations	The Site lies within three planning designations, these being: the London Plan's - Wembley Opportunity Area; the LBB's Wembley Area Action Plan (site allocation W 27 – Euro Car Parts) and the Greater London Authority's (GLA) Strategic Cultural Area;
Socioeconomics	The nearest educational facility to the Site is Chalkhill Primary School which is located approximately 370m northeast; The nearest medial service to the Site is the Chalkhill Family Practice GP Surgery which is located approx. 535m to the northwest;

 Table 1
 Key Environmental Features and Designations

³ Source: <u>https://flood-map-for-planning.service.gov.uk/</u>



Nearby open spaces to the Site include Chalkhill Estate (approx. 375m to the norther Elvin Gardens (approx. 520m to the west).				
	The nearest residential receptors to the Site are located at Empire Court along North End Road. At their nearest point to the Site, the residential units are located approximately 80m north of the Site.			
Transport and access	The Site benefits from a Public Transport Accessibility Level (PTAL) rating of 4 – good;			
	The nearest bus stop is located just to the south of the Site on Fifth Way and is accessed by the 92 and 206 bus routes;			
	The closest tube station to the Site is Wembley Park. It is located roughly 650m to the northwest of the Site and connects to the Jubilee and Metropolitan lines.			
	There is an off-road cycle route to the south-east of the Site, which connects to Stonebridge Park railway station approximately 2.5km to the south of the Site. Cycle parking is available at Wembley Central, Wembley Stadium and Wembley Park stations.			

25. Figure 7 below shows the environmental context of the Site and the surrounding area as summarised in the above **Table 1**. A 1km radius from the Site has been drawn onto the map and points of interest outside this radius have not been shown.

Figure 7 Environmental Context Map



Relevant Planning History

- **26.** A number of extant planning permissions have been consented for the Site in respect to its existing site land uses. These include:
 - Planning permission was granted in 2005 for the formation of a vehicle crossover at Fourth Way to site (planning reference: 05/3484);
 - Planning permission was granted in 2004 for the erection of a single-story side extension to the existing warehouse (planning reference: 03/1841);
 - Planning permission was granted in 1955 for the installation of a mezzanine floor at 1st floor level to provide 200 sqm of additional floorspace (planning reference: 95/1334);



- Planning permission was granted for a change of use from general industrial (Class B2) to storage and distribution (Class B8) (planning reference: 92/0045);
- Planning permission was granted in 1982 for the erection of a detached industrial building with offices and car parking (planning reference: 830464);
- Other minor applications were submitted during the 1980s/90s for various signage and temporary proposals.
- **27.** There is currently a live planning application in relation to the Site (planning reference: 20/2033), for the following development:

"Demolition and redevelopment to provide new buildings ranging between 11 and 21 storeys with basement levels; all for a mix of uses comprising 493 residential units, retail (Use Class A1) and industrial floorspace (Use Class B1(c); provision of private and communal space, car parking, cycle parking, ancillary space, mechanical plant, landscaping and other associated works."

28. At the Brent Planning Committee on 9th December 2020, members resolved to grant planning permission for the scheme. The application is currently under consideration by the Greater London Authority at Stage 2.



THE PROPOSED DEVELOPMENT AND PLANNING APPLICATION

Overview of the Proposed Development

- **29.** The Proposed Development will involve the demolition of the existing buildings on the Site and the construction of a residential-led, mixed-use scheme. The Proposed Development will reach a maximum height of approximately ground + 24 storeys + plant (122m Above Ordnance Datum (AOD)) and is anticipated to comprise of the following key land uses:
 - Up to 800 residential units / 74,000m² gross external area (GEA) residential space;
 - Approximately 4,000m² GEA of non-residential floorspace; and
 - Back of house servicing facilities, plant space and associated landscaping.
- **30.** The Proposed Development contains 3 buildings which are to be arranged around 5 blocks that range in height and massing from ground plus 10 storeys to ground plus 24 storeys.
- **31.** A single storey basement is proposed to the south west of the Site which will contain residential ancillary spaces and plant. Flexible commercial/light industrial uses are proposed which is likely to include retail, storage and/or leisure uses with associated amenity and plant spaces at ground/podium level.
- **32.** Flexible commercial, business and service land uses across the site is likely to include retail, storage and/or leisure uses at ground level with amenity space for residents.
- **33.** The Proposed Development will be set back from the Wealdstone Brook with a gap retained between the edge of the brook's concrete channel and the overall building footprints. At this stage, it is intended that the landscaped buffer will be accessible to residents and the public as well as controlled access for maintenance and emergency vehicles. The landscaped buffer allows for pedestrian and cyclists connectively between Fulton Road to the west and Fourth Way to the east.
- **34.** Vehicular access to the Site and Proposed Development is provided off Fifth Way to the south and Fourth Way to the east. One way access off Fifth Way is proposed for servicing vehicles to enter the Site at surface level and exit the Site to the east onto Fourth Way. Emergency, controlled access is proposed to the north of the site along the brook, connecting the industrial yard in the east to Watkin Road in the northwest corner of the Site.
- **35.** The Proposed Development is proposed to be an Air Source Heat Pump (ASHP) led scheme with the provision of back-up gas boilers where required.



PLANNING CONTEXT

Planning Policy Context

- **36.** The ES (within **ES Volume 1, Chapter 1: Introduction and EIA Methodology**), will define the relevant national, regional and local policy context. Specifically, the ES will list out the key relevant policy documents but will not discuss the policies within these in any detail.
- **37.** Although relevant policies out of the key planning policy documents will, in some instances, inform the scope and the methodology of the technical assessments within the EIA, the Proposed Development's compliance with and performance against the relevant planning policies will be appraised within the Planning Statement which will be a standalone document that is submitted in support of the planning application. It is not the purpose of the ES to appraise the Proposed Development against relevant national, regional and local planning policy standards / targets.
- **38.** Where planning policy informs the scope and the methodology of the technical assessments of the EIA, the policies will be presented in the ES (in the relevant technical topic chapters) and discussed as necessary. Any policy detail required to support the relevant impact assessment scope, methodology or assessment of effects, will either be provided within the technical topic chapter itself or within an appendix to the ES.

National Planning Policy and Guidance

- **39.** The EIA will be undertaken having regard to the National Planning Policy Framework (NPPF). The NPPF sets out the Government's economic, environmental and social planning policies for England. The policies contained within the NPPF articulate the Government's vision of sustainable development, which are intended to be interpreted at a local level, to meet the requirements of local aspirations.
- **40.** As relevant to the EIA, specifically to the scope, methodology and assessment of effects for the EIA technical topics, the NPPF shall be considered throughout undertaking of the EIA and preparation of the ES.
- **41.** The EIA will also refer to, as relevant to the EIA technical topics, the Planning Practice Guidance (PPG), which is an online resource. The PPG aims to make planning guidance more accessible, and to ensure that the guidance is kept up to date.

Strategic Planning Policy and Guidance

- **42.** As relevant to the EIA technical topic scope, methodology or assessment of effects, the ES will have regard to the following key strategic planning documents. Any additional strategic planning policy and guidance documents considered relevant to the technical assessments which are covered by the EIA will also be considered:
 - The London Plan: The Spatial Development Strategy for Greater London (March 2021) hereafter referred as 'the London Plan'; and
 - Supplementary Planning Guidance (SPG) (i.e. further guidance on policies in the London Plan that can't be addressed in sufficient detail in the plan itself).

Local Planning Policy and Guidance

- **43.** As relevant to the EIA technical topic scope, methodology or assessment of effects, the ES will have regard to key local planning policy and guidance documents.
- 44. The current local planning framework for the LBB comprises the Brent Local Plan (BLP).
- **45.** The BLP sets out the vision for future development in Brent and includes plans and policies that will be used to direct development and determine applications for planning permission. Contained within the



BLP are several documents to aid future developments within the area including: The Core Strategy (2010), The Wembley Area Action Plan (2015) and Development Management Policies (2016). The Brent Draft Local Plan ('Shaping Brent's Future Together') was submitted for examination in March 2020, and the Examination in Public took place in October 2020. The Council is now considering the actions recommended by the Inspector in order to make the Plan and its associated documents legally 'sound'. The Draft Local Plan will therefore be given significant material weight as part of the decision making process for the emerging scheme.

- **46.** The Site is located in the Wembley Area Action Plan (W27 site allocation) and is described as "appropriate for mixed use development including office, leisure, residential, student accommodation, managed affordable workspace (including for creative industries), hotel and community use".
- **47.** The Site is also allocated for mixed use development in the emerging Local Plan (Policy BCSA4).

Other Guidance

48. In addition to any relevant planning policies that inform the scope, methodology or assessment of effects, as relevant, the technical topic chapters of the ES will present a summary of any pertinent recognised industry guidance documents.



EIA METHODOLOGY

EIA Methodology and Approach to Assessment of the Proposed Development

- **49.** In addition to the EIA Regulations, there is also guidance available that has been referenced where appropriate, including but not limited to:
 - at a European level, reference has been made to the European Commission's (EC) various EIA guidance documents available here: http://ec.europa.eu/environment/eia/eia-support.htm
 - at a domestic level, reference has been made to the Ministry of Housing, Communities and Local Government (MHCLG) overarching PPG;
 - in addition, the Department for Transport 'Design Manual for Roads and Bridges Volume 11: Environmental Assessment' has been referred to as applicable;
 - in relation to publications from professional bodies, reference has been made to IEMA publications as these include best practice/suggested improvements to the EIA process. This includes:
 - IEMA's ES Review Criteria (COM3-6);
 - 'Guidelines for Environmental Impact Assessment' (2004);
 - 'Special Report into the State Environmental Impact Assessment Practice in the UK' (2011);
 - 'Shaping Quality Development' (2015);
 - 'Delivering Quality Development' (2016); and
 - 'Delivering Proportionate EIA' (2017).
 - whilst primarily written for major infrastructure projects, reference is also made to guidance/advice notes published by the National Infrastructure Planning where appropriate, as these can include relevant/helpful information;
 - whilst written for applications submitted within the London Borough of Tower Hamlets (LBTH), reference is also made to 'Tower Hamlets Council EIA Scoping Guidance', as it includes relevant / helpful information https://www.towerhamlets.gov.uk/Documents/Planning-andbuilding-control/Development-control/Revised_Scoping_Guidance_V2_Final.pdf; and
 - applicable case law.
- **50.** In accordance with the EIA Regulations and best practice guidance documents, the EIA will comprise an assessment for each of the relevant technical topics against an appropriate baseline condition of the Site and surrounding area, using methods of prediction including established standards and industry guidelines and techniques confirmed as part of the EIA Scoping process. In all cases, the source data and guidance used to establish the baseline conditions and assessment methodology will be clearly set out within the ES.

Baseline Conditions

- 51. Baseline assessments will utilise any existing and available information, as well as new information either collected through baseline surveys undertaken during the course of the EIA process or additional information provided as part of the EIA Scoping Opinion and consultation process. This information will be used to present within the ES (within the individual technical chapters) an up to date description of the current baseline conditions of the Site and surrounding area.
- 52. In addition, as per the requirements of the 2017 EIA Regulations, consideration as to how the current



baseline conditions may evolve in the future in the absence of the Proposed Development will also be presented in the ES (within the individual technical chapters). This likely evolution of the baseline conditions will be quantified where possible and where not possible, a qualitative review will be presented.

Sensitive Receptors

- **53.** When undertaking an EIA, it is important to identify potential environmental receptors which may be impacted by the Proposed Development and may need to be considered as part of the assessment.
- 54. The environmental receptors that may be sensitive to change are identified and discussed within the scope of each technical topic in this EIA Scoping Report (hereafter referred to as 'sensitive receptors'). The sensitive receptors outlined within this EIA Scoping Report have been identified at the time of writing as part of the EIA scoping process, however these will be reviewed during preparation of the ES and may be subject to change.

Demolition and Construction

- **55.** The ES (within a non-technical chapter titled 'Demolition and Construction') will provide an outline of the anticipated demolition and construction programme and related activities and aspects (i.e. demolition and enabling works, substructure works, superstructure works etc., demolition waste volumes and construction material quantities, HGV movements and HGV routing). In addition, key environmental controls and management measures relevant to the Proposed Development (including relevant codes of construction practice) will be presented.
- **56.** This information will inform the demolition and construction impact assessments. Throughout the demolition and construction impact assessments, the assumption will be made that the standard environmental controls required under legislation and best practice guidance are met as a matter of course.
- **57.** The assessment of the potential for likely significant effects arising during the demolition and construction works will be addressed within each of the individual technical assessment chapters of the ES and will assess against the defined Baseline Condition (described earlier). The demolition and construction assessments presented within the technical chapters of the ES will identify the need for any additional or bespoke environmental management or mitigation measures in order to avoid, prevent, reduce or off-set any significant adverse effects identified.
- **58.** Where required, a description of any proposed monitoring arrangements will also be presented and would define (where appropriate) the procedures regarding the monitoring of the relevant significant adverse effects, the types of parameters to be monitored and the monitoring duration.
- **59.** All the measures proposed within the technical chapters will be compiled and presented in a mitigation and monitoring schedule (to be presented as a separate chapter within the ES).
- **60.** It is anticipated that any required demolition and construction related environmental management / mitigation and monitoring measures would be secured and controlled through an appropriate Construction Environmental Management Plan (EMP) (or equivalent) and it is proposed that the requirement for these documents be secured by means of suitably worded planning conditions to be attached to the permissions (if granted). Key mitigation and management controls that would later form part of a CEMP will be presented in the ES to help define the policies, procedures and management framework for the implementation of any identified specific environmental management and mitigation controls and monitoring.
- **61.** It is anticipated that the Proposed Development will be phased. Relevant details of the phasing for the demolition and construction stages of the Proposed Development will be presented in **ES Volume 1**,



Chapter 4: Demolition and Construction. Each of the technical assessments and ES chapters will consider phasing where necessary.

Completed Development

- **62.** The ES will present a description of the Proposed Development in order to provide suitable context to enable the assessment of potential and likely significant environmental effects. Enough information on the Proposed Development, in terms of the key aspects, will be presented to allow an understanding of the development being proposed, in order to enable the assessment of potential and likely significant environmental effects of the completed and operational development. Any assumptions made will be clearly presented in the narrative.
- **63.** As appropriate to the topic in question, the technical chapters of the ES will address the phased delivery of the Proposed Development.

Cumulative Effects and Effect Interactions

64. The EIA will identify the potential for (a) Cumulative Effects and (b) Effect Interactions which are described below.

Cumulative Effects

- **65.** The cumulative assessment will be based on the information available on the Council's planning register. Generally, the schemes to be included within the cumulative effects assessment will either have:
 - full planning consent or a resolution to grant consent;
 - submitted (but not yet consented) schemes have been included, where considered appropriate

 the assessment of these schemes has been undertaken in a qualitative manner, and the lack
 of certainty noted in each assessment;
 - Produce an uplift of more than 10,000 square meters GEA of mixed-use floorspace or, provide over 150 residential units; or
 - Is an office to residential conversions (granted under the General Permitted Development Order) giving rise to over 150 residential units.
- **66.** By applying an initial screening exercise to the surrounding development schemes, the cumulative effects assessment of the EIA becomes more focused on the larger schemes (i.e. those with the potential to interact in a cumulative manner).
- **67.** A preliminary list of cumulative schemes for consideration within the EIA has been identified and is presented in **Appendix A** of this EIA Scoping Report. As part of this EIA scoping process, the LBB (and other consultees, as relevant) are invited to comment on the proposed cumulative schemes, so that the list of cumulative schemes can be agreed,
- **68.** Each technical chapter of the ES will consider the potential for cumulative effects associated with the schemes identified for inclusion within the cumulative effects assessment. Each technical ES Chapter will be clear on the cumulative schemes that have been considered within the cumulative effects assessment.
- **69.** Cumulative schemes that are under construction at the time of the EIA, where the construction works are significantly progressed or where early phases are occupied, will be included in the baseline of the massing-based technical assessments as completed schemes, rather than included in the cumulative assessment for these topics (e.g. daylight/sunlight, wind).
- 70. It is acknowledged that there may be other development schemes (in addition to those identified) that



are at the pre-application stage. As there is currently no information on pre-application submission on the planning register, these have not been assessed.

Effect Interactions

- **71.** Effect interactions occur as interactions between effects associated with just one project, i.e. the combination of individual effects arising as a result of the Proposed Development, for example effects in relation to noise, airborne dust or traffic on a single receptor.
- **72.** Effect Interactions from the Proposed Development itself on particular receptors at the Site and within the surrounds will be considered during the demolition and construction works and also once the Proposed Development is completed and operational. Dependent on the relevant sensitive receptors, the assessment will focus either on key individual receptors or on groups considered to be most sensitive to potential effect interactions. The potential interaction of residual effects that are of minor, moderate or major scale, will be considered within this assessment. Residual effects which are negligible will be excluded from this assessment as by virtue of their definition, they are considered to be imperceptible.
- **73.** There is no established methodology for assessing the impact of cumulative effects on a particular receptor. The interaction of a combination of individual effects would be determined to be either 'not significant' or 'significant', a scale of the combined effects (minor, moderate or major) would not be applied. If one of the individual effects is significant the combination of effects would be regarded as 'significant'. If none of the individual effects are significant the interaction of effects would be regarded as 'not significant'.
- **74.** Consideration of effect interactions will be presented within the ES in a separate chapter (i.e. Effect Interactions (**ES Volume 1**)).

Alternatives

- **75.** In addition, the EIA Regulations require (Schedule 4) that the ES provides "*a description of the reasonable alternatives* [...] *relevant to the proposed project and its specific characteristics*" which have been considered by the Applicant and "an indication of the main reasons for selecting the chosen option, including comparison of environmental effects".
- **76.** The ES will discuss any relevant and reasonable alternatives considered and if relevant, include a qualitative comparison of their environmental effects. The chapter will also describe the evolution of the Proposed Development, and key modifications made during the design process. Environmental considerations which have influenced this process will be discussed. Matters that will be considered in terms of design evolution include land uses, layout, building heights and massing. The preferred design alternative, culminating with the Proposed Development being sought for approval, will be discussed.
- 77. This information will be presented within a specific chapter titled, ES Volume 1, Chapter 2: Alternatives and Design Evolution.
- 78. The summary of the design evolution will also consider the initial microclimate analysis undertaken on the evolving scheme, including daylight and sunlight analysis and initial wind design reviews, which are currently underway, (design modifications as a result of this upfront testing will be summarised in ES Volume 1, Chapter 2: Alternatives and Design Evolution).



DETERMINING EFFECT SIGNIFICANCE – TERMINOLOGY AND APPROACH

Reference to 'Impact' and 'Effect'

79. It is noted that the terms 'impact' and 'effect' are distinctly different. Having gained an understanding of the likely impact it is then important to know whether the change in environmental or socio-economic conditions results in a significant environmental effect. The impacts of the Proposed Development may or may not result in significant effects on the environment, depending on the sensitivity of the receptor and possible other factors (such as duration). The assessment of the likely significant effects of the development is a requirement identified by Schedule 4 of the EIA Regulations.

Receptor Sensitivity and Magnitude of Impact

- 80. To achieve a consistent approach across the different technical disciplines addressed within the ES (Volume 1), assessments will broadly define the sensitivity of the receptors that could be affected by the Proposed Development and the magnitude of impact or change from the baseline conditions in order to derive the resultant effect. Technical specialists will use their own approach or amend the approach stated below based on what is appropriate for their assessments.
- **81.** Terminology to describe the sensitivity of receptors and magnitude of impact or change from the baseline conditions is broadly as follows:
 - High;
 - Medium;
 - Low; or
 - Negligible.
- **82.** Where there is no impact/change, no assessment will be required due to there being no potential for significant effects.
- **83.** Each of the technical assessment chapters of the ES (**Volume 1**) will provide further detail on the definition of each of the above terms specific to the topic in question and will also provide the criteria, including sources and justifications, for quantifying the different levels of receptor sensitivity and 'impact magnitude'. Where possible, this will be based upon quantitative and accepted criteria (for example, national standards for air quality and noise), together with the use of value judgement and expert interpretation.

Identification of a Resultant Effect

84. The basis for determining the resultant effect generally takes into account the sensitivity of the receptor and magnitude of impact or change from the baseline conditions. A generic matrix that combines the sensitivity of the receptor and the magnitude of impact to identify the resultant effect is provided within Table 2.

	Magnitude of Impact					
Receptor Sensitivity	High	Medium	Low	Negligible		
High	Major	Major	Moderate	Minor		
Medium	Major	Moderate	Minor	Negligible		
Low	Moderate	Minor	Negligible	Negligible		
Negligible	Minor	Negligible	Negligible	Negligible		

Table 2 Resultant Effects



Effect Scale

- **85.** The categories and definitions of the 'scale' of the resultant effect (i.e. definitions of Major, Moderate, Minor and Negligible effects) will be set out in each technical chapter of the ES and adjusted to suit the technical topic in question, where relevant; where this is the case revised definitions of effect scale will be presented in the technical assessment chapters of the ES (Volume 1) and in ES Volume 2.
- 86. Where there is no impact to a receptor and therefore no effect, this will be stated.

Effect Nature

87. Table 3 provides definitions of the 'nature' of the resultant effect i.e. definitions of Adverse and Beneficial.

Type of Effect	Description
Adverse	Detrimental or negative effects to an environmental / socio-economic resource or receptor. The quality of the environment is diminished or harmed.
Neutral	The quality of the environment is preserved or sustained or there is an equal balance of adverse and beneficial effects.
Beneficial	Advantageous or positive effect to an environmental / socio-economic resource or receptor. The quality of the environment is enhanced.

Table 3 Definition of the Nature of the Resultant Effect

Geographic Extent of Effect

88. The ES (**Volumes 1** and **2**) will identify the geographic extent of the identified effects. At a spatial level, 'site' or 'local' effects are those affecting the Site and neighbouring receptors, while effects upon receptors in LBB beyond the vicinity of the Site and its neighbours are considered to be at a 'district / borough' level. Effects affecting Greater London are considered to be at a 'regional' level, whilst those which affect different parts of the country, or England as a whole, are considered being at a 'national' level.

Effect Duration

89. For the purposes of the ES, effects that are generated as a result of the demolition and construction works (i.e. those that last for this set period of time) will be classed as 'temporary'; these maybe further classified as either 'short term' or 'medium-term' effects depending on the duration of the demolition and construction works that generate the effect in question. Effects that result from the completed and operational phases of the Proposed Development will be classed as 'permanent' or 'long-term' effects.

Direct and Indirect Effects

90. The ES will identify whether the effect is 'direct' (i.e. resulting without any intervening factors) or 'indirect' or 'secondary' (i.e. not directly caused or resulting from something else).

Effect Significance

- **91.** Following identification of an effect, the effect scale, nature, geographic extent and duration using the above summarised terminology, a clear statement will then be made within the ES as to whether the effect is significant or not significant. As a general rule, the following applies:
 - 'Moderate' or 'major' effects are deemed to be 'significant'.
 - 'Minor' effects are considered to be 'not significant', although they may be a matter of local concern; and
 - 'Negligible' effects are considered to be 'not significant' and not a matter of local concern.



- **92.** Where mitigation measures are identified to either eliminate or reduce likely significant adverse effects, these will be incorporated into the ES, for example either through the design, or will be translated into demolition and construction commitments; or operational or managerial standards / procedures.
- **93.** The ES will then highlight the 'residual' likely significant effects (those effects which remain following the implementation of suitable mitigation measures) and classifies these in accordance with the terminology defined above.



TOPICS TO BE SCOPED IN

Air Quality

Introduction

- **94.** An air quality assessment will be undertaken to assess the potential effects of the Proposed Development on air quality within the Site and surrounding areas. Air quality has been scoped into the EIA due to the potential for significant effects as a result of emissions from the demolition, construction and operation of the Proposed Development from vehicles and/or building emissions associated with these activities. If relevant, the assessment will identify mitigation measures to be applied during the demolition/construction and operational stages.
- **95.** The air quality assessment will be carried out by Air Quality Consultants (AQC) and presented within an Air Quality chapter of the ES.

Baseline Conditions

96. The LBB has declared an Air Quality Management Area (AQMA) for exceedances of the annual mean nitrogen dioxide (NO₂) and 24-hour mean PM₁₀ objectives, predominantly as a result of emissions from road transport. The Proposed Development lies within this AQMA, as shown in **Figure 8**.

Figure 8 Site Boundary, Declared AQMA, Focus Areas and Nearby Monitoring Locations



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97. The Proposed Development does not lie within an air quality Focus Area, but lies within approximately 1.5km of a number of these areas; these have been identified by the GLA as locations that not only exceed the EU annual mean limit value for nitrogen dioxide (40 μg/m³) but are also locations with high



levels of human exposure. They are areas where the GLA considers there to be the greatest potential for air quality improvements, and are, therefore, where actions will be focused to improve air quality.

- 98. In 2019, LBB measured concentrations of nitrogen dioxide at a number of locations across the borough, including at four automatic monitoring sites and 45 diffusion tube locations. Concentrations of PM₁₀ were measured at all four automatic sites, whilst concentrations of PM_{2.5} were measured at two sites.
- 99. The closest automatic monitor to the Proposed Development is the BT4 site, located approximately 1.3km to the southeast of the Site, adjacent to the North Circular Road (A406). LBB also operates five diffusion tube monitoring locations within approximately 1.5km of the Proposed Development (Figure 8). The latest available nitrogen dioxide monitoring results for these monitors, for the years 2014 to 2019, are provided in Table 4Table 4.

Site ID	Site Type	Location	2014	2015	2016	2017	2018	2019	
Automatic Monitor – Annual Mean (µg/m³)									
BT4	Roadside	IKEA	79.7	41.0	76.0	72.0	71.0	63.0	
	Ob	jective			4	0			
		Automatic Monito	rs – No. of	Hours > 20	0 µg/m³				
BT4	Roadside	IKEA	10	0	33	33	1	7	
Objective				18					
		Diffusion Tub	es – Annua	l Mean (µg/	/m³)				
9	Roadside	Junction of East Lane / Wembley Hill Road	53.9	47.3	57.1	49.9	n/a	37.3	
17	Roadside	Old Church Lane junction with Neasden Lane	59.6	55.4	<u>62.5</u>	55.7	n/a	46.0	
23	Roadside	Junction North Circular Road / Chartley Avenue	<u>108.7</u>	<u>93.2</u>	<u>115.4</u>	<u>93.9</u>	n/a	<u>70.5</u>	
BRT 43	Roadside	Pitfield Way	<u>72.7</u>	<u>80.3</u>	<u>80.7</u>	<u>73.7</u>	n/a	47.1	
BRT 53	Roadside	High Road Wembley	77.1	75.7	80.7	65.0	n/a	59.3	
Objective					4	0			
 Exceedances of the objectives are shown in bold; annual mean concentrations great than 60µg/m³, indicating that the 1-hour mean objective may be exceeded, are also underlined. Data taken from London Borough of Brent 2019 Annual Status Report⁴. 									

Table 4 Summary of Nitrogen Dioxide Monitoring (2014 – 2019) ^{a, b}

100. As shown in Table 4, the annual mean objective was exceeded at all but one of the roadside monitoring sites in 2019. Long-term data indicates that concentrations have reduced significantly since 2014, consistent with the introduction of more stringent vehicle emissions limits. Defra guidance⁵ advises that an annual mean concentration that exceeds 60µg/m³ indicates the potential for an exceedance of the 1-hour mean nitrogen dioxide objective; diffusion tube site 23, at the junction of the North Circular Road and Chartley Avenue measured a concentration of 70.5µg/m³ in 2019, which indicates that there is a risk that the 1-hour mean objective is exceeded at this roadside location. Direct measurements of 1-hour mean concentrations at the Ikea automatic monitor (BT4) indicate that the objective has, however, been met in recent years.

101. Table 5 presents monitored PM₁₀ and PM_{2.5} at the BT4 automatic monitor and shows there have been no measured exceedances of the PM₁₀ or PM_{2.5} annual mean objectives in recent years. The number

⁵ Department for Environment Food & Rural Affairs (2018) Local Air Quality Management Technical Guidance (TG16)



⁴ London Borough of Brent (2019) London Borough of Brent Air Quality Annual Status Report for 2019.

of days with concentrations of PM_{10} greater than $50\mu g/m^3$ exceeded the objective between 2016 and 2018.

Site ID	Site Type	Location	2014	2015	2016	2017	2018	2019
Automatic Monitor – PM ₁₀ Annual Mean (µg/m³)								
BT4	Roadside	IKEA	28.6	29.2	33.0	33.0	32.0	30.0
	Ob	40						
	Automatic Monitor – PM _{2.5} Annual Mean (μg/m³)							
BT4	Roadside	IKEA	22.9	20.4	23.7	21.4	20.0	20.7
Objective			25					
		Automatic Monitors	s – No. of D	ays PM ₁₀ >	50 µg/m³			
BT4	Roadside	IKEA	26	23	45	41	37	29
Objective			35					
^a Exceedances of the objectives are shown in bold.								
^b Data taken from London Borough of Brent 2019 Annual Status Report ⁴ .								

Table 5 Summary of PM₁₀ and PM_{2.5} Monitoring (2014 – 2019) ^{a, b}

Future Baseline

102. Future air quality conditions at and near to the Proposed Development will be determined through detailed dispersion modelling, as described below.

Potential Sensitive Receptors

103. Receptor locations will be identified based on detailed maps, satellite imagery and plans of the Proposed Development. Concentrations will be predicted at a number of locations both within, and close to, the Proposed Development. Receptors will be selected to represent relevant exposure to potential air quality impacts, which will include, for example, residential properties, schools and nurseries.

Demolition and Construction

104. For on-site demolition and construction activities, the assessment will consider the potential for impacts within 350m of the Site boundary, and within 50m of the routes to be used by vehicles generated during the demolition/construction stage up to 500m from the Site entrance(s). These distances are defined in guidance provided by the Institute of Air Quality Management (IAQM) and the GLA. For the demolition/construction dust assessment, relevant receptors in the area include residential dwellings (classed as high sensitivity receptors), and offices (classed as medium sensitivity receptors). The guidance uses a receptor count method whereby all receptors within set distance bandings are counted to determine the potential for impacts.

Operation

105. For existing properties, receptors will be located at the roadside façade of properties along the local road network where the impact of development-generated traffic will be greatest. In particular, receptors will be selected at locations where concentrations are expected to be highest, such as near to junctions, and in the prevailing downwind direction to ensure that the combined effect of road traffic and any energy or emergency plant emissions are considered. **Figure 9** identifies likely receptors.





Figure 9 Possible Receptor Locations

Note: Contains Ordnance Survey data © Crown copyright and database right 2019. Ordnance Survey licence number 100046099.

- 106. For receptors within the Proposed Development, which will include the proposed residential properties (at a range of heights) and locations relevant for the short-terms objectives such as outdoor amenity areas (gardens), the exact locations will depend on the layout, including the location of flues serving any proposed energy or emergency plant, and the proximity to entrances/exits to the local road network. Receptors will be identified at a range of heights, to represent exposure across the Proposed Development.
- **107.** Receptors where the air quality objectives apply are considered to be of high sensitivity; therefore, there are no medium or low sensitivity receptors considered when the Proposed Development is completed and operational as all receptors are considered to be of high sensitivity.

Potential Effects

- **108.** Potential effects that will be considered in relation to the demolition and construction, and operational stages of the Proposed Development include:
 - Impacts of dust soiling and PM₁₀ emissions during the demolition and construction stage;
 - Impacts of emissions from heavy duty vehicles during the demolition and construction stage;
 - Impacts of road traffic and any plant emissions generated by the Proposed Development when operational;
 - Impacts of existing pollution sources on future users of the Proposed Development; and



- The potential for the Proposed Development and cumulative schemes to cumulatively impact on air quality at existing and proposed sensitive receptor locations, both during the demolition/construction and operational stages.
- **109.** The assessment will focus on assessing concentrations of nitrogen dioxide and particulate matter (PM₁₀ and PM_{2.5}) as these are the principal pollutants of potential concern. It will also consider the potential impacts of dust and PM₁₀ during the demolition and construction phase.
- **110.** The air quality neutrality of the Proposed Development will also be assessed, in accordance with the requirements of Policy SI1 of the London Plan⁶.
- **111.** Appropriate mitigation measures, as listed in the GLA guidance document on control of dust and emissions⁷, will be proposed for the demolition and construction stage of the Proposed Development, based on the level of risk identified by the construction dust risk assessment. With appropriate mitigation in place, effects will be 'not significant'.
- **112.** The potential for significant effects during operation of the Proposed Development will be based on the approach described in Environmental Protection UK (EPUK) / IAQM guidance⁸. This involves considering the magnitude of the predicted changes in pollutant concentrations associated with the Proposed Development, taking account of baseline concentrations; at proposed receptors.

Scope of Assessment

- **113.** The scope of the air quality assessment will include:
 - The determination of baseline air quality conditions through examination of local monitoring and other publicly available data;
 - The identification of relevant sensitive receptor locations for the demolition and construction, and operation of the Proposed Development;
 - A qualitative assessment of the impacts of the Proposed Development on dust soiling and concentrations of PM₁₀ resulting from activities during the demolition and construction period;
 - An assessment of the potential impacts of exhaust emissions from vehicles travelling to and from the Proposed Development during the demolition and construction period;
 - A quantitative assessment of the impacts of the operation of the Proposed Development on the local area, resulting from emissions of nitrogen dioxide, PM₁₀ and PM_{2.5} from developmentgenerated road traffic and nitrogen dioxide emissions from any energy and emergency plant, where appropriate, in the proposed year of opening;
 - A quantitative assessment of concentrations of nitrogen dioxide, PM₁₀ and PM_{2.5} across the Proposed Development in the proposed year of opening; and
 - An air quality neutral assessment, in accordance with the requirements of Policy SI1 of the London Plan.

Demolition and Construction

114. The potential impacts from dust generated during the demolition and construction stage of the Proposed

https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/control-dust-and. ⁸ Moorcroft and Barrowcliffe et al (2017) Land-Use Planning & Development Control: Planning for Air Quality v1.2, IAQM, London, Available: http://iaqm.co.uk/guidance/.



⁶ GLA (2021) The London Plan: The Spatial Development Strategy for Greater London.

⁷ GLA (2014) The Control of Dust and Emissions from Construction and Demolition SPG, Available:

Development will be considered using the approach presented in the IAQM Guidance⁹, upon which the GLA guidance on the *Control of Dust during Construction and Demolition* is based⁷.

- **115.** NRMM (on-site plant) emissions will not be explicitly quantified; relevant guidance from the IAQM states that "experience from assessing the exhaust emissions from on-site plant (also known as non-road mobile machinery or NRMM) [...] suggests that they are unlikely to make a significant impact on local air quality and in the vast majority of cases they will not need to be quantitatively assessed". However, suitable mitigation measures will be presented, based on advice presented in the IAQM and GLA guidance documents.
- **116.** The number of HGV movements during the demolition and construction stage will initially be considered in the context of the screening criteria provided in guidance from EPUK and IAQM⁸. If the Proposed Development is predicted to lead to an increase that exceeds the screening criteria, then emissions from traffic generated during the demolition and construction stage will be assessed quantitatively.

Operational Impacts

Road Traffic Modelling

- **117.** The impacts of road traffic emissions will be predicted using the ADMS-Roads dispersion model. Predictions will be carried out for nitrogen dioxide, PM₁₀ and PM_{2.5}. The model requires a variety of inputs, including road traffic data (flows, speeds and vehicle fleet composition) and meteorological data.
- **118.** The model will be used to predict pollutant concentrations for the following three scenarios:
 - Baseline year (2019)¹⁰;
 - Opening year without the Proposed Development, but including traffic generated by relevant committed developments; and
 - Opening year with the Proposed Development, including traffic generated by relevant committed developments and the Proposed Development itself.
- **119.** An important element of the modelling study will be to verify the model output against measured results. This will be undertaken by identifying suitable roadside air quality monitoring locations.
- 120. Meteorological data will be taken from the Northolt station, approximately 8km west of the Site, which is the nearest and most representative site to the Proposed Development. The year of meteorological data will be selected to match the baseline assessment year and the latest available monitoring data (2019). Background pollutant concentrations will be determined using data derived from the background maps published by Defra.

Energy and Emergency Plant Modelling

- **121.** The impacts of emissions from any proposed energy and emergency plant will be considered, and assessed using the ADMS-5 dispersion model, if necessary.
- **122.** Initially, the impacts will be assessed qualitatively based on the proposed size, location and emissions performance of the proposed plant and the proposed testing schedule. Where it is not possible to discount potentially significant contributions to nitrogen dioxide concentrations, the contribution of the energy and emergency plant will be determined using the ADMS-5 dispersion model and added to

¹⁰ If 2020 monitoring data are available, they will be presented in the assessment; however, in early 2020, activity in the UK was disrupted by the COVID-19 pandemic. As a result, concentrations of traffic-related air pollutants fell appreciably. Consequently, 2020 is likely to present as an atypically low pollution year for roadside pollutant concentrations, and it is thus judged most robust to make future-year projections based on measurements made during 2019.



⁹ IAQM (2016) Guidance on the Assessment of Dust from Demolition and Construction v1.1, Available: http://iaqm.co.uk/guidance/.

baseline concentrations (including road traffic contributions) to determine total concentrations.

123. The model will be run with three years of meteorological data as a sensitivity test. In addition, the model will be run with and without buildings, to take account of the uncertainty in the effects of entrainment of the plume into the wake of the buildings. The maximum predicted concentration at each receptor from either of the building scenarios, in any meteorological year, will be reported to provide a reasonable worst-case.

Air Quality Neutral Assessment

- **124.** The GLA has published Supplementary Planning Guidance on Sustainable Design and Construction¹¹ aimed at ensuring that new developments are 'Air Quality Neutral'. The buildings and transport emissions will be compared with published benchmarks.
- **125.** The London Environment Strategy¹² and the London Plan⁶ include reference to the need for all new large-scale developments in London to be 'Air Quality Positive', making sure that emissions and exposure to pollution are reduced. Whilst guidance on the approach to ensuring a development is 'Air Quality Positive' has not yet been published, consideration will be given to the measures designed into the Proposed Development to reduce both emissions and exposure.

Cumulative Effects Assessment

- **126.** The cumulative effects during demolition and construction of the Proposed Development and identified cumulative schemes will be considered taking into account the location and proximity of each scheme, and the GLA's guidance on the *Control of Dust during Construction and Demolition*.
- 127. The opening year 'without development' scenario (i.e. the future baseline) will include vehicle trips associated with general growth and identified cumulative schemes which are under construction already likely to affect the study area. cumulative effects associated with road traffic are therefore explicitly included in the main assessment and a cumulative assessment is not specifically undertaken for traffic.
- **128.** The cumulative effects of energy plant installed within the identified cumulative schemes will be considered qualitatively.

Climate Change

129. The EIA Regulations seek to account for climate by requiring a description of '*the impact of the project on climate*' and '*the vulnerability of the project to climate change*' (Schedule 4, paragraph 5(f)).

The Proposed Development's Potential Impact on Climate

- **130.** The approach to assessing the potential impact of the Proposed Development on climate will be undertaken in accordance with the IEMA guidance 'Assessing Greenhouse Gas Emissions and Evaluating Their Significance'¹³ (2017). This guidance sets out a 'good practice' approach to achieving a proportionate assessment of a development's potential impact on climate and communicating the results in terms of a notional percentage contribution relative to a carbon budget, together with appropriate mitigation.
- **131.** The guidance presents a series of principles developed by IEMA, which highlight that all GHG emissions contribute to climate change, and that the combined effect of all emissions draws us closer to the scientifically defined environmental limit for climate change. The guidance therefore suggests that, in

¹³ IEMA (2015). Assessing Greenhouse Gas Emissions and Evaluating Their Significance (website: <u>https://www.iema.net</u>)



¹¹ GLA (2014) Sustainable Design and Construction Supplementary Planning Guidance, Available:

https://www.london.gov.uk/what-we-do/planning/implementing-l-ondon-plan/supplementary-planning-guidance/sustainable-

design-and.

¹² GLA (2018) London Environment Strategy, Available:

https://www.london.gov.uk/sites/default/files/london_environment_strategy_0.pdf

the absence of any defined threshold or significance criteria, any GHG emissions or reductions from a project may be considered as significant. The guidance also reinforces a key principle of EIA which is to reduce the impact of a project's emissions at all stages of the lifecycle through mitigation.

- **132.** Consistent with the guidance, the approach taken in the EIA will be to quantify the net GHG emissions¹⁴ from the Proposed Development and compare against an existing carbon budget (defined either at a global, national, regional, local or sectoral level) in order to contextualise the project's carbon contribution by developing a sense of the scale of the emissions anticipated.
- **133.** The ES will present the carbon mitigation being proposed, which will follow the principles of the carbon management hierarchy (i.e. avoid, reduce, off-set), in order to reduce as far as reasonably practicable the anticipated GHG emissions over the Proposed Development's lifecycle.
- 134. The assessment of GHG emissions (essentially a carbon footprint or 'inventory' of the Proposed Development) and an outline of the carbon mitigation measures proposed will be presented in a technical report and included within ES Technical Appendices (Volume 3). Relevant information out of this report (specifically relating to carbon mitigation measures) will be presented within the ES Chapter describing the Proposed Development (ES Volume 1, Chapter 3: The Proposed Development) and the chapter that outlines the demolition and construction works (ES Volume 1, Chapter 4: Demolition and Construction).

The Potential Impact of Climate Change on The Proposed Development

- **135.** The approach to assessing the potential impact will be undertaken in accordance with the IEMA guidance '*Climate Change Resilience and Adaption*' (2015)'¹⁵, which presents a framework for the consideration of climate change resilience and adaption in the EIA process. It recognises a need for a proportionate approach to the assessment, due to the uncertainties associated with predicting how the environment will respond to climate change.
- **136.** The guidance advises on *inter alia*, defining the future climate scenario, the integration of climate change adaption into the design, and the process for EIA. The guidance also provides advice on the execution of the impact assessment across the technical topics, including the identification of the climate related parameters which are likely to influence the project in question, and the anticipated changes to those parameters under a future climate scenario.
- 137. Consistent with the guidance, the EIA will describe a future climate scenario which will be developed through the use of the future climate projections published by the Met Office (through the UK Climate Projections (UKCP18) website). The results include projections for variables including annual mean temperatures, and annual changes in summer and winter precipitation.
- 138. To describe the predicted future climate, it is proposed that the highest emissions scenario (RCP8.5) for 2100 will be utilised as the future baseline. RCP8.5 has been used as it represents a suitably conservative emissions scenario with regards to climate policy, land use, and technological development. The year 2100 is the timeframe considered most relevant to the Proposed Development. The projected change to the range of climatic conditions will adopt the 50% probability level, which is a central estimate adopted given the level of uncertainty associated with predicting the modelled scenarios. For further information on the emissions scenario used and probability levels, please refer to the Climate Change Technical Note within ES Volume 3, Appendix: Introduction and EIA Methodology.
- 139. The future climate change scenario will be considered within the ES across each of the technical topics

¹⁵ IEMA (2015). Climate Change Resilience and Adaption (website: <u>https://www.iema.net</u>)



¹⁴ Determining the net GHG emissions contribution accounts for the existing GHG emissions within the project boundary prior to the project commencing, against the predicted project emissions.

being presented, and the level of assessment and methodology will be proportional to the available evidence base. The aim of the assessment will be to consider whether the effect on receptors (under the current condition, without climate change) are likely to be different under an alternative future climate regime; in particular, to identify whether the potential impacts of the Proposed Development will be worse or improve under the future baseline, and therefore if these changes alter the significance of effects identified for the Proposed Development under the current condition (without climate change). A key aspect of the assessment (within each of the technical topics presented) will be to identify the likely effect of those receptors considered more vulnerable to changes in climate, having taken into account the resilience and adaptive measures (being either design or management) which are proposed for the scheme in order to mitigate the risk presented by climate change.

- **140.** Due to the level of uncertainty in both the future climate projections and how the future climate conditions may affect sensitive receptors, the assessment will be qualitative, based on objective professional judgement, unless where there is published, accepted quantifiable methods available (i.e. in relation to the assessment of flood risk).
- 141. The ES will present the adaption and resilience measures proposed as part of the description of the Proposed Development (ES Volume 1, Chapter 3: The Proposed Development), and also report the process of design for the resilience and adaptive measures developed for the scheme as part of the consideration of alternatives (ES Volume 1, Chapter 2: Alternatives and Design Evolution).

Daylight, Sunlight, Overshadowing, Light Pollution & Solar Glare

Introduction

- 142. A daylight, sunlight and overshadowing (DSO) assessment will be undertaken to assess the potential effects of the massing, scale and orientation of the Proposed Development with regard to the likely significant effects of the Proposed Development on daylight, sunlight and overshadowing on existing and emerging neighbouring residential properties, as well as open spaces and public amenity areas. Given the scale and design of the Proposed Development, along with its proximity to potentially sensitive receptors, a daylight, sunlight and overshadowing assessment is considered necessary and is therefore scoped into the EIA. If relevant, the assessment will identify mitigation measures to be applied embedded during the design process.
- **143.** The daylight, sunlight and overshadowing assessment will be carried out by GIA and presented within a DSO ES chapter.
- 144. Given the proposed residential led usage and buffer zone around Wealdstone Brooke, the emerging design is not likely to emit artificial light beyond the thresholds outlined in ILP Guidance which would be a source of potentially significant light pollution or comprise any large areas of reflective cladding which would give rise to the potential for significant solar glare effects. Therefore, it is not considered likely that the Proposed Development would result in significant light pollution or solar glare effects and these assessments are scoped out of the ES Chapter.

Baseline Conditions

Daylight, Sunlight and Overshadowing

- **145.** The daylight and sunlight levels within each of the relevant surrounding sensitive receptors will be defined firstly under the existing site conditions by reference to the Vertical Sky Component (VSC), No-Sky Line (NSL) and Annual Probable Sunlight Hours (APSH) methods, in-line with the Building Research Establishment's (BRE) recommendations, the regional and local planning policies.
- **146.** With regard to the relevant existing surrounding outdoor areas, the Transient Overshadowing (TOS) and Sun Hours on Ground (SHOG) methodology will be used when relevant.



- **147.** The daylight, sunlight and overshadowing effects of the Proposed Development will then be assessed against this baseline condition.
- **148.** Cumulative schemes that are currently under construction within the surrounding area which are considered likely be completed by the time the Proposed Development comes forward will be considered as built and included in the baseline alongside the existing properties. From a review of surrounding cumuatlive schemes, the following schemes are to be considered as part of baseline conditions as construction has commenced:
 - Parkwood House (planning application reference 17/2782);
 - Cannon Trading Estate (planning application reference 7/9/10/11);
 - Kelaty House Block A-E (planning application reference 12/1293 as amended by 16/1435, 17/2924, 19/0882 and 20/0918);
 - 10 11 Watkin Road (planning application reference 18/3381); and
 - Amex House (planning application reference 16/1404).
- **149.** Any additional cumuatlive schemes that are yet to commence construction will be considered as part of the cumuatlive effects assessment.

Potential Sensitive Receptors

Daylight and Sunlight Receptors

- **150.** In terms of the daylight and sunlight analysis the scope will focus on the adjoining residential properties where the occupants have a reasonable expectation of daylight and sunlight as per the Building Research Establishment (BRE) guidelines.
- **151.** The following residential receptors have been identified as sensitive in relation to daylight and sunlight. They include but are not limited to:

Sensitive Properties

- Cannon Trading Estate
- Empire Court North End Road
- Kelaty House Block A-E

Future Sensitive Properties

- **152.** Additionally, owing to the proximity of future residential properties, the following buildings will be considered in relation to daylight and sunlight effects arising from the Proposed Development:
 - Wembley Park Masterplan NE01-06 (outline consent, planning application reference: 15/5550); and
 - 1, 2, 3 and 9 Watkin Road (resolution to grant, planning application reference 20/0587).

Overshadowing Receptors

- **153.** Areas of open space are considered sensitive to overshadowing effects resulting from the Proposed Development. With shadows being cast in a northerly direction in the northern hemisphere, open spaces located to the north of the Proposed Development require consideration in relation to overshadowing.
- **154.** The following areas have been identified as sensitive receptors in relation to the Proposed Development. They include but are not limited to:
 - Wealdstone Brook;



- Empire Court Communal Garden; and
- Amex House Communal Garden.

Potential Effects

- **155.** The potential daylight, sunlight and overshadowing effects associated with the Proposed Development are considered to be as follows (and as relevant to the scope of the assessment in terms of receptors identified above):
 - Changes to the daylight and sunlight amenity within surrounding residential properties, and other properties identified which have a reasonable expectation to natural light, because of the demolition and construction works;
 - Changes to overshadowing of surrounding outdoor amenity spaces because of the demolition and construction works;
 - Changes to the daylight and sunlight amenity to surrounding residential properties, and other properties identified which have a reasonable expectation to natural light, as a result of the Proposed Development once complete; and
 - Changes to overshadowing of surrounding outdoor amenity spaces as a result of the Proposed Development once complete.

Scope of Assessment

156. The assessments will be carried out in accordance with BRE's Guidelines. The analysis will be undertaken from a 3D computer model constructed using specialist software.

Demolition and Construction

157. Owing to the evolving and changing nature of demolition and construction activities, a qualitative assessment will be undertaken using professional judgement, with the worst-case scenario in terms of the effects quantitatively modelled and analysed through the assessment of the completed Proposed Development (see below for further details).

Operational

Daylight / Sunlight

- **158.** In line with the BRE Guidelines, both the VSC and NSL assessments will be undertaken for the Proposed Development for the surrounding relevant existing receptors identified above.
- **159.** The sunlight amenity to the surrounding relevant existing receptors will be considered by reference to the APSH method of assessment.
- **160.** For the future sensitive receptors consented in outline, VSC and APSH assessments will be undertaken on the maximum parameters, in the absence of details on the elevations and internal layouts.
- **161.** For the future sensitive receptors consented in detail, VSC, NSL and APSH assessments will be undertaken.
- **162.** The nature (beneficial or adverse), scale (negligible, minor, moderate or major) and ultimately the significance of effect will be determined using professional judgement and by reference to Appendix I of the BRE guidelines.

Overshadowing

163. The overshadowing analysis on the surrounding areas of amenity space will be undertaken by reference to the TOS method of assessment.



- **164.** For the TOS assessment, the path of shadow will be mapped for the Proposed Development on the following dates as suggested by the BRE Guidelines:
 - 21st March (Spring Equinox);
 - 21st June (Summer Solstice); and
 - 21st December (Winter Solstice).
- **165.** The nature (beneficial or adverse), scale (negligible, minor, moderate or major) and ultimately the significance of overshadowing effects will be determined using professional judgement.
- 166. Depending on the outcome of the TOS analysis, the Sun Hours on Ground assessment may be required for any amenity areas that appear to be significantly impacted by the Proposed Development. The Sun Hours on Ground assessment considers the proportion of a designated amenity space which receives two hours of direct sunlight on 21st March.

Cumulative Effects Assessment

- **167.** An assessment will be undertaken to determine the effects of the Proposed Development on existing receptors and amenity areas, with the surrounding cumulative schemes being developed at the same time (i.e. a Cumulative Scenario).
- **168.** The following schemes are considered likely to have the potential for cumulative effects in relation to daylight, sunlight and overshadowing and will therefore be assessed in a cumulative scenario:
 - Wembley Park Masterplan NE01-06 outline consent (planning reference: 15/5550);
 - 1, 2, 3 and 9 Watkin Road (resolution to grant, planning application reference 20/0587);

Consented Development Assessment

169. Additionally, a supplementary assessment of the December 2020 consented scheme (planning application reference 20/2033), has been undertaken in line with Appendix F of BRE Guidelines, which states that "sometimes there may be an extant planning permission for a site but the developer wants to change the design. In assessing the loss of light to existing windows nearby, a local authority may allow the vertical sky component (VSC) and annual probable sunlight hours (APSH) for the permitted scheme to be used as alternative benchmarks.". Therefore, the December 2020 consented scheme (planning reference number: 20/2033) will be used as a benchmark against which to assess the impacts of the Proposed Development.

Health

- **170.** The potential impacts of a new development on the health of local residents and workers to the Site would be largely determined by the way the newly proposed buildings and spaces are used, as well as lifestyle factors which cannot be accurately quantified at the planning stage. However, appropriate design and planning can play a role within the wider determinants of health and well-being, including provision of good quality work space and housing, employment, amenity and leisure infrastructure, ease of access to different forms of transport, etc.
- **171.** The EIA Regulations requires that the EIA must '[...] identify, describe and assess in an appropriate manner [...] the significant effects of the proposed development [in terms of] human health, [...]' (Regulation 4(2) and Schedule 4(4)).
- **172.** It is considered that significant effects of the Proposed Development in terms of human health will be comprehensively considered throughout the ES as a whole within individual assessments and that a separate health assessment would not be required as part of the preparation of the ES. The following technical assessments are identified where potential impacts and effects on human health has been


taken into account include:

- **ES Chapter 4** Demolition and Construction:
 - It is proposed that for the period of demolition and construction works, a Construction Environmental Management Plan (CEMP) and Construction Logistics Plan (CLP) would be prepared in advance of works commencing on-site to manage the potential impacts from the works and subsequent construction of the Proposed Development. The CEMP would include key matters relating to health impact including public safety, and amenity and site security.
- ES Chapter 5 Socio-Economics:
 - Considers the impact of the Proposed Development on the local social infrastructure arising from the new residential population, such as primary health care (GPs) and A&E facilities, amenity and play space areas, etc. Consideration will also be made to the local economy in terms of employment opportunities and local spending, which in turn has direct and indirect benefits on the population at the local and borough spatial level. Also accounted for is the new provision of new open space and public realm to benefit both future occupants and visitors to the Site, as well as the wider community. Finally, implications to social cohesion and crime reduction, as well as the area's relative deprivation will also be considered.
- **ES Chapter 6** Traffic and Transport:
 - Considers the impact of the Proposed Development on existing and future road users, in terms of driver delay, and delays to cyclists and their amenity. The assessment also takes account of pedestrians along the surrounding road network, in terms of delays, their amenity, fear and intimidation; their potential for severance from places and other people; and to the risk for accidents and their safety.
- ES Chapter 7 Air Quality:
 - Considers the potential impact on human health (both receptors external to the Site, and for future occupants and visitors at ground floor and upper levels) in terms of air quality, in the form of dust generated during the demolition and construction works, and from introduced sources associated with the Proposed Development, including the energy centre and transport emissions (i.e. servicing) when operational.
- **ES Chapter 8** Noise and Vibration:
 - Considers the impact of the Proposed Development on human health from noise and vibration generated during the demolition and construction works, and on completion of the Proposed Development - particularly the effect of change in noise and vibration levels at highly sensitive receptor locations (i.e. residential) within the Site and surrounding local area.
- ES Chapter 9 Daylight, Sunlight and Overshadowing:
 - Considers the change in the daylight and sunlight amenity condition to surrounding external receptors (particularly residential properties) as a result of the massing introduced by the completed Proposed Development, as well as the likelihood for overshadowing to surrounding open spaces affecting the amenity of future users. The consideration of the potential impact of light pollution on neighbouring residential properties is also considered.
- ES Chapter 10 Wind Microclimate:
 - Considers the change in the wind microclimate experienced by both future occupants and visitors to the Site, in terms of across the public realm areas and entrances to the



buildings, as well as to pedestrians and road users (i.e. cyclists) external to the Site, who travel along thoroughfares and surrounding roads.

- Geo-interpretive Desk Study and Geo-technical Risk Assessment (Refer to **Appendix F**)
 - Identifies the potential land quality risks and constraints associated with the Proposed Development. In particular, the report assesses the potential risk of contaminated land on human health based on a 'source-pathway-receptor' analysis - for a risk to be present, there must be a viable contaminant linkage; i.e. a mechanism whereby a source impacts on a sensitive receptor via a pathway. Receptors considered include – human health (future site users); site neighbours; and construction workers.
- Flood Risk Assessment (ES Volume 3, Appendix: Water Resources)
 - Prepared to identify the susceptibility of the land being redeveloped to flooding and the risk to future occupants of the Site, and ensuring the safe development and secure future occupancy of the Site – in particular, 'more vulnerable' uses such as residential, health, and education. It is a requirement for development to address the potential risk of flooding and manage accordingly to ensure that the development is and remains safe throughout its lifetime (i.e. it has an appropriate degree of protection) and does not increase flood risk elsewhere (i.e. to other vulnerable uses).

Noise & Vibration

Introduction

- **173.** A noise and vibration impact assessment will be undertaken to assess the potential effects of the Proposed Development on noise and vibration within the Site and surrounding areas. Noise and vibration has been scoped into the EIA due to the potential for significant effects as a result of demolition and construction activities and traffic, operational traffic and plant and introduced uses. If relevant, the assessment will identify mitigation measures to be applied during the demolition/construction and operational stages.
- **174.** The noise and vibration assessment will be carried out by Sandy Brown and presented within a Noise and Vibration ES chapter.

Baseline Conditions

- 175. Baseline noise levels were determined via long-term unattended and short-term attended noise monitoring undertaken on-site in March 2018. The existing baseline noise measurements indicate daytime ambient noise levels of L_{Aeq,16hr} 60-65 dB and night-time ambient noise levels of L_{Aeq,16hr} 53-60 dB. As the survey is 3 years old, a shortened validation procedure will be adopted, which will include daytime samples only.
- **176.** Matchday baseline noise levels were determined via short-term attended noise monitoring undertaken on-site in March 2018. The existing baseline noise measurements during a matchday indicate ambient noise levels of L_{Aeq} 53-67 dB and maximum noise level of L_{Amax} 71-81 dB. Crowd noise from Wembley Stadium was noted as occasionally audible but not dominant.
- **177.** The dominant existing noise sources at the Site are road traffic from Fourth Way to the north-east, Fulton Road to the west and Fifth Way to the south. Wembley Stadium is located 320-520 m to the south-west and is considered to be a dominant noise source on during match days and entertainment events.
- 178. The nearest significant ground-borne vibration source is the sub-surface London Underground train line (Metropolitan line and Jubilee line) and the sub-surface National Rail train line (Chiltern Railways). These are approximately 130-180 m to the north-east. Existing measurements on site indicate ground-borne vibration levels (Vibration Dose Values) are below the threshold for 'low probability of adverse



comment'. As such a ground-borne vibration has been removed from the scope of the assessment.

Potential Sensitive Receptors

- **179.** The assessment of demolition and construction of the Proposed Development, and once the Proposed Development is completed and operational, will consider the following potential sensitive receptors (as identified in Figure 10, referenced as per the cumulative schemes):
 - Ref 14: Kelaty House, First Way (under construction) comprising an apart hotel and student accommodation (indicated in green in Figure 10);
 - Existing residential properties on North End Road (indicated in blue in **Figure 10**);
 - Ref 4: Wembley Masterplan Plots NE01 to NE06 (former Wembley Retail Park) comprising mixed-use development with residential, workspace and commercial use (indicated in orange in Figure 10);
 - Ref 10: 10-11 Watkin Road (under construction) comprising mixed-use development with residential, workspace and community use (indicated in purple in Figure 10);
 - Ref 16: 1, 2, 3 & 9 Watkin Road (not yet under construction) mixed-use development with residential and commercial uses (indicated in light blue in Figure 10);
 - Ref 1: Parkwood House, Albion Way (under construction) comprising student accommodation; (indicated in pink in Figure 10); and
 - Surrounding existing industrial units.
- **180.** The potential receptor locations have been selected as they are representative of the nearest noise sensitive receptors to the Proposed Development. When noise levels are suitably controlled at the receptor locations identified, then noise levels will be controlled at other sensitive receptors further from the Site. Nevertheless, in the event that significant effects are assessed at the closest receptors, then the assessment radius from the Site will be expanded until not significant effects are evaluated.

Potential Sensitive Receptors Figure 10





Potential Effects

- **181.** Potential noise and vibration effects anticipated to arise during the demolition and construction works, and once the Proposed Development is completed and operational, will be considered within the noise and vibration impact assessment. These potential effects include, but are not limited to, the following:
 - Temporary noise and vibration nuisance because of demolition and construction works associated with daytime and (if required) night-time works;
 - Noise nuisance to existing surrounding sensitive receptors from road vehicle movements generated during the demolition and construction works – associated with daytime and (if required) night-time works;
 - Cumulative construction noise and vibration effects associated with construction works at the Site being undertaken simultaneously with construction works on other surrounding development sites;
 - Assessment of environmental noise effects on the occupants of the completed Proposed Development;
 - Traffic related noise effects once the Proposed Development is completed and operational associated with road traffic movements;
 - Operational noise from any industrial, retail or leisure uses associated with Proposed Development; and
 - Noise generated from building services plant.

Scope of Assessment

182. Noise and vibration assessment will be undertaken, as described below.

General

- **183.** The noise and vibration assessment will be presented in the form of an ES chapter (of **ES Volume 1**) and will be supported by relevant technical information (survey data and calculations) presented as an appendix in **ES Volume 3**.
- **184.** Identification of potentially sensitive noise and vibration receptors on and surrounding the Site, and categorisation of their 'sensitivity', will be undertaken in accordance with EIA terminology, as illustrated in **Table 6**.

Sensitivity of Receptor	Example Descriptions
High	Residential properties, hotels courtrooms and hostels
Medium	Schools, colleges, court chambers, museums and public house (non-residential)
Low	Retail, industrial and commercial buildings

- Table 6Receptor Sensitivity
- **185.** The magnitude of impact shall be defined in accordance with recognised noise and vibration guidance, as referenced in the following sections, and corresponding EIA terminology High, Medium, Low, Very Low.
- **186.** The relationship between the magnitude of impact and the receptor sensitivities will be determined by the significance evaluation matrix shown in **Table 7**.

Table 7 Significance of Effects

Sensitivity of Receptor

Magnitude of Impact



	High	Medium	Low	Very Low
High	Major	Moderate	Minor	Negligible
Medium	Moderate	Minor	Negligible	Negligible
Low	Minor	Negligible	Negligible	Negligible

- **187.** In terms of nature of effects, these will be defined as either adverse, beneficial or neutral in nature.
- **188.** The scale of effects will refer to guidance within the Noise Policy Statement for England (NPSE)¹⁶. The decision making includes identifying whether the overall effect of the noise exposure generated by a development is, or would be, above or below the significant observed adverse effect level and the lowest observed adverse effect level. The definitions for the different effect levels are outlined below:
 - Significant Observed Adverse Effect Level (SOAEL): The level of noise exposure above which significant adverse effects on health and quality of life occur
 - Lowest Observed Adverse Effect Level (LOAEL): The level of noise exposure above which adverse effects on health and quality of life can be detected; and
 - No Observed Effect Level (NOEL): The level of noise exposure below which no effect at all on health or quality of life can be detected.
- **189.** Typically, effects (either before or after mitigation) that are major or moderate in scale shall be considered as 'significant effects' i.e., exceeds the LOAEL.

Demolition and Construction

- **190.** The assessment of demolition, enabling and construction noise and vibration effects are described as follows:
 - Estimation of noise generated (impact magnitude) during each principal phase of the demolition, enabling and construction works and an assessment of the likely effects on surrounding sensitive receptors pre-mitigation. The assessment will be based on the "ABC" methodology set out in British Standard BS 5228:2009¹⁷, as interpreted within **Table 8**.

Table 8Description of the magnitude of impact rating for assessing the likely and residual
effects of demolition and construction noise and vibration

Magnitude of impact	Daytime noise levels (08:00-18:00)	Vibration levels
Very low	Lower than ambient or less than $L_{Aeq, 10hr}$ 65 dB.	Peak particle velocity (PPV) less than 0.3 mm/s
Low	Higher than ambient though less than L _{Aeq,10hr} 70 dB.	PPV regularly exceeding 0.3 mm/s, but less than 1.0 mm/s.
Medium	Higher than ambient and between L _{Aeq,10hr} 71- 75 dB	PPV regularly exceeding 1.0 mm/s, but less than 10.0 mm/s.
High	Higher than ambient and greater than $L_{Aeq,10hr}$ 75 dB	PPV regularly exceeding 10.0 mm/s.

Note: Ambient noise levels assumed to remain between $L_{Aeq, 10hr}$ 60-65 dB.

¹⁷ British Standards (BS) 5228-2:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites -Noise, December 2008



¹⁶ Department for Environment, Food and Rural Affairs, Noise Policy Statement for England (NPSE), March 2010

- For the assessment of road traffic noise associated with the demolition, enabling and construction works, reference will be made to the Calculation of Road Traffic Noise (CRTN)¹⁸. Further advice is also given in the Design Manual for Roads and Bridges (DMRB)¹⁹.
- Significance criteria for assessing construction traffic noise are presented in **Table 9**, which is based on the IOA /IEMA 'Guidelines for Noise Impact Assessment'²⁰.

Table 9Description of the Magnitude of Impact Rating for Assessing the Effect of Increases
in Ambient Noise

Magnitude of Impact	Increase in noise level (dBA)	Description
Very low	<1.0	Noise increase is unlikely to be discernible.
Low	1.0 - 2.9	A slight increase in noise levels may be perceived in affected buildings and outdoor recreational areas.
Medium	3.0 - 4.9	Increase in noise levels is likely to be noticeable in affected buildings and outdoor recreational areas.
High	>5.0	Increase in noise levels is likely to be clearly perceptible and could have a significant effect on the continued use of a building.

- Classification of the pre-mitigated nature, scale and significance of noise and vibration effects
- Identification of appropriate Best Practicable Means mitigation / any other required mitigation and re-classification of the residual effects (post mitigation) nature, scale and significance
- Details of plant and equipment to be used throughout the enabling and construction works including % on times and sound power levels shall be presented within the Environmental Statement.

Completed Development

- **191.** The assessment of noise effects associated within the completed and operational Proposed Development will be undertaken as follows:
 - The operational noise affects will be assessed with respect to the baseline measurements
 - For the assessment of building services noise, reference will be made to the use of BS 4142:2014²¹. Criteria for the assessment are set in accordance with BS 4142 and the Institute of Acoustics (IOA) / Institute of Environmental Management and Assessment (IEMA) 'Guidelines for Noise Impact Assessment, as presented in **Table 10**.

Table 10 Description of the Magnitude of Impact Rating for Assessing the Effects of Building Services Plant Noise

Magnitude of Impact	Increase in noise level (dBA)	Description
Very low	<1.0	Noise increase is unlikely to be discernible.
Low	1.0-2.9	A slight increase in noise levels may be perceived in affected buildings with openable windows and outdoor recreational areas.
Medium	3.0-4.9	Increase in noise levels is likely to be noticeable in affected buildings with openable windows and outdoor recreational areas.

¹⁸ Department for Transport Welsh Office (1988) Calculation of Road Traffic Noise (CRTN)

²¹ British Standards (BS) 4142:2014 Method for rating and assessing industrial and commercial sound, October 2014



¹⁹ Highways England Design Manual for Roads and Bridges Volume 11 Section 3, LA 111 Noise and Vibration, May 2020 ²⁰ Institute of Environmental Management and Assessment (IEMA) and Institute of Acoustics (IoA) Guidelines for Noise Impact Assessment, October 2014

High	>5.0	Increase in noise levels is likely to be clearly perceptible in affected building with openable windows and outdoor recreational areas
		recreational areas.

 For the assessment of site suitability for residential development reference will be made to the ProPG guidance²² on external noise levels (**Table 11**), though ultimately whether the recommended internal noise levels within BS 8233:2014²³ (**Table 12**) will be achieved.

Table 11 Magnitude of impact – external free-field noise levels

Magnitude of impact	Daytime (07:00-23:00) free-field external noise level, L _{Aeq,16hr} (dB)	Night-time (23:00-07:00) free-field external noise level, L _{Aeq,8hr} (dB)	Night-time (23:00-07:00) free-field external maximum noise level, L _{AFmax} (dB)
Very low	≤50	≤40	≤55
Low	51-60	41-50	56-65
Medium	61-70	51-60	66-75
High	>70	>60	>75

Note: Excluding 10 highest events.

Table 12 Magnitude of impact - internal noise levels within dwellings

Magnitude of impact	Increase in noise level above BS 8233 (dBA)	Description
Very low	<1.0	Complies with BS 8233
Low	1.0-4.9	Internal noise limits comply with 'reasonable' standard set out in BS 8233
Medium	5.0-10.0	Internal noise limits up to 5 dB higher than 'reasonable' standard set out in BS 8233
High	>10.0	Internal noise limits 10 dB higher than 'reasonable' standard set out in BS 8233

• For the assessment of outdoor amenity, reference will be made to the use of BS 8233:2014, as presented in **Table 13**.

Table 13 Magnitude of impact - noise in outdoor amenity

Magnitude of impact	Noise level (dBA)	Description
Very low	≤50	Meets the lower recommended value in BS 8233
Low	51-55	Meets the upper guideline value in BS 8233
Medium	56-60	Noise levels that are just noticeable above the upper guideline value in BS 8233
High	≥61	Would be noticeably above the upper guideline value in BS 8233

192. A site suitability assessment will also be performed to assess potential future noise and vibration impacts which may affect the Proposed Development. The Site suitability assessment will include a review of the likely mitigation measures required so that suitable internal noise levels are achieved in residential properties.

Cumulative Effects Assessment

193. The cumulative impacts associated with the Proposed Development and other cumulative schemes within the locality will be established and assessed. This will be in relation to demolition, enabling and construction noise and vibration effects, building services noise and operational noise egress, with the

²³ British Standard (BS) 8233:2014 Guidance on sound insulation and noise reduction for buildings, February 2014



²² ProPG: Planning & Noise, Professional Practice Guidance on Planning & Noise, New Residential Development, May 2017

assessments undertaken in line with the methods outlined above.

Socio-Economics

Introduction

- 194. A socio-economic assessment will be undertaken to assess the potential effects of the Proposed Development on socio-economics within the Site and surrounding areas. Socio-economics has been scoped into the EIA due to the potential for significant effects as a result of demolition and construction / operational employment, housing provision, the local economy and spending, access to schools, GP's, and open space and crime and deprivation. If relevant, the assessment will identify mitigation measures to be applied during the demolition/construction and operational stages.
- **195.** The socio-economic assessment will be carried out by Hatch Associates and presented within a Socio Economic ES chapter.

Baseline Conditions

196. The baseline analysis of the socio-economic assessment will address the baseline conditions at the following spatial levels: the Site on Fulton Road, a Local Impact Area²⁴ (LIA) which covers the Wembley Area Action Plan (WAAP) area (the boundary of which is outlined in the diagram below), the London Borough of Brent (LBB), and Greater London.



Figure 11 Surrounding Spatial Levels

197. In addition to the above, the following community infrastructure facilities will be assessed in relation to other, more appropriately defined catchments based on other administrative areas identified within local and regional policy (based on the London Plan).

²⁴ Consisting of the following LSOAs – Brent 0009C, Brent 017B, Brent 017C, Brent 017F, Brent 020D, and Brent 020E.



- Primary Healthcare Facilities GP surgeries located within one-mile of the Proposed Development, based on advice from the Healthy Urban Development Unit (HUDU);
- Early-years Facilities located within <u>the ward</u> (i.e. Tokyngton) in which the Proposed Development is located based on evidence available within the latest Brent Childcare Sufficiency Assessment²⁵ (CSA);
- Primary Schools located within <u>two-miles</u> of the Proposed Development and LBB's <u>Planning</u> <u>Area 3</u> as defined within the latest LBB School Place Planning Strategy²⁶;
- Secondary Schools located within <u>LBB;</u>
- Open Spaces based on guidance in the London Plan:
 - <400m pocket parks, local parks and small open spaces;
 - <1.2km district parks;
 - <3.2km metropolitan parks; and
 - Between 3.2km to 8km for regional parks.
- Children's Play Spaces based on guidance set out in the Mayor's Play and Informal Recreation Supplementary Planning Guidance (SPG) and the London Plan:
 - <100m walking distance (or 60m buffer) for local areas for play (LAPs) to be used by under five-year olds;
 - <400m walking distance (or 240m buffer) for local equipped areas for play (LEAPs) to be used by children aged five to 11; and
 - <1km walking distance (or 600m buffer) for neighbourhood equipped areas for play (NEAPs) to be used by children aged 12-years and over.
- Commercial floorspace located within the <u>LIA</u> and <u>LBB</u>.
- Deprivation within the <u>LIA</u> and <u>LBB</u>.
- **198.** The socio-economic baseline conditions will be assessed using established statistical sources, such as the Office for National Statistics' (ONS) Business Register and Employment Survey (BRES), Annual Population Survey (APS), and Regional Gross Value Added (GVA). This will be supplemented with any relevant data held by LBB, the Greater London Authority (GLA) and the client team. Where necessary, consultation will be undertaken with LBB, the Education Department and the LBB CCG to test findings in relation to the baseline position.
- **199.** Full details of the methodology adopted, including all sources and references used in developing an understanding of the baseline position, will be provided as part of the ES chapter itself. Furthermore, the ES chapter will detail which geographical scales are relevant for the different indicators used, and why.
- **200.** Key baseline indicators will include:
 - Population Data from the ONS indicates that the LIA has a population of around 13,500 people, accounting for around 4% of LBB's total population (of 330,000 people). Since 2011, the LIA's population has increased by +12% compared with an increase of +6% in LBB and +9% across London. With 67% local residents of core working age (i.e. aged 16-64), the LIA's profile

²⁶ London Borough of Brent (2020), Brent School Place Strategy 2019-2023.



²⁵ London Borough of Brent (2018), Brent Childcare Sufficiency Assessment (CSA) July 2018-July 2021.

matches the regional average, and is marginally higher than the average for LBB (66% aged 16-64).

- Housing The latest Census shows that in 2011 there were fewer than 4,000 households within the LIA, with the number increasing substantially since then. Overall, around 59% of all households within the LIA are in rented accommodation (both socially and private), which is around ten percentage points higher than the regional average. The Wembley Area Action Plan sets out an ambitious target of 11,500 new homes between 2007-26, representing more than half of the planned housing within the borough (22,000 new homes) over the plan period. The London Plan has increased LBB's housing target to 23,250 new homes over a ten-year period. Overall, LBB's target represents around 4% of London's ten-year housing target (of 522,870 new homes). The Brent Strategic Housing Market Assessment (SHMA) from 2018 has identified a need for 48,000 additional homes between 2016-41, or an average of 1,920 dwellings per annum.
- Economic activity Data from the APS shows that around three-in-four (or 75%) LBB residents of core working age are economically active, compared with a slightly higher proportion of economically active residents (of 79%) across London. APS data also shows that the employment rate in LBB (of 70%) is around 5% lower than the regional average (of 75%), and that the unemployment rate (of 6.6%²⁷%) in LBB is higher than the regional average (of 5.0%).
- Employment Data from the BRES shows that in 2019, there were around 14,200 jobs located within the LIA, accounting for 11% of LBB's total employment figure. Data on the sectoral make-up of employment within the LIA identifies retail (16%), construction (14%) and transport (11%) as the three largest employment sectors, compared with health (14%), business support (10%) and retail (9%) across LBB.
- **Economy** In 2018, LBB contributed around £8.7 billion to the regional economy. This represents only a small proportion (of around 2%) of the regional economy (estimated to be in the region of £450 billion).
- Education Existing capacity of early years (for Tokyngton ward), primary (within one mile of the Proposed Development and within Planning Area 3) and secondary school places (within LBB) will be considered. Data from the Brent CSA 2018-2021 and the LBB School Place Planning Strategy both suggest that there is capacity to accommodate growth, although this will need to be confirmed based on recent data from the Department for Education (DfE)
- Healthcare Existing capacity in local primary healthcare services (i.e. GPs) within 1km of the Site of the Proposed Development will draw on a review of data from the NHS and the LBB CCG. This will provide a baseline against which the additional demand for GP facilities generated by the Proposed Development will be assessed.
- Open space and children's play space LBB has a total of 451.9 hectares of open space, with a little over nine hectares of dedicated play space. The LBB Open Space, Sports and Recreation Study states that the borough has good open space provision, with around 1.39 hectares per 1,000 residents (compared with a requirement of 0.8 hectares per 1,000 residents).
- Commercial floorspace Data from CoStar indicates that in 2020 LBB had over 7.8 million square feet of industrial floorspace, 382,300 square feet of which were vacant. This represents an overall vacancy rate of around 5%.
- **Deprivation** The LIA's ranking in terms of overall Index of Multiple Deprivation (IMD) will be considered alongside other domains (such as crime, access to housing and environmental

²⁷ London Borough of Brent (2019), Open Space, Sports and Recreation Study.



barriers). The latest IMD data (from 2019) shows that the eastern part of the LIA is characterised by relatively higher deprivation which extends south towards the boundary of LBB with LB Hammersmith and Fulham. The central and western parts of the LIA (i.e. where the Proposed Development is located) are less deprived. That said this area is relatively more deprived when compared with less deprived areas to the north west of LBB.

Crime – The assessment will draw on data from the Metropolitan Police Service data dashboard²⁸. Data for LBB shows that between 2015 and 2020, the borough had an average crime rate of 514 per 1,000 residents. This has fallen considerably (to 85 crimes per 1,000 residents) in 2020, reflecting an overall reduction in crime regionally as people observed social distancing rules, and followed the lockdown measures put in place to reduce the spread of the COVID-19 pandemic.



Figure 12 Deprivation Levels

Potential Sensitive Receptors

- **201.** The Proposed Development will deliver new housing and commercial floorspace (including light industrial uses) to the local area, in addition to improvements to the public realm and an active mixed-use development contributing to the wider revival of Wembley.
- **202.** The Proposed Development will contribute to LBB's and London's housing targets resulting in an increase in local population, and support jobs within LBB, generate additional GVA, increase demand on education, healthcare and open space provision, whilst also affecting the stock of commercial floorspace (including light-industrial uses and co-working space).
- **203.** The selection of receptors that could be subject to effects by the Proposed Development has been informed by the initial baseline analysis presented above, as well as consideration of the temporary socio-economic effects associated with the demolition and construction of the Proposed Development,

²⁸ See - <u>https://www.met.police.uk/sd/stats-and-data/met/crime-data-dashboard/</u>



these include:

- Loss of existing employment on-site;
- Temporary employment supported within the construction sector as a result of the demolition and construction activity associated with the Proposed Development;
- Existing provision of commercial floorspace;
- Residents seeking new housing (including private and affordable housing) within LBB;
- Existing population and labour market characteristics including proportion of working age population;
- On-site and off-site employment;
- The size, diversity and prosperity of the local economy as measured by the direct, indirect and wider economic output (measured in terms of GVA);
- Residents in, and seeking education facilities including early-years, primary and secondary school facilities;
- Residents using, and seeking healthcare facilities;);
- Residents using local open spaces (including children's play space, as well as private and communal open spaces); and
- Residents experiencing crime and/ or deprivation issues.

Potential Effects

- **204.** The Proposed Development is expected to generate a range of economic and social effects, some of which would be temporary (such as employment supported during demolition and construction activity associated with the Proposed Development), whilst other would be permanent (such as those resulting from the loss of current uses on-site, as well as the new resident and workforce population once work on the Proposed Development is completed and it is occupied).
- 205. The likely potential effects are presented below:

Temporary:

- Loss of existing employment on-site; and
- Temporary employment opportunities supported within the construction sector as a result of the demolition and construction activity associated with the Proposed Development.

Permanent:

- Implications of the Proposed Development on the stock of modern, light-industrial and co-working floorspace;
- The creation of any net additional long-term employment opportunities from the proposed commercial uses of the Proposed Development;
- The economic effect of additional GVA and expenditure within the LIA, LBB and London resulting from additional employees and residents;
- The provision of new homes (including affordable homes), and contribution towards local and regional housing targets (as set out within the London Plan);



- Implications of the Proposed Development's residents on early-years provision, as well as primary and secondary school places;
- Implications of the Proposed Development's residents upon primary (i.e. GPs) healthcare facilities;
- Implications of the Proposed Development's residents upon demand for open space provision (including children's play space); and
- Implications of the Proposed Development on existing crime and deprivation levels within the local area.

Scope of Assessment

- **206.** In the absence of statutory guidance, and formal methodologies for assessing socio-economic effects, the assessment of the Proposed Development will be based on widely recognised methods for quantifying the impacts of commercial and mixed-use developments. Whenever possible, the likely socio-economic effects generated by the Proposed Development will be quantified, but where this is not feasible (or possible), a qualitative assessment will be provided based on professional judgement and experience.
- **207.** There is no statutory technical guidance for the assessment of the scale and nature of socio-economic effects. As such, the likely effects of the Proposed Development on the socio-economic receptors identified above will therefore be based on professional judgement, and will consider the following factors:
 - The <u>sensitivity</u> of each receptor affected (as set out in **Table 14** below); and
 - The <u>magnitude of impact</u> to the receptor brought above by delivery of the Proposed Development (as set out in **Table 15** below).
- **208.** The sensitivity of each receptor will be evaluated as being high, medium, low or negligible based on a review of the baseline position of each receptor and its performance against other benchmark areas (in this case LBB and London). The importance of the receptor in local and regional policy terms will also be considered.

Sensitivity of Receptor	Description
High	Evidence of direct and significant socio-economic concern relating to the receptor. May be given a high priority in local, regional and/ or national economic and regeneration policy.
Medium	Some evidence of socio-economic concern linked to receptor, which may be indirect. Change relating to receptor has medium priority in local, regional and/ or national economic and regeneration policy.
Low	There is little evidence of socio-economic concern relating to receptor. Receptor is given a low priority in local, regional and/ or national economic and regeneration policy.
Negligible	Very low importance with little or no priority even at the local scale.

Table 14 Definition of Receptor Sensitivity

209. The magnitude of impact experienced by each receptor will be determined by considering the change from (current) baseline conditions, both before and (if required) after mitigation. The criteria used for the assessment of the magnitude of socio-economic effects (both beneficial and adverse) are outlined in **Table 15** below.

Table 15 Definition of Magnitude of Change

Magnitude of impact Description



llich	Loss of resources and/ or integrity of resource; severe damage to key characteristics, features or elements.
nığıı	Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality.
Madiana	Loss of resource, but not adversely affecting its integrity; partial loss of and/ or damage to key characteristics, features or elements.
Mediam	Benefit to and/ or addition of key characteristics, features or elements; improvement of attribute quality.
	Some measurable change in attributes, quality or vulnerability; minor loss of and/ or alteration to one (or more) key characteristics, features or elements.
Low	Minor benefit to and/ or addition of one (or more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.
Negligible	Very minor change (either positive or detrimental) to one (or more) characteristics, features or elements.

- 210. The assessment will also consider the nature of effect (as either beneficial, adverse or neutral), as well as its duration. In general, the effects generated as a result of demolition and construction activity will be classed as 'temporary' and 'short-term' in nature, whilst the effects of the completed (and therefore operational) Proposed Development will be classed as 'permanent' and 'long-term' in nature.
- 211. The matrix used to determine the scale of the socio-economic effects on each receptor is presented in **Table 16** below.

Receptor Sensitivity	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Minor
Low	Moderate	Minor	Minor	Negligible
Negligible	Minor	Minor	Negligible	Negligible

Table 16 Matrix Used to Determine Scale of Effect

- **212.** Effects will be defined as either 'significant' or 'not significant'. Based on the above, effects of moderate and/ or major scale will be considered as <u>significant</u>, whilst those of 'minor' or 'negligible' scale will be considered as <u>not significant</u>.
- 213. The overall approach to the socio-economic assessment will include:
 - Review of local, regional, national policy, plans and development constraints in so far as they
 influence the baseline conditions; judgements about the sensitivity of receptors; the assessment
 methodology or justification of a specific socio-economic effect described in the socio-economic
 assessment; and
 - A full review of baseline conditions for areas described in the baseline section above. This will be assessed using recognised data sources principally from the ONS but drawing where appropriate on evidence from LBB, the GLA and other sources.

Demolition and Construction

 Quantification of any existing on-site full-time equivalent (FTE) jobs lost as a result of the Proposed Development. These will be based on information provided by the Applicant if available. In the absence of information, existing employment will be estimated using existing



floorspace schedules and relevant employment densities based on the Homes and Communities Agency's (HCA) Employment Density Guide²⁹; and

An estimation of the FTE jobs generated during the demolition and construction phase. This will
use data on construction spend estimates and use labour co-efficient ratios³⁰ to derive estimates
of the likely number of temporary construction workers per annum during the construction phase.

Complete and Operational

- An estimation and quantification of the FTE jobs created by the completed and operational Proposed Development. On-site jobs will be estimated using established employment density ratios²⁹. Off-site jobs will be estimated using standard HCA Additionality Guide multipliers³¹;
- An estimation of the new residential site population will be made based on the proposed mix of units applied to existing average household sizes within the local area. The child yield arising from the Proposed Development will be calculated based on the Greater London Authority's (GLA) Population Yield Calculator³²;
- An estimation of the additional expenditure created by the completed and operational Proposed Development. This will be based on data from the Family Expenditure Survey (FES);
- An appraisal of the likely effects of the Proposed Development's additional population on the capacity of existing early years provision and local primary and secondary schools, as well as the capacity of primary healthcare facilities, open space provision and children's play space. Where relevant, established standards for provision (e.g. per head of population) set out within local and GLA policy will be referred to;
- An appraisal of the likely effects of the Proposed Development's additional population on crime, deprivation and social-cohesion; and
- Identification of appropriate mitigation measures should any significant adverse effects be identified.

Cumulative Effects Assessment

214. An assessment of the Proposed Development being delivered alongside other relevant cumulative schemes within the local area will also be undertaken. Cumulative effects will once again, be considered within the context of the appropriate impact areas outlined above.

Townscape, Built Heritage & Visual Impact Assessment

Introduction

- **215.** A (built) heritage, townscape and visual impact assessment (HTVIA) will be undertaken to assess the potential effects of the Proposed Development on built heritage receptors, townscape receptors and visual receptors.
- **216.** The HTVIA has been scoped into the EIA due to the potential for significant effects as a result of the massing, scale, layout and visual character of the Proposed Development. If relevant, the assessment will identify mitigation measures to be embedded at the design stage.
- **217.** Matters relating to 'built heritage' and 'townscape and visual' impact will be dealt with as two separate disciplines. They are incorporated into one document due to their commonalities, including the use of

³² GLA (October 2019), Population Yield Calculator, v3.2.



²⁹ Homes and Community Agency (2015), Employment Density Guide, 3rd Edition, November 2015.

³⁰ From Homes and Communities Agency (2015), Calculating Cost per Job, Best Practice Note, 3rd Edition.

³¹ Homes and Community Agency (2014), Additionality Guide, 4th Edition.

verified views to inform the assessment. The heritage, townscape and visual impact assessment will be carried out by Montague Evans LLP and will be presented within **ES Volume 2**.

Baseline Conditions

- **218.** The Site is comprised of Euro House, Wembley, an industrial area of land approximately 350m northeast of Wembley Stadium. The Site is identified as part of the Wembley Park Masterplan and The London Plan identifies the Site as part of the Wembley Opportunity Area.
- **219.** Wembley Area Action Plan (2015) identifies the Site as an area for release from strategic industrial location and forms part of the Wembley Eastern Lands area. The AAP states *"the aspiration for this area is to introduce a wider variety of uses in order to provide a careful transition from the broader offer of mixed used development in the west, through to the Strategic Industrial Locations in the east".*
- **220.** The AAP also identifies the Site as Allocation W27 which identifies access and improvements are required to Wealdstone Brook.
- **221.** As defined in paragraph 47 of this EIA Scoping Report, the Site is within emerging Allocation BCSA4 of the new Local Plan³³, which is identified for mixed-use, residential-led development to incorporate maximum of business use floorspace, hotel and potentially student accommodation. It has an indicative capacity of 700 dwellings. The allocation confirms the Site is appropriate for tall buildings, subject to them achieving an appropriate relationship sensitive to its surroundings and not adversely affecting protected views of the stadium.
- **222.** Baseline conditions of heritage, townscape and visual receptors will consider the history of the area when preparing the HTVIA.
- **223.** The identification of the (built) heritage baseline will be informed by secondary resources, including:
 - The National Heritage List for England (NHLE);
 - Conservation area appraisals; and
 - Site observations.
- **224.** Townscape receptors will be identified through site observations, desk-based research and an understanding of the features which define the area, including its heritage receptors. There will be regard to documents published by the LBB which provide description of townscape character, such as conservation area appraisals and other policy designations. These include the Wembley Area Action Plan (2015) and evidence base³⁴.
- **225.** The visual baseline will be identified through desk-based analysis of key viewing corridors, including those identified in the Statutory Development Plan³⁵. The Site is not located in any Landmark Viewing Corridor identified by the London View Management Framework (LVMF)³⁶, although a review of an extension to their Wider Setting Consultation Area will be undertaken to ensure no backdrop views are impacted. A preliminary selection of viewpoints and likely visual receptors has been informed by townscape character and heritage receptors (see Figures 1 and 2); this is based on the framework of views assessed for the extant consent.

³⁶ Mayor of London, 2012. London View Management Framework Supplementary Planning Guidance



³³ Draft Local Plan, London Borough of Brent: Regulation 19 Consultation

³⁴ The evidence base includes the London Borough of Brent Development Management Policies (2016)

³⁵ London Plan (March 2021); London Borough of Brent Adopted Local Plan documents: Core Strategy (2010), Wembley Area Action Plan (2015), London Borough of Brent Development Management Policies (2016) and corresponding Policies Map.

Potential Sensitive Receptors

Built Heritage

- **226.** The (built) heritage assessment will assess the likely effect of the Proposed Development on 'built' or 'above ground' heritage receptors.
- 227. (Built) heritage receptors include world heritage sites, listed buildings, scheduled ancient monuments (with upstanding remains), conservation areas, registered parks and gardens and non-designated heritage receptors, such as locally listed buildings. A map (see Appendix C) identifies all the heritage receptors within a 1km radius of the Site boundary. This is the study area which has been identified in accordance with the methodology described below.
- **228.** The Site itself does not contain any statutorily listed buildings or non-designated heritage receptors, and it is not located within a Conservation Area.
- **229.** There are five Conservation Areas and three grade II listed buildings within 1km of the Site, although none of these assets are located within 500m of the Site.
- **230.** For the purposes of the HTVIA, professional judgement will be used to select those built heritage receptors that are likely to experience change to their setting as a result of the Proposed Development, and by extension, their heritage value. For many heritage receptors in the area there is no setting relationship to the Site. Therefore, those assets that are both physically and functionally separated from the Site will not be assessed, as the heritage value of these assets is unlikely to be affected.

Townscape and Visual

- **231.** The townscape assessment will consider the Proposed Development within its urban context, including the buildings, the relationships between them, the different types of urban open spaces and the relationship between buildings and open spaces.
- **232.** The townscape assessment will be presented through the identification of Townscape Character Areas within an identified study area; in this case 750m. The purpose of identifying Townscape Character Areas is to understand the appearance, use and function of the townscape surrounding the Site, and the nature of the differences in the townscape, and the potential effect that the Proposed Development will have upon that townscape area. A Character Area Plan has been drafted and can be found at **Appendix C**.
- **233.** The HTVIA will have regard to relevant policy designations³⁷. Policy designations outline the strategic aspirations for an area, contribute to the understanding of townscape value and the potential for, or even lack of, change. These include:

London Plan (March 2021)

- Policy D1 (London's form character and capacity for growth)
- Policy D3 (Optimising site capacity through the design-led approach)
- Policy D4 (Delivering good design)
- Policy D5 (Inclusive design)
- Policy D8 (Public realm)
- Policy D9 (Tall Buildings)

³⁷ Where relevant the Draft Local Plan will be considered as part of the HTVIA. Latest updates relating to its publication are available here: <u>https://www.brent.gov.uk/services-for-residents/planning-and-building-control/planning-policy/shaping-brent-s-future-together/</u>



- Policy HC1 (Heritage conservation and growth)
- Policy HC3 (Strategic and Local Views)
- Policy HC4 (London View Management Framework)

LBB: Development Management Policies (2016)

- DMP 7: Brent's Heritage Assets
- DMP 9: Waterside Development
- DMP 19: Residential Amenity Space

LBB: Core Strategy (2010)

- CP 5: Placemaking
- CP 7: Wembley Growth Area
- CP 18: Protection and Enhancement of Open Space, Sports and Biodiversity

Wembley Area Action Plan (2015)

- WEM 1: Urban Form
- WEM 5: Tall Buildings
- WEM 6: Protection of Stadium Views
- WEM 8: Securing Design Quality
- WEM 32: Urban Greening
- WEM 34: Open Space Provision
- WEM 40: River Brent and Wealdstone Brook
- **234.** The existing townscape surrounding the Site comprises a mix of residential and light industrial units. Existing and consented development for residential-led development in tall buildings is also located within the area surrounding Wembley Stadium, in particular within the Wembley Opportunity Area and Wembley Park Tall Building Zone. The area has a low susceptibility to the type of change envisaged by the emerging proposals.
- **235.** The visual assessment will consider the impact of the Proposed Development upon visual receptors. The assessment relates to how people will be affected by changes in views and visual amenity from different locations. Visual receptors are always people (although usually visual receptors are defined according to use e.g. residential, business, road, footpath etc.), rather than landscape features.
- **236.** The scope of the visual assessment is based on viewpoints identified by policy as well as an appraisal of site conditions which are specific to the Proposed Development, i.e. orientation of streets, location of heritage receptors, green spaces, townscape character areas, etc.
- 237. An initial study has identified 26 viewpoints to be tested, which are identified by the maps in AppendixC. 15 of these will be verified views, and an additional 11 views will be unverified test views.

Potential Effects

- 238. The EIA will address the following potential heritage, townscape and visual effects:
 - Temporary change in the setting of heritage receptors, townscape character and views during demolition and construction works; and



• Permanent changes to the setting of heritage receptors, local townscape and selected key views when the development is completed and operational.

Demolition and Construction

- **239.** There is a limited number of (built) heritage receptors in the surrounding area (see **Appendix C** Heritage Asset Plan). The demolition and construction activities may cause indirect effects on (built) heritage receptors as a result of a change to the receptor's setting. This will largely be limited to visibility of equipment associated with construction (cranes, hoarding, etc.). The effects during demolition/construction will be temporary.
- **240.** The potential effects at this stage on heritage receptors which are located nearest to the Site could also include environmental effects such as noise, dust and vibration. Due to the separating distance between the Site and heritage assets, there will be a limited potential for environmental effects such as noise, dust and vibration to impact the significance of heritage receptors. Where appropriate, an assessment of the impacts to individual heritage assets will be carried out.
- **241.** Similarly, the demolition and construction activities may have effects on the townscape and visual receptors as a result of:
 - The noise, dust and vibration associated with the construction activity;
 - Visibility of equipment associated with construction (cranes, hoarding, etc.); and/or
 - The potential increase in activity affecting the local road network.
- **242.** The activities related to construction described above are most likely to affect the townscape and visual receptors which are closest to the Site. The assessment will be qualitative and informed by the respective chapters for each discipline. The receptors which are further from the Site are less likely to experience effects as a result of the distance, limited or no inter-visibility, and interposing development.

Operational

- **243.** When the Proposed Development is completed and operational it is likely to give rise to direct and indirect effect to the immediate townscape. The Proposed Development would comprise a notable increase in scale (height) relative to the existing building on the Site, although would be congruent to the wider existing and emerging townscape. Considerable care and attention will be given to the access, form, layout and architectural detailing of the ground floor to ensure that this provides a contextual relationship and functional enhancement to the surrounding townscape, including heritage receptors.
- **244.** The townscape assessment will have regard to the Wembley Park Tall Building Zone (red boundary), within which the majority of the Site is located, and Wembley Park Tall Building Zone Core (blue boundary), within which the Site is partially located (see **Figure 13**).





Figure 14 Tall Building Zone

- **245.** It is also important to understand the relationship of the proposals with other tall building developments surrounding the Site. In addition to scale, form and mass, the articulation of the buildings and architectural treatment would need to be considered in order to achieve a balanced composition and mass.
- **246.** Due to the significant separating distance and established baseline context, the operational stage is not likely to give rise to any effects on the setting of heritage assets. The Proposed Development would be seen over a distance by virtue of its scale. Change to the setting of an asset may change the way in which the heritage value of the receptor is appreciated or understood as a result of a change to its setting caused by the Proposed Development; however, it is highly unlikely, given the separating distance and existing baseline context, that the Proposed Development would give rise to any significant effects to heritage receptors. An effect on the setting of a built heritage receptor is regarded as an indirect effect.
- **247.** A cumulative assessment will be carried out that considers the additional effects of the Proposed Development on top of the surrounding consented developments. The consented developments are to be agreed with the LBB during the pre-application and scoping process. At this stage, the following schemes have been identified (but are not limited to):
 - 4 15/5550- Wembley Masterplan (Where plots are not yet subject to RMA's); and



• 16 - 20/0587 1, 2, 3 & 9 Watkin Road.

Scope of Assessment

- 248. The scope of the HTVIA will be informed by the identification of an appropriate study area for built heritage, townscape and visual receptors. The study area is informed by building locations and heights, topography and townscape features and an understanding of the scale of the Proposed Development. The study areas are to be agreed with the LBB during the pre-application and scoping process. Appendix C shows the suggested study areas; these are considered to be proportionate to be able to understand any likely significant effects.
- **249.** The assessment will be supported by Accurate Visual Representations (AVRs or verified views), which provide the basis for the assessment of the Proposed Development and its effect on the identified views. Each viewpoint will be reproduced in the following formats:
 - Existing baseline photography;
 - Proposed 'existing' plus 'proposed', a wireline (AVR1) or render (AVR3) of the Proposed Development; and
 - Cumulative 'proposed' plus material planning applications/consents surrounding the Site.
- **250.** The AVRs will be prepared to industry standard by independent visualisation consultants. The methodology will be in accordance with Appendix C of the LVMF, which is considered best practice, and the Landscape Institute (LI) Technical Advice Note 06/19. It is the expectation that the AVRs will be prepared in line with Type 4 of the LI Technical Advice Note, unless the on-site conditions require an alternative lens type or format.
- 251. The AVR locations as shown in Appendix C and presentation will be agreed with the LBB.
- **252.** The assessment will also be supported by 11 non-verified test views in addition to the 15 AVRs. This will enable the effect of the Proposed Development to be tested on a wider range of viewpoints. The view selection is based on the framework assessed for the extant consent.
- **253.** The assessment methodology is the product of best practice and policy requirements informed by guidance. There is correlation between heritage, townscape and visual assessment. Notwithstanding, these are separate disciplines and require separate assessment in accordance with legislation, planning policy and best practice guidance.

Heritage

- **254.** The assessment of heritage receptors will be informed by relevant parts of the Development Plan³⁸ and Chapter 16 of the NPPF³⁹. Other guidance used in the assessment will include:
 - Historic England, Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment (2017);
 - Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2017); and
 - Historic England, Advice Note 4: Tall Buildings (2015).

Townscape and Visual

255. The framework for assessment of townscape and visual impact will be prepared using the Guidelines

³⁸ London Plan (March 2021); London Borough of Brent Adopted Local Plan documents: Core Strategy (2010), Wembley Area Action Plan (2015), London Borough of Brent Development Management Policies (2016) and corresponding Policies Map ³⁹ National Planning Policy Framework (2019)



for Landscape and Visual Impact Assessment, Third Edition (LI and Institute of Environmental Management and Assessment (IEMA), 2013) ('GLVIA3'). Regard will also be given to the methodology set out in An Approach to Landscape Character Assessment (2014) prepared by Natural England.

Assessment Process Framework

- **256.** The approach to the assessment has three stages:
 - Baseline assessment of value;
 - Assessment of sensitivity and magnitude of impact; and
 - Assessment of likely effect.
- **257.** The methodology will describe the criteria and approach to assessment at each stage outlined above. The first stage comprises an assessment of the baseline condition, including the value of the townscape and visual amenity of views. The assessment of sensitivity involves a judgement as to the susceptibility of the receptor (be it built heritage, townscape or visual) to the changes arising from the Proposed Development. The susceptibility is then calibrated with the value of the receptor to result in its sensitivity.
- **258.** The second and third stages are part of the assessment of the Proposed Development. The likely effect of the Proposed Development upon a receptor is based upon a calibration of the sensitivity of the receptor and the magnitude of impact. This results in a likely effect in the following range: None, Negligible, Minor, Minor-Moderate, Moderate, Moderate-Major or Major.
- **259.** The nature of the likely effect, either beneficial, adverse or neutral, is then described. This applies to all likely effects (Negligible to Major) unless the likely effect is identified as None.
- **260.** A likely effect is judged to be significant for the purposes of the EIA if it is Moderate, Moderate-Major or Major. The lesser likely effects in the scale (Minor-Moderate and below) are not significant.

Mitigation

- **261.** Measures proposed to prevent, reduce or where possible offset any adverse likely effects will be identified and developed as part of the design process. Primary mitigation measures, including architectural and urban design, will become embedded into the Proposed Development, commonly referred to as embedded mitigation.
- **262.** The likely effects of the Proposed Development will include embedded mitigation. As a result, there may be no requirement for additional mitigation. If this is the case, likely residual effects would remain the same as the likely effects, unless otherwise stated.

Policy Assessment

- **263.** The HTVIA will include an assessment of the Proposed Development on built heritage, townscape and visual receptors. The assessment will also include an analysis of planning policy, which provides the rationale for development of tall buildings in this location. The policy assessment will be distinct from the assessment of likely effects for the purposes of EIA, although it will use the findings of the ES assessment to inform the discussion.
- **264.** In general, likely effects to heritage receptors which are judged to be adverse will equate to harm to the heritage value of the receptor, and will be assessed accordingly (with regards to paragraphs 184-202 of the NPPF). If a likely effect is judged to be beneficial, then this will be considered as a heritage benefit.
- **265.** Similarly, adverse likely effects on townscape character and visual amenity will be judged in terms of policy related to design and the aspirations for the Site.



Traffic & Transport

Introduction

- **266.** A traffic and transport assessment will be undertaken to assess the potential effects of the Proposed Development on traffic and transport within the Site and surrounding areas. Traffic and transport has been scoped into the EIA due to the potential for significant effects as a result of vehicular trips associated with the demolition, construction and operation of the Proposed Development, in addition to extra demand placed on the local transport network. If relevant, the assessment will identify mitigation measures to be applied during the demolition/construction and when the Proposed Development is complete and operational.
- **267.** The traffic and transport assessment will be carried out by Iceni and presented within a Traffic and Transport ES chapter.

Baseline Conditions

- **268.** The Site is well connected to local public transport networks as indicated in the Site's Public Transport Accessibility Level (PTAL) rating of 4, indicating a 'good' level of accessibility.
- **269.** The Site is located near to Wembley Park Underground Station (Jubilee and Metropolitan Lines), which is approximately 650m north of the Site. The Site is also located approximately 1.2km to the north-east of Wembley Stadium Railway Station.
- **270.** The Site is directly adjacent to a bus stop on Fifth Way, with buses 92 and 206 running every 7-11 minutes and 11-13 minutes respectively.
- **271.** The Site is located between Fulton Road, Fifth Way and Fourth Way and is located close to the A406 (North Circular Road).
- **272.** Automated Traffic Counts (ATCs) were undertaken for a one-week period from Wednesday 29th January until Tuesday 4th February 2020 as part of the previous planning application (application reference number: 20/2033), before the COVID-19 pandemic started impacting traffic flows.
- **273.** Given the recent nature of these traffic surveys, and the fact that at the time of writing, traffic flows are impacted by the COVID-19 pandemic, local authorities are not accepting traffic surveys being undertaken as a result, it is proposed to use the January 2020 traffic surveys to establish the baseline context for this scheme.
- **274.** A review of cumulative schemes has been undertaken to see if any additional data needs to be added to the baseline scenario. Since the establishing the baseline in January 2020, an additional two developments have been granted planning consent at Planning Committee (which are captured within the full list of cumulatives schemes (see **Appendix A**)). The applications are as follows:
 - Wembley Park Station Car Park and Sidings (Planning Ref: 20/0967) Granted consent at committee; and
 - 1, 2 3 & 9 Watkin Road (Planning Ref: 20/0587) Granted consent at committee.
- **275.** These additional planning applications will also be reviewed in the cumulative assessment in the Traffic & Transport chapter of the ES.

Potential Sensitive Receptors

276. At this stage it is considered that the traffic associated with the Proposed Development will not be significantly higher than what was generated, assessed, and accepted as part of the previous planning application for the Site in 2020 (planning reference: 20/2033). The Proposed Development is proposing a low level of onsite car parking and therefore associated vehicular trips will be minimal, especially



when compared to the existing uses on the Site. A full assessment of proposed traffic generation will be included within the Traffic & Transport ES chapter, as well as the accompanying Transport Assessment (TA), to demonstrate this. As such, it is proposed that the sensitive receptors on the local highway network are as shown in **Figure 14**



Figure 15 Established Sensitive Receptors

Potential Effects

- 277. The potential traffic & transport effects of the Proposed Development are split into two different stages; the 'Demolition and Construction' stage and the 'Operational' stage i.e. when the Proposed Development has been completed. For both these stages, an assessment will be undertaken within the ES to determine any potential impacts and likely effects which could arise, and this will take reference from, and build on where necessary, the assessments undertaken previously.
- **278.** For the construction stage, the temporary increase in the number of Heavy Goods Vehicles (HGVs) on the local highway network will be considered, alongside any impact caused by the construction workforce i.e. increased demand on public transport, cycle parking etc. Lastly, this assessment will also consider whether the construction methodology itself has an impact on any of the established sensitive receptors i.e. closure of footways.
- **279.** Likewise, an assessment will be undertaken for when the Proposed Development is completed and operational to determine any impact on the local highway network as a result of increased traffic levels, on local public transport services to determine what impact the increased demand will have on capacity, and on local pedestrian and cycle facilities, which will be facilitated by an Active Travel Zone (ATZ) assessment being undertaken and included within the TA.

Scope of Assessment

280. As mentioned, it is considered that the baseline data has already been established as part of the previous planning application (planning reference number: 20/2033), but this will be reviewed and



updated as necessary i.e. with new cumulative schemes. To further establish the baseline, a site visit(s) will be undertaken alongside an ATZ assessment. Other relevant information, such as planning policy, proposed and recently completed highway works, and collision data will also be obtained and reviewed as necessary.

Demolition and Construction

281. The assessment of potential demolition and construction effects will assess any possible increased number of HGV movements and workforce numbers. This assessment will build on the information provided within a dedicated Demolition and Construction chapter within the ES. It is also anticipated that an Outline Construction Logistics Plan will be prepared and submitted alongside the application, providing further details.

Operational

- **282.** The assessment undertaken for when the Proposed Development is completed and operational will follow the Institute of Environmental Management and Assessment (IEMA) document: 'Guidance Notes No.1: Guidelines for the Environmental Assessment of Road Traffic, as well as the relevant planning policy i.e. NPPF.
- **283.** A trip generation assessment will be undertaken for the Proposed Development which will utilise the industry-standard TRICS database. It is expected that the trip rates to be utilised will be consistent with the previous application, which were accepted (planning application reference 15/5550), and then applied to the development proposals. A multi-modal assessment will also be undertaken as part of this which will utilise Census data. To ensure the baseline scenario is relevant, growth rates taken from TEMPro may also be used.
- **284.** As mentioned, a TA will be prepared to support this planning application and will include a full assessment of the scheme from a transport and traffic perspective. This will include an ATZ assessment to consider the quality of local pedestrian and cycle routes to key destinations, establishing any necessary improvements.
- **285.** The TA will also be accompanied by a Framework Travel Plan, a Delivery and Servicing Plan and a Car Park Management Plan.

Cumulative Effects Assessment

286. Lastly, the Traffic & Transport ES chapter will assess the cumulative effects, taking account of any further impacts when looking at the Proposed Development in conjunction with the effects of other cumulative schemes within the surrounding area.

Wind Microclimate

Introduction

- **287.** A wind microclimate assessment will be undertaken to assess the potential effects of the Proposed Development on the wind microclimate of the Site and surrounding areas. Wind-microclimate has been scoped into the EIA due to the potential for significant effects as a result of the massing proposed as part of plans for the Proposed Development. If relevant, the assessment will identify mitigation measures to be embedded within designs for the Proposed Development and/or applied during the operational stages.
- **288.** The wind microclimate assessment will be carried out by RWDI, a specialist wind engineering consultancy, and presented within a Wind Microclimate ES chapter.

Baseline Conditions

289. Baseline conditions will be quantified in terms of pedestrian activity, in relation to its 'usability' for a



range of pedestrian activities defined by the Lawson Comfort Criteria (typically sitting, standing, strolling, walking or uncomfortable as per the LDDC variant). This will be undertaken via wind tunnel testing of a scale model of the Proposed Development (in a boundary layer wind tunnel test facility), which will be constructed to reflect the existing built form at the Site and the surrounding area. Additionally, the occurrence of any 'strong winds', defined as winds exceeding a 15m/s threshold for more than 2.2 hours per annum (as per the LDDC variant), shall be identified and quantified.

- **290.** The wind tunnel test will allow the mean and peak wind speeds to be measured (for both the winter (worst case) and summer seasons) at locations across the existing site and at the entrances to and around other surrounding buildings, footpaths, roads, and areas of open space, within an appropriate proximity and for all wind directions.
- **291.** The baseline results from the wind tunnel will be combined with long-term meteorological climate data for the London area, corrected to the Site to understand the baseline conditions specific to the Site having regard to its location within London. Testing in the wind tunnel will be conducted in the absence of any hard or soft landscaping, in order to provide a conservative result, unless where substantial and unlikely to be altered in the mid to long-term (such as embankments to railways or rivers or forested areas for example).
- **292.** Consented schemes currently under construction would be included in the current baseline as to represent the long-term scenario of them being complete and operational, rather than the current temporary situations where the Site is inaccessible to the public and/or protected by site hoarding. These include:
 - **1** 17/2782 Parkwood House;
 - **4G** 17/0462 Wembley Masterplan Plot E01/E02 RMA;
 - 4H 17/0016 Wembley Masterplan Plot E03 (Canada Court) RMA;
 - **5** 17/3213 Wembley Park E05, Green Car Park First Way;
 - 7 16/1404 Wembley Parade (Amex House);
 - **10** 18/3381 10-11 Watkin Road;
 - **12** 17/4538 One Olympic Way;
 - 14 12/1293 Kelaty House; and
 - **15** 17/3797 Units 1-5 Inc, Cannon Trading Estate.
- **293.** Existing buildings to be demolished will be considered in terms of their current uses, as equally the conditions at the Site post-demolition, also a temporary situation, is not significant as a site would be expected to be inaccessible in this phase.
- **294.** Winds for the London area are predominantly from the south-west, with a secondary peak from the north-east during the spring. Winds are typically stronger in the winter season, and lighter throughout the summer. Wind roses for the London area are shown in **Figure 15** below per season, combined from data attained from London Heathrow and London City airports over a period of approximately 30 years, which is analysed through a statistical model, providing the frequency of occurrence and magnitude of winds from all directions from that period. Therefore, the wind roses inherently consider trends in the specific 30-year period.







Potential Sensitive Receptors

- **295.** The locations tested (measured locations) will include spaces that both existing, and end users (the receptors) will populate that are potentially sensitive to wind microclimate conditions, such as users of pedestrian footpaths or 'thoroughfares', possible entrance locations for new buildings, roads, and amenity areas (i.e. open space). This is both on and off-site to a reasonable proximity subject to the street patterns around the Site, and in relation to their safety and comfort levels.
- **296.** Figure 16 below shows the approximate area in which wind condition measurements will be taken during the assessment, noting that specific locations for measurements are yet to be established. These will however be based upon existing and potential uses of the Proposed Development, ensuring all accessible areas potentially affected by the Proposed Development in the immediate vicinity are captured by at least one measurement location.





Figure 17 Approximate extent of wind tunnel measurement locations relative to the Site

Potential Effects

- **297.** The introduction of the proposed massing on-site will have the potential to influence the wind conditions on, and immediately adjacent to, the Site and within the Site's surrounds. The potential wind microclimate effects associated with the Proposed Development are considered to be:
 - Undesirable wind speeds in accessible ground and elevated levels of the Site, surrounding buildings and nearby areas of public realm during the demolition and construction of the Proposed Development; and
 - Undesirable wind speeds at ground and accessible elevated levels of the Site, surrounding buildings and nearby areas of the public realm once the Proposed Development is completed and operational.

Scope of Assessment

Demolition and Construction

298. Generally, as demolition and construction works progress, the conditions on and around a redevelopment site would be expected to gradually transition between those of the baseline and the completed and operational scheme. As this will also apply to the demolition and construction of the Proposed Development, a qualitative approach will be taken to the assessment of the potential effects of the demolition of the existing buildings and construction of the Proposed Development on the wind microclimate. This will be based on professional judgement and the assumption that:



- Pedestrians will have limited or no access of the majority of the Site (due to site hoarding) and the immediate vicinity; and
- The demolition and construction activities on-site will be less sensitive to the local wind conditions than when the Proposed Development is completed and operational, which will include building entrances and outdoor open space, circulation space etc.).

Operational

- **299.** Given the size and geometry of the Proposed Development, in addition to the Site's location in relation to surrounding buildings and nearby areas of open space, it is important to avoid undesirable wind speeds being generated at ground and accessible elevated levels. Undesirable wind speeds could make some spaces within and around the Proposed Development uncomfortable or unsafe for pedestrian use.
- **300.** Subsequent to the wind tunnel testing of the baseline conditions, the following model scenarios will be tested within the wind tunnel (for both the winter (worst case) and summer seasons):
 - The Proposed Development (Completed and Operational) massing and the existing surrounding buildings / area;
 - The Proposed Development (Completed and Operational) massing, with the existing surrounding buildings and the massing of nearby cumulative schemes; and
 - The Proposed Development (Completed and Operational) massing and the existing surrounding buildings / area and including the proposed landscaping scheme.
- **301.** Scale models of the Proposed Development and nearby cumulative schemes will be manufactured and tested in a boundary layer wind tunnel test facility Likely at 1:300 scale, covering a minimum radius of 360m at this scale. Mean and peak wind speeds will be measured in sensitive receptor locations, for all wind directions. These results will be combined with long-term meteorological climate data for the London area and then benchmarked against the Lawson Comfort Criteria (LDDC variant both in terms of comfort and safety), to determine the suitability of different areas within and surrounding the Site.
- **302.** The suitability of the conditions both within the Site and surrounding the Site both in terms of comfort, and strong winds will be presented and discussed within the ES, and a supporting technical appendix.
- **303.** Conditions will notably be measured not only at ground level, but podium and rooftop terraces in addition to private amenity spaces such as external balconies.

Mitigation

- **304.** Should mitigation measures be required to ensure wind conditions within a particular area / space are suitable for their intended use, or mitigate against predicted strong winds, such mitigation will be developed in consultation with the Applicant and the Design Team.
- **305.** Where necessary due to the presence of any strong winds that represent a safety concern in particular, mitigation measures will be tested through additional rounds of wind tunnel studies. Following the addition of any required mitigation, the significance of any residual effects will be classified.

Cumulative Effects Assessment

- **306.** The cumulative assessment is undertaken to the same methodology as for the scheme in when the Proposed Development is completed and operational. A list of cumulative schemes to be considered is included within **Appendix A** of this scoping report.
- **307.** Cumulative schemes that have not yet started construction, within approximately a 360m radius of the centre of the Site will be included (assuming a 1:300 model), and would be expected to include the



following:

- 4 15/5550- Wembley Masterplan (Where plots are not yet subject to RMA's);
- 8 17/5097 Olympic Office Centre, 8 Fulton Road;
- 9 18/4767 Access Self Storage, HA9 First Way; and
- **16** 20/0587 1, 2, 3 & 9 Watkin Road.
- **308.** Schemes beyond the 360m radius are considered to be too far from the Site to result in any cumulative impacts and are therefore excluded from the assessment.
- **309.** Equally, various cumulative schemes related to landscaping/appearance and not to the significant removal or introduction of building massing on a site are specifically excluded from the wind assessment as they have no bearing on the results, which comprise:
 - 4A 17/0019 Central Section of Olympic Way;
 - **4D** 17/0459 Southern Park;
 - **4F** 17/3840 Northern Section of Olympic Way; and
 - **4L** 17/2867 Olympia Way (Zone B, Fulton Road Crossing).



TOPICS TO BE SCOPED OUT

Archaeology (Buried Heritage)

Introduction

310. An Archaeological Desk Based assessment has been undertaken by Oxford Archaeology. The report determined the potential effects on all below ground heritage receptors in accordance with the Chartered Institute for Archaeologists (CIfA) Standards and Guidance for Historic Environment Desk-based Assessments (2017) and Planning Policy Guidance (2019) – Historic Environment, published by the Ministry of Housing, Communities and Local Government. The desk-based assessment undertaken for this scoping report is attached to this scoping report as Appendix D.

Baseline Conditions

- **311.** No prehistoric, Roman, or early-medieval finds or features have been recorded within the Site or its environs. The area appears to have been in agricultural use from the end of the medieval period until the end of the 18th-century when the Site formed the eastern edge of a newly landscaped park. Additions were made to the park at the end of the 19th-century when it was opened to the public as a pleasure ground, although no major features are recorded within the Site. Significant development first took place in the early 20th-century when Wembley Park hosted the major British Empire Exhibition. The Proposed Development site contained a replica underground coal mine, located in the southern half of the Site, and a separate mining museum located to the north. The above ground buildings were demolished following the closure of the Exhibition in 1924 and major programmes of redevelopment occurred in the 1960's. 1970's culminating with the construction of current Euro Car Parts warehouse in the 1980s.
- **312.** The area does not appear to have been attractive to early settlement, and there is low potential for the presence of archaeological finds or features predating the later medieval period. There is a low potential for the presence of minor agricultural remains of later medieval and post-medieval date, and a low potential for the existence of minor features relating to the use of the Site as a park in the 19th-century. The Site has been heavily developed in the 20th-century, and it is likely that significant truncation of any archaeological remains has taken place. Numerous archaeological investigations within Wembley complex have recorded 20th-century made-ground lying directly above the natural London Clay, demonstrating a significant degree of truncation in the area. The Site itself appears to have been significantly developed. The southern part of the Site appears to have been cut into the natural slope of the hill, while the northern part of the Site appears to have been artificially raised. These works in addition to the 20th-century development and redevelopment of the Site would have significantly impacted upon any earlier archaeological remains.
- **313.** The Site has the potential to contain buried remains of the 1920's show-mine complex although it is likely that the remains will have been significantly damaged by subsequent activity on the Site. All above ground evidence for the complex and the associated museum have been removed and it is recorded that the main access shaft, which was uncovered during redevelopment of the Site in the 1980's, was infilled at this time. It is unclear to what extent this may have included damage to or destruction of the shaft walls. There would also be the possibility that some elements of the tunnel complex (originally buried at a depth of 13.7mbgl) may survive.

Potential Effects

314. The Proposed Development will involve the demolition of the existing buildings on the Site and the construction of a residential-led, mixed-use scheme. The Proposed Development will reach a maximum height of approximately ground + 24 storeys + plant and is a mixed-use development containing residential, light industrial and retail units as well as servicing facilities, plant space and associated



landscaping.

- **315.** A single storey basement is proposed to the south west of the Site which will contain vehicle and bike parking as well as bin stores and ancillary plant. Light industrial, leisure and retail uses are proposed at ground level with amenity space for residents proposed at podium level above the ground floor.
- **316.** The Proposed Development will be set back from the Wealdstone Brook and no development will take place between the brook edge and the northernmost buildings on site. A landscaped buffer will be provided between the Wealdstone Brook which is anticipated to be accessible to residents and the public. The landscaped buffer allows for pedestrian and cyclists connectively between Fulton Road to the west and Fourth Way to the east.
- **317.** The desk-based assessment has demonstrated that the Site has a low archaeological potential for remains predating the late medieval period and modern development and redevelopment is likely to have significantly truncated, damaged, or removed, any pre-20th century remains that might have been present.
- **318.** The northern part of the Site has the potential to contain archaeological remains, albeit low, although these are anticipated to be buried below a significant depth of made ground. This area is to form part of a green buffer between the development and the Wealdstone Brook. Groundworks in this area will be likely to involve clearance (stripping) of overburden and some landscaping which is unlikely to extend though made ground and into the archaeological horizon.
- **319.** The southern half of the Site has the potential to contain buried elements of the 1920's exhibition mine complex either in the form of the remains of the main mine shaft (although this is recorded as having been infilled in the 1980's) or in the form of more deeply buried elements of the mine complex such as tunnels or potentially rooms or void spaces. Analysis of the potential survival of the more deeply buried remains of the complex carried out as part of the 2020 ES suggests that these elements were originally buried at a depth of up to 13.7mbgl.
- **320.** The Proposed Development, which includes the construction of a basement in the southern area of the Site within the general location of the model coal mine, has the potential to disturb less deeply buried elements of the mine complex (such as the main access and supply shaft, should elements of this survive) and, dependent upon the construction method employed, the development may also have the potential to partially impact the more deeply buried mine tunnels and associated features through the use of piles. It is suggested that any impact upon remains associated with the mine complex could be satisfactorily mitigated through the implementation of a programme of archaeological observation and recording. Provisional details of such a programme are contained within the 2020 desk-based assessment which will be appended to this Scoping Report (see **Appendix D**) and updated as required to be appended to the ES. It is likely that these works would remove the potential for any significant residual effects upon the archaeological resource and on the basis of this the topic can be scoped out of the ES assessment.

Aviation

Introduction

321. The need for an aviation assessment has been considered by Trium Environmental Consulting LLP.

Baseline Conditions

322. Heathrow Airport is located approximately 16km southwest of the Site and London City Airport is located approximately 23km southeast of the Site.



Potential Effects

- **323.** Both London Heathrow Airport and London City Airport are designated as 'officially safeguarded aerodromes' in accordance with the Office of the Deputy Prime Minister (ODPM) Circular 1/2003: Safeguarding Aerodromes⁴⁰. Precise and integrated airspace management procedures are necessary to maintain safety and efficiency. This requires the operations of London City Airport traffic to be at altitudes below London Heathrow Airport traffic. The international aviation criteria require a 1000 feet (ft) (or 304.8m) obstacle clearance in the central London area⁴¹.
- **324.** The Proposed Development will provide a range of buildings with a maximum building height of ground floor plus 24 storeys (plus plant). Given that the height of the Proposed Development will be significantly below the 1000 ft / 304.8m threshold and its sufficient distance from both Heathrow and London City Airport, it is not considered that there is the potential for significant effects.

Internal Daylight, Sunlight and Overshadowing

325. The potential for daylight and sunlight availability within the newly proposed residential units and within the newly created public realm is dependent on the design of the Proposed Development, and is a design consideration, rather than an EIA issue. Therefore, the assessment of daylight and sunlight availability (including overshadowing) within the Proposed Development itself will not form part of the ES but will be presented as a separate standalone report submitted in support of the planning application.

Ecology and Biodiversity

Introduction

326. Ecology by Design has conducted surveys of the Proposed Development site in January 2018, October 2019 and March 2021. An Ecological Impact Assessment (EcIA, non-Environmental Impact Assessment) has been prepared of the Proposed Development site. The EcIA is included in Appendix E. The most recent site survey was undertaken on 22nd March 2021, in accordance with guidance in the Joint Nature Conservation Committee (JNCC) (2010) Handbook for Phase 1 Habitat Survey and the Chartered Institute of Ecological and Environmental Management (CIEEM) (2013) Guidelines for Preliminary Ecological Appraisal, in accordance with BS42020:2013: Biodiversity.

Baseline Conditions

- **327.** A review of readily available ecological information and other relevant environmental databases (included Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) website) was undertaken for the Site and its vicinity. In addition, a biological records search from GiGL (Greenspace Information for Greater London) was reviewed to identify the location and citations of local non-statutory designated sites and presence of records for notable/protected species.
- **328.** There are no statutory designations of national or international importance within the boundary of the Site. However, there is one Site of Special Scientific Interest (SSSI) within 2km of the Site. Nine Sites of Importance for Nature Conservation (SINCs) were identified within 2km of the Site. These non-statutory designated sites are recognised as important wildlife sites, the conservation of which forms a material consideration in the planning process. Of particular relevance to this assessment is the SINC that borders the Site, the Wealdstone Brook from Kenton to the Jubilee Line SINC.

Sensitive Receptors

329. Habitat surveys completed at the Site were undertaken during optimal conditions by suitably qualified

⁴¹ Civil Aviation Authority (CAA), (2006); CAP 738 – Safeguarding of Aerodromes Document



⁴⁰ ODPM, (2002); Circular 1.2003: Safeguarding Aerodromes, Technical Sites and Military Explosives Storage Areas: The Town and Country Planning (Safeguarding Aerodromes, Technical Sites and Military Explosives Storage Areas) Direction 2002

ecologists.

- **330.** Overall, the Site is considered to be of low ecological value, with low value habitats immediately bordering the Site. There has been little change in the ecological conditions throughout the survey period. The Site supports a selection of common habitat types and there are records of a variety of notable and rare species in the local area. No ponds were identified within 500m of the Site.
- **331.** The EcIA concludes that the Site has:
 - Negligible potential to provide habitat for great crested newt (*Triturus cristatus*), badger (*Meles meles*), dormouse (*Muscardinus avellanarius*), water vole (*Arvicola amphibius*), reptile and otter (*Lutra lutra*);
 - Low potential to provide habitat for foraging and commuting bats and notable invertebrates;
 - Moderate potential for nesting birds; and
 - Japanese knotweed (Fallopia japonica), an invasive species listed in Schedule 9 of the Wildlife and Countryside Act 1981, was identified in the north of the Site.

Potential Impacts and Embedded Mitigation Measures

- **332.** No further surveys are required with regards to any other protected species, as any potential residual impacts could be avoided and compensated for through appropriate mitigation actions. These have been described below.
- **333.** Whilst roosting bats will not be affected, recommendations have been made to mitigate potential adverse effects upon foraging and commuting bats, including: Foraging habitat should be retained, and a wildlife friendly lighting scheme is be incorporated to prevent any additional light pollution as a result of the Proposed Development.
- **334.** The use of low level, directional lighting is to be installed for artificial lighting around the Site, with only the minimum light levels required to meet health and safety standards used within the landscaped area adjacent to the Wealdstone Brook⁴². The majority of the Site is currently hardstanding with industrial buildings and security lighting which offers minimal foraging opportunities for bats. The lighting scheme for the Proposed Development is likely to include the use of up lights around trees which could disturb bats which may otherwise forage and commute around the new tree planting however, some less light sensitive bat species may still forage around the new tree planting proposed across the Site.
- **335.** Consideration is given to the corridor along the Brook to ensure that a dark corridor is maintained to provide suitable habitat for foraging and commuting bats. The landscaping plan will include planting along the bank of the Brook which will help screen the Brook from light spill.
- **336.** Any lighting associated with the Proposed Development should, where possible, be designed following appropriate guidance. This will include directional lighting, appropriate luminescence and protection from light spill. No uncontrolled lighting should occur, and light spill should be minimised; this would enable the continued use of the Site as a commuting and foraging resource.
- **337.** Where retention of vegetation is not possible as a result of the Proposed Development compensatory green corridors will be provided; there should be no net loss in vegetation cover or impacts to the ecological functionality of the green corridors which surround the Site boundaries. The Proposed Development will be set back from the Wealdstone Brook with a gap retained between the edge of the brook's concrete channel and the overall building footprints. This will avoid potentially adverse effects to any ecological receptors including any potential light pollution impacts for species using the

⁴² Bat Conservation Trust & Institution of Lighting Professionals (2018). Guidance Note 8: Bats and artificial lighting in the UK.



Wealdstone Brook.

- **338.** Whilst no further surveys are required with regards to any protected species, standard mitigation measures identified will be included during demolition/construction and incorporated within the Mitigation and Monitoring chapter of the Environmental Statement. The Proposed Development will be completed in accordance with an approved Construction Environmental Management Plan (CEMP) which will be conditioned to the planning consent if granted. The following standard mitigation measures will be adhered to as part of the CEMP:
 - Incorporation of a bat sensitive lighting scheme and construction works will be restricted to daylight hours to prevent disturbance to bats;
 - No sediment run-off or pollution of the Brook is to take place through the implementation of bunds, sandbags or stock block concrete barriers along the Brook;
 - Suppression of dust during the construction works including dampening techniques and physical barriers such as hoardings.
 - Erection of physical barriers such as hoardings, keeping the use of heavy plant to the minimum required to complete the works and switching off machinery when not in use to keep the impact of noise to a minimum during construction activities;
 - To avoid killing or injuring reptiles, any vegetation clearance will be phased and directional towards the west to allow reptiles to disperse unharmed into retained suitable habitat;
 - Vegetation will be cut to ground level outside the nesting period (between September and February inclusive). If vegetation is to be removed during the main bird nesting season (March to August inclusive) it will be immediately preceded by a check for any active nests by a suitably qualified ecologist. Any active nests will be avoided with a suitable buffer (to be defined by an ecologist) until the young have fledged or the nest is identified as being no longer active by an ecologist; and
 - Appropriate treatment and disposal of invasive species. A specialist will be consulted in relation to removal of Japanese knotweed to implement an appropriate management and removal programme to prevent its spread into the wild.
- **339.** A series of enhancement measures have been recommended within the EcIA that if implemented, would enhance the Site's ecological value, which is likely to have beneficial effects, although these are not considered to be significant. These ecological enhancements (and their associated biodiversity benefits) will be described in **ES Volume 1, Chapter 3: The Proposed Development** chapter of the ES, but no technical assessment will be provided. The EcIA will be appended to the ES, for reference purposes.
- **340.** Based on the results of the EcIA, it is considered that the Proposed Development does not have the potential to generate any significant ecological effects. As such, it is proposed to scope an Ecology and Biodiversity from the EIA.

Geoenvironmental (Ground Conditions, Groundwater and Land Take and Soils)

Introduction

341. A Geoenvironmental Interpretative Report was undertaken by CGL in December 2019 and updated in May 2020 (Appendix F). This report includes the findings from a Phase I desk study and Phase II geoenvironmental site investigation which assessed the ground conditions and geo-environmental setting of site including the potential for contamination due to historical and existing land usage.



342. Further works will be undertaken by Terrell Associates to compliment the work undertaken by CGL in 2019 as part of required intrusive ground investigations across the site.

Baseline Conditions

- **343.** During the Site walkover, lubricant and oil storage were also observed along the south-eastern margin of the Site, with barrels placed above wooden pallets. Visual evidence of spillages was not observed at the time of investigation.
- **344.** Historical maps obtained for the Site indicate that, in the late 1800s, the Site was occupied by undeveloped land associated with the Wembley Park. By the early 1920s, the Site and surrounding area had been developed with residential, commercial and industrial expansion, with the Site shown to be located within the Wembley Park British Empire Exhibition Centre. Between the early 1920s and 1970s, the Site was occupied with railway land and the plans show the presence of five railway tracks crossing the Site and a railway viaduct in the north-west. By 1971, the Site had been developed as an engine depot, with site levels indicated to have been raised with the realignment of the Wealdstone Brook. By the 1990s, the depot structures had been demolished and the Site levels indicated to be raised further, to accommodate a new warehouse structure in its current-day configuration.
- **345.** The British Geological Survey (BGS) 1:50,000 scale sheet No. 26 (North London) indicates that the superficial deposits are absent from the Site. However, Alluvium is shown along the northern boundary of the Site, associated with the Wealdstone Brook. The BGS describes Alluvium as typically unconsolidated sandy silty clays with occasional gravel. The Site is shown to be underlain by solid geologies of the London Clay Formation and in turn the Lambeth Group, Thanet Formation and the Upper Chalk at depth. The London Clay Formation is described by the BGS as blue-grey or grey-brown, silty clay, clayey silt and sometimes silt, with some layers of sandy clay. The underlying Lambeth Group is described as laterally variable sequences of clay, with some silt, sand and gravels as well as minor limestones and lignites.
- **346.** The Environment Agency (EA) has produced an aquifer designation system consistent with the requirements of the Water Framework Directive. The designations have been set for superficial and bedrock geology and are based on the importance of aquifers for potable water supply, and their role in supporting surface water bodies and wetland ecosystems. The Site is not located within a Groundwater Source Protection Zone and there are no groundwater or surface water abstraction licences within 2km of the Site. The nearest surface watercourse is the Wealdstone Brook, an "Inland River", which is situated along the northern boundary of the Site aligned roughly west to east.
- **347.** The Environmental Disclosure Report indicates that the north-eastern margin of the Site is situated within an EA indicative Flood Zone 2. The EA defines a Flood Zone 2 as at risk have a 1 in 100 to 1 in 1,000 risk of flooding by rivers and a 1 in 200 to 1 in 1,000 risk of flooding by the sea. The report indicates that the Site may be situated within a BGS designated Groundwater Flooding Susceptibility Area, associated with Superficial Deposits Flooding.
- **348.** Desk study searches undertaken indicate that there are no recorded historical or active landfills within 250m of the Site. A number of potentially contaminative historically land uses are recorded both on-site and within the vicinity, associated with commercial/industrial buildings, railway sidings, engineering works and factories, associated with the Wembley Park industrial site. There are no sites classified as being contaminated under Part 2A of the Environmental Protection Act (1990) or sites associated with Part A (1) and IPPC Authorised Activities, within 250m of the Site boundaries. A single pollution incident is recorded on-site and a further four are recorded within 10m of the Site boundary. The records are associated with contaminated water and other pollutants. These were classified as Category 2 (significant) impact to water, Category 4 (no impact) to land and air.


- **349.** The Environmental Disclosure Report does not identify any ground workings within 125m of the Site. A cutting associated with the mainline railway line is shown 137m to the north, with a ground working associated with a pond shown 150m to the south-west.
- **350.** With reference to the Wembley Park British Empire Exhibition of 1924, it is thought that the southern portion of the Site was home to a working model 'coal mine shaft'. Due to the presence of existing buildings onsite, the surveys were unable to confirm the presence of the mineshaft although it is thought that the shaft has been infilled. During reporting for the previous planning application on the Site (planning reference number: 20/2033), a Geotechnical Risk Assessment was produced in relation to the underground mine shaft which has been appended to the Scoping Report (**Appendix F**).
- **351.** A Preliminary UXO Risk assessment was undertaken which stated that "during WWII, the Site was situated within the Municipal Borough (M.B.) of Wembley. Home Office statistics suggest that this area sustained an overall moderate high density of bombing. Available sets of consolidated and weekly London bomb census mapping held in-house suggests that bombing did affect the locality of the Site, although no high explosive (HE) bombs are recorded directly within the Site boundary. It should be noted that a bomb disposal task, concerning an unexploded German 50kg HE bomb from WWII, was discovered in the general surrounding of the Site in 2015 (approximately 600m to the west). As the wartime site footprint appeared to mostly consist of scrubland and a stream, it has not been possible to provide a formal assessment of bomb damage at this stage based on information available. Therefore, it has not been possible to confidently assess the wartime ground conditions on site, as well as the level of access". A Detailed UXO Risk Assessment will therefore require undertaking prior to commencement of demolition and construction works on site.

Potential Effects

- **352.** The approach for assessing the potential for contamination at the Site will be undertaken in accordance with Part IIA of the Environmental Protection Act (1990) and Contaminated Land Report 11: Model Procedures for the Management of Land Contamination
- **353.** Potential contaminants that could be present across the Site include metals, hydrocarbons, polyaromatic hydrocarbons and asbestos associated with the historical and existing site usage. Potential liquid sources of hydrocarbons from fuel, lubricant and oil storage may also pose a risk. In addition, Made Ground associated with site levelling may be a source of ground gas where an appreciable content of organic matter and/or putrescible materials may be present. In addition to these sources, degradation of hydrocarbons/organic chemicals in the ground can produce organic vapours and ground gases. The natural London Clay Formation may also be a source of sulphates that may pose a risk to buried concrete.
- **354.** The Phase II site investigation was undertaken in accordance with latest current UK guidance BS5930 and BS10175, and comprised five windowless sample boreholes completed to depths of between 4mbgl and 5mbgl, with three boreholes installed with combined groundwater/ground gas monitoring standpipes (response zone within Made Ground and London Clay Formation.
- **355.** The ground conditions encountered during the intrusive investigation were in accordance with published geological maps comprising Made Ground underlain by the London Clay Formation. Visual or olfactory indicators of potential contamination were observed across the Site in the form of ashy/coal inclusions within the Made Ground deposits. Within a single location, visual and olfactory evidence of hydrocarbons were recorded within the Made Ground between 1.2mbgl and 2.1mbgl. The Made Ground within this horizon included black, ashy materials with fragments of coal, glass, metal, nails with a strong hydrocarbon odour and oily sheen. Visual/olfactory indicators of hydrocarbon contamination was not recorded in the underlying natural strata, nor within any other locations investigated.



- **356.** A total of eight soil samples obtained at varying depths were analysed; seven from the Made Ground and one sample from the underlying natural deposits. When compared directly to the GAC, all determinants were recorded below applicable levels for the Proposed Development end-use, with the exception of a single sample of Made Ground within borehole that recorded elevated concentrations of lead. A total of four samples of Made Ground were submitted for an asbestos screen. Loose fibres of chrysotile asbestos were recorded in a single sample of Made Ground at a depth of 1.2mbgl (quantification recorded <0.001% asbestos by weight). The remaining samples did not record the presence of asbestos.
- **357.** A single ground gas monitoring visit was undertaken. Based on concentrations and flow rates recorded during the ground gas monitoring visits completed, the ground gas regime at the Site is assessed as Characteristic Situation 1 or 'very low risk'. However, based on current CIRIA guidance, the maximum concentration of methane was recorded above 1% w/w in a single location. Therefore, it is recommended that the gas regime locally is increased to Characteristic Situation 2.
- **358.** Water sampling undertaken within boreholes indicated concentrations of metals and TPH to be above Drinking Water Values. All recorded concentrations were below relevant Environmental Quality Standards.
- **359.** Overall, risks to human health relating to soil contamination and landfill gases are considered to be Low to Medium. Risks to construction workers are considered to be Medium based on the presence of asbestos fibres. Risks to controlled waters are considered to be Low.
- 360. Based on the anticipated development, piled foundations are considered to be necessary. On the basis of the above testing in accordance with BRE SD1 a Design Sulfate Class of DS3 with an ACEC of AC 3 would apply for buried concrete within the Made Ground, with a Design Sulfate Class of DC4 ACEC of AC-3s for the London Clay Formation on site.

Proposed Development and Mitigation Measures

- **361.** Based on the findings of the investigation and the conceptual site model, remedial works are considered to be required as part of the Proposed Development. Further UXO assessment will be required, and additional UXO mitigation may also be necessary.
- **362.** Where areas of landscaping are proposed a capping layer will be required to prevent contact with underlying residual organic and inorganic contaminates and localised asbestos containing materials.
- **363.** Based on current CIRIA guidance, ground gas protection measures compatible with Characteristic Situation 2 should be provided in accordance with BS8485. Based on the preliminary monitoring visit undertaken, additional ground gas monitoring is recommended following demolition of existing structures. A refined ground gas risk assessment should be undertaken, following supplementary investigation and additional assessment.
- **364.** It should be noted that the investigation was constrained by the presence of existing structures. As such, a potential for contaminative sources remains viable within areas of existing structures. As such, there may be a risk to controlled waters from the piling required for the scheme from vertical migration of groundwater from the Made Ground into the underlying Principal Aquifers of the Thanet Formation and the Upper Chalk. This will be address through the implementation of further post-demolition investigation. Prior to any piling activities a Piling Risk Assessment would be required in order to assess the environmental risk and any required mitigation measures.
- **365.** On the basis of the findings of the desk study and Phase II investigation, further investigation/assessment would be required to be undertaken to evaluate the potential pollutant linkages identified and to identify whether remediation measures would be required for the Proposed Development, in accordance with CLR 11 and BS 10175:2011+A2:2017. For further information, view



Section 7 of Appendix F - Geo interpretive Report. It is assumed that a number of these recommendations will be secured via appropriately worded planning conditions.

366. Following completion of the supplementary investigation, a revised risk assessment should be produced if required. A Remediation Method Statement would be produced to detail the proposed remediation objectives to mitigate identified risks, in accordance with CLR 11. The Remediation Method Statement would be submitted to the LBB for approval.

Conclusions

367. Based on the review of the baseline conditions, the outlined mitigation measures including proposed further site investigation, together with the absence of any significant potential impacts identified relating to ground stability hazards or land contamination it is considered that further assessment with respect to ground conditions can be scoped-out of the Environmental Statement.

Project Vulnerability

- **368.** With reference to Regulation 4(4) and Schedule 4 of the EIA Regulations, this EIA Scoping Report also considers whether there are likely to be any significant effects on the environment or the Proposed Development arising from the vulnerability of the Proposed Development to major accidents or disasters that are relevant to the development.
- **369.** Paragraph 8 of Schedule 4 of the EIA Regulations (as amended) provides a description of the information to be provided in the ES in relation to these events. In line with this description, this information is of key importance for the assessment of major industrial and/or infrastructure schemes which could pose significant risks to society and the environment in the event of a major accident or a natural disaster which would impede its normal function (e.g. nuclear / petrochemical installations, major transport infrastructure such as tunnels, bridges or airports, etc.). While the Proposed Development does not fall into these scheme categories, the project's vulnerability to such events has nevertheless been taken into consideration in order to ascertain the potential risks to future site users and surrounding human and environmental receptors.
- **370.** New guidance has recently been made available (IEMA Major Accidents and Disasters in EIA: A Primer⁴³) and which has clarified the definitions of major accidents and disasters to the following:
 - Disaster "may be a natural hazard (e.g., earthquake) or a man-made/external hazard (e.g., act of terrorism) with the potential to cause an event or situation that meets the definition of a major accident"; and
 - Major accident as "events that threaten immediate or delayed serious environmental effects to human health, welfare and/or the environment and require the use of resources beyond those of the client or its appointed representatives to manage. Whilst malicious intent is not accidental, the outcome (e.g., train derailment) may be the same and therefore many mitigation measures will apply to both deliberate and accidental events".
- **371.** As noted in the guidance, a development should first be screened to determine its potential to result in likely significant effects from major accidents and natural disasters. The following questions are posed to help determine a view on this:
 - "Is the development a source of hazard itself that could result in a major accident and/or disaster occurring?

⁴³ IEMA, 2020, Major Accidents and Disasters in EIA: A Primer.



- Does the development interact with any sources of external hazards that may make it vulnerable to a major accident and/or disaster?
- If an external major accident and/or disaster occurred, would the existence of the development increase the risk of a significant effect to an environmental receptor occurring?"
- **372.** In line with the above questions, given its intended scale and uses, it is considered the Proposed Development would be unlikely to result in significant effects from most major accidents and natural disasters. The Proposed Development is not a source of hazard itself nor does it interact with any sources of external hazards that make it vulnerable to a major accident or disaster.
- **373.** The Proposed Development is allocated for primarily residential uses, to be supported by a number of additional uses. As such, considering the above definitions and considerations an assessment of the Proposed Development's vulnerability to major accidents and natural disasters has been screened out of further assessment in the EIA.
- 374. The guidance further states that:

"Not all potential events will fall into the scope of a major accidents and/or disasters assessment. The level of risk therefore needs to be defined to inform what types of events are within the scope of the major accidents and/or disasters assessment".

- **375.** The London Resilience Partnership (LRP) has developed the London Risk Register⁴⁴, which lists a range of natural hazards and man-made accidents/incidents and assesses the risks they pose to the London area based on their potential impact and likelihood. As well as assessing the risk of these events, the London Risk Register also provides an outline of the control measures already in place to avoid, manage and respond to them. These measures range from specific laws and regulations intended to avoid or manage the potential causes of major accidents and natural disasters, to government agency programmes intended to prevent, inspect and monitor these causes, as well as a variety of response plans, forecasting and early warning systems. The effective implementation of these plans, programmes, legislative tools and guidance is considered to reduce the risk of these events to a level which is as low as reasonably possible.
- **376.** Due to the nature and surroundings of the Proposed Development, many of the events listed in the Register (e.g. wildfires, animal diseases, etc.) are not considered relevant or likely to pose a risk to future site users or surrounding receptors. The remaining events in the Register will be managed, or altogether avoided, through the aforementioned established regulatory framework and the control measures implemented at the local and/or national government level, with the support of specialist government agencies.
- 377. In addition to the above mentioned measures, the planning application process also presents an opportunity for local authorities and government agencies/bodies to comment on the proposals and address any vulnerabilities (e.g. police force commentary on security matters, including Secure by Design accreditation). In some cases, this risk management process will be further supported with project-specific information and assessments which are included as part of the planning application. Most notably, this applies to the Flood Risk Assessment and Drainage Strategy (ES Volume 3, Appendix Water Resources), which address the flood and drainage related risks, as listed in the London Risk Register.
- **378.** In line with the above, within the context of the events assessed in the London Risk Register, it is considered that the vulnerability of the Proposed Development to major accidents and natural disasters will be adequately managed throughout the lifetime of the project. As such, it is considered that the

⁴⁴ London Resilience Partnership, February 2017. London Risk Register. Available: https://www.london.gov.uk/sites/default/files/london risk register 6.0.pdf



vulnerability of the Proposed Development to such events, is in itself, unlikely to result in any further significant effects on introduced site users and surrounding environmental and human receptors.

379. The EIA for the Proposed Development will therefore not specifically consider the issue of major accidents and natural disasters any further.

TV and Radio Interference

Introduction

- **380.** Interference to certain telecommunications systems (e.g. television (TV), mobile phone and radio) can arise from buildings physically blocking and absorbing associated signals. Therefore, a loss or degradation of the reception of such systems can result from the introduction of new buildings and is often referred to as 'electronic interference', with the affected area referred to as the 'shadow area'.
- **381.** For assessment purposes, domestic dwellings where TV is watched or radio is listened to as an amenity, are identified as sensitive receptors. Places where the provision of TV or radio form part of a commercial premises (e.g. hotels, offices and shops), are not identified as sensitive receptors⁴⁵.
- **382.** This TV and Radio Interference section of the EIA Scoping Report has been prepared by Trium Environmental Consulting LLP. It has considered the effect of the Proposed Development on radio signals received by domestic radios, mobile phone reception, and terrestrial and satellite TV reception.

Radio Signals

383. Due to radio signals being at lower frequencies, they can 'bend' to a greater extent around buildings (or other obstructions) when compared to TV signals. Radios are also able to make constructive use of reflected signals. As such, radio signals are able to operate successfully in dense urban settings (i.e. containing a large density of tall and large buildings) and therefore radio reception (both analogue and digital) is not considered to be at risk of degradation as a result of the Proposed Development. No likely significant effects to radio reception (both analogue and digital) are therefore anticipated as a result of the Proposed Development.

Mobile Phone Reception

384. A review of Ofcom's mobile availability checker⁴⁶ has identified that both 3G and 4G mobile services for four network providers (EE, O2, Vodaphone and Three) are available within and in close proximity to the Site. A search of the Mast Data database⁴⁷ identified no mobile masts within the Site boundary that will require relocation.

Cable TV Reception

385. Cable TV (CATV) services are delivered via underground coaxial or fibre-optic cables to residential dwellings. As CATV services are not transmitted through the air, there is limited potential for interference to CATV, and therefore CATV is not considered to be at risk of degradation as a result of the Proposed Development. No likely significant effects to CATV services are therefore anticipated as a result of the Proposed Development.

Terrestrial TV Reception

386. Terrestrial (land based) TV signals are transmitted in digital format (Digital Terrestrial TV (DTTV) i.e. freeview). The Site receives DTTV signals from the Crystal Palace transmitter mast, located approximately 20.4km to the southeast of the Site; any resultant shadow areas resulting from the

 ⁴⁶ Ofcom. Mobile and Broadband Checker. Accessed online 02.02.2020 [URL: https://checker.ofcom.org.uk/mobile-coverage]
⁴⁷ Mast Data, (2019). Searching for Mobile Phone Telecommunication Mast and Basestations Locations. Accessed online 18.11.2019 [URL: https://www.mastdata.com]



⁴⁵ This differentiation has been consistently used by the relevant United Kingdom (UK) government agencies (currently Office of Communications (OFCOM)) since the inception of TV services in the UK.

Proposed Development will therefore be located to the northwest of the Site.

- **387.** With regards to determining the potential effects of the Proposed Development on DTTV reception received by residential dwellings, and transmitted by the Crystal Palace transmitter mast, design information relating to the Proposed Development has been reviewed. It has been identified that the Proposed Development will comprise five buildings, with the tallest element up to a maximum of approximately ground floor plus 24 storeys (122 metres AOD) in height.
- **388.** The DTTV shadow generated as a result of the Proposed Development, is anticipated to fall to the northwest of the Site over large areas of light industrial land on Fulton Road, and land associated with Network Rail. At its longest point, the DTTV shadow will fall for a maximum of 2.9km northwest of the Site, falling over a small number of residential dwellings located in the proximity of Preston Road Underground Station.
- **389.** The effects of the Proposed Development's DTTV shadow are reduced due to the heights of nearby multi-storey schemes including: 10-11 Watkin Road, Amex House and Parkwood House, all of which are located approximately 250m northwest of the Proposed Development. The Proposed Development's DTTV shadow falls over these buildings at which point, there is a pre-existing baseline DTTV shadow cast. This therefore partially blocks the Proposed Development's DTTV shadow.
- **390.** There is, therefore, the potential for a loss or degradation to DTTV reception as a result of the Proposed Development for those residential dwellings currently (at the time of writing) receiving TV reception via DTTV.
- **391.** It should be noted that a DTTV shadow cast by a building/obstruction diminishes with distance as a result of 'knife-edge diffraction'. This diffraction mechanism is a process whereby signals appear to bend (or 'diffract') behind a structure and eventually meet, like that of a knife-edge as opposed to a straight block. The most noticeably adverse effects will therefore be experienced by those residential dwellings located in closest proximity to the Site, with the magnitude of the impact reducing with distance away from the Site.
- **392.** For potentially affected residential dwellings located within the DTTV shadow area, standard measures are available to mitigate the likely adverse effect, these include: upgrading the existing DTTV aerials by increasing their height and gain; the provision of a non-subscription satellite service which is available from the BBC and ITV ('Freesat') or Sky for a one-off cost; or linking affected residential dwellings up to the existing available CATV network at a one-off cost. These standard measures are straight forward to implement and would remove any adverse effects to DTTV reception
- **393.** It is therefore considered that whilst there is potential for a loss or degradation to DTTV reception of nearby residential receptors as a result of the Proposed Development, no likely significant effects to DTTV reception are anticipated as a result of the availability of mitigation options to remove any adverse effects.

Satellite TV Reception

- **394.** Satellite TV services to the UK are provided by geo-stationary satellites, which are primarily located within the Astra 28.2oE satellite cluster. Due to the geostationary positioning of the satellites in relation to London, satellite TV shadow areas will fall to the northwest of the Site.
- **395.** The anticipated satellite TV shadow generated as a result of the Proposed Development will fall to the northwest of the Site, over the light industrial land of Fulton Road and Watkin Road, for a maximum of approximately 135m from the Site boundary. The satellite TV shadow will not fall over any residential dwellings. Consequently, there is no potential for a loss or degradation to satellite TV reception received by residential dwellings as a result of the Proposed Development.



Conclusion

396. Based on the information available, it can be concluded that there is the potential for a loss or degradation to DTTV reception received by surrounding residential receptors, as a result of the Proposed Development. However, given the availability of mitigation options available and the negligible impact of the Proposed Development on satellite TV services for surrounding residential receptors, no further consideration of electronic interference effects will be presented within the ES.

Waste

Introduction

397. The need for an assessment of waste has been considered by Trium Environmental Consulting LLP.

Potential Effects

- **398.** The predominant waste and recycling effects on sensitive receptors, arising from the demolition/construction and operation of new development, result from:
 - The composition of waste (i.e. whether the waste generated is inert, or whether it comprises waste potentially hazardous to human health, requiring specialist management e.g. asbestos containing materials (ACMs), clinical waste, hazardous waste) and the potentially adverse effects on construction workers and future on-site users (sensitive receptors); and
 - The quantity of waste generated and the impacts of this waste on the local waste management infrastructure (receptor sensitive to this impact), when considering the existing capacity of the local infrastructure, and current and future apportionment targets.
- **399.** Mitigation measures to avoid, remedy or mitigate adverse effects in terms of waste and recycling during the demolition / construction can include:
 - Provision of a CEMP to include waste reduction and management objectives;
 - The appropriate management of any potential contamination identified on-site; and
 - The minimising of stockpiling of construction materials.
- 400. The specific mitigation measures to be implemented throughout the demolition / construction works will be outlined within the introductory chapters of the ES and reported upon within ES Volume 1, Chapter 13: Mitigation and Monitoring Schedule. Through the implementation of mitigation measures, amount of waste generated will be minimised. Providing measures in the CEMP are enforced and adhered to, significant adverse effects on sensitive receptors, pertaining to the quantity and composition of waste during the demolition and construction phase, are considered unlikely.
- **401.** A Waste Management Strategy should be secured to outline associated waste management measures. The Proposed Development will be designed to accommodate the required waste storage. In particular, the strategy will provide details on how each waste stream generated from each use class will be managed, and details on how waste will be reduced, minimised and recycled, where possible (in line with the Waste Hierarchy). Measures relating to the Proposed Development once complete and operational, including a summary of the waste strategy, will be presented in the introductory chapters of the ES.
- **402.** Any impacts associated with the transportation of waste (particularly in construction) and dust will be dealt with where applicable within the ES.

Conclusion

403. With the mitigation measures identified above in place, it is considered that the waste effects would not be significant. As such, no technical waste assessment is proposed to be undertaken (i.e. an



assessment of waste and recycling is scoped out of the EIA), but as stipulated above, will be referenced as appropriate within the ES, and where appropriate, appended to the ES. It is anticipated that the planning application will be accompanied by a Delivery and Servicing Plan.

Water Resources, Drainage and Flood Risk

Introduction

404. Based on the Environment Agency's "Flood Map for Planning (Rivers and Sea)", the majority of the Site is located within Flood Zone 1 – which is defined as land with low flood risk potential, having a less than 1 in 1,000 annual probability of river or sea flooding. There is a very small area of land towards the northern and north eastern boundary of the Site designated as Flood Zone 2 and 3 respectively (see Figure 17 below). As this is not within the footprints of any proposed development area and will remain within the buffer zone surrounding the Wealdstone Brook. For sites of 1 hectare or more, developers are required to undertake a site-specific flood risk assessment.



Figure 18 **Environment Agency Flood Risk Map**

405. As such, Terrell Associates have been commissioned to undertake a Flood Risk Assessment (FRA) to accompany the planning application for the Proposed Development, in accordance with the National Planning Policy Framework (NPPF) and accompanying Planning Practice Guidance.

Baseline Conditions

- 406. Reference will be made to the Council's Strategic Flood Risk Assessment (SFRA), published in November 2008. The SFRA is used to assess the risk to an area from flooding from all sources, now and in the future, taking account of the impacts of climate change. The SFRA is used to underpin Exception and Sequential Tests when assessing planning applications for new developments as well as the EA updated flood maps, the NPPF and associated guidance.
- **407.** The SFRA identifies a very small proportion of the Site as being affected by flooding from Wealdstone Brook, and it is recommended that future development of this site is limited to areas situated outside of Flood Zone 2 (Figure 17). This reinforces the intent of the Sequential Test which requires Council (and developers) to steer vulnerable uses within the Site to areas of lowest risk. Any development within flood affected areas of the Site will have to meet the requirements of the Sequential Test before any future consideration of the Site can be taken forward. Throughout the Site, (re)development must deliver a measurable reduction in flood risk. Risk reduction measures for consideration should include SUDS to seek a reduction in the rate of runoff from the Site.



- **408.** Thames Water has provided information to indicate that there have been up to 5 reported incidents of sewer related flooding in recorded history within the immediate vicinity of the Wembley Masterplan area. The details associated with these incidents are not available, however it is important to ensure that future development does not increase the rate of runoff from the Site. The potential risk of groundwater flooding within the Site is considered negligible.
- **409.** The SFRA also states that a minimum buffer zone must be provided for all culverted and open waterways. The minimum buffer width is 8 metres. Consultation with the Environment Agency has been undertaken which confirmed the minimum buffer width required was to be 10m from the edge of the Wealdstone Brook's concrete channel, rather than 8m from the top of the bank of the Wealdstone Brook.
- **410.** Consideration must be given to the uses to be introduced to the Site as part of the Proposed Development. In accordance with NPPF, the retail and office uses are classified as "less vulnerable" and the residential uses would be classed as "more vulnerable".
- **411.** The London Plan requires discharge rates to be reduced to 50% of the existing discharge rates (minimum) but aim for greenfield runoff rates. In addition, Defra's Non-Statutory Technical Standards require major developments to achieve a greenfield runoff rate. The detailed design of the Proposed Development will need to include measures to ensure compliance with these rates the preferred method being through the implementation of Sustainable Drainage Systems (SuDS). This will be considered as part of the application.
- **412.** The inclusion of SuDS techniques will ensure that run-off from the completed development will be controlled and stored on site, prior to subsequent discharge to the receiving sewer network. This will ensure that significant volumes of run-off are not released off-site or into the canal network. The initial conceptual surface water attenuation plan (drainage strategy) will be detailed within the FRA.
- **413.** Wealdstone Brook is located along the northern boundary of the Site, which is considered to be a sensitive receptor. However, the implementation of a CEMP will specify pollution prevention / construction best practice methods such as: installation of temporary drainage infrastructure during construction, storage of oils / chemicals / stockpiled materials away from the canal and with appropriate bunding, where necessary and covers for lorries transporting materials to / from the Site to prevent releases of dust / sediment to the brook.
- **414.** The Brent Model Update Study flood outlines from a catchment wide flood risk mapping model that can be used to investigate the additional risks posed by climate change. The 1 in 100-year outline + 35% and +70% for climate change show that the additional extent of the defended flood outlines will extend North of the Wealdstone Brook, not towards the Site, in line with the 1 in 1000-year flood extent used to identify Flood Zone 2.

Conclusion

415. Based on the conclusions of the FRA, the effects are not considered likely to be significant with the implementation of suitable SuDS and a CEMP, and therefore it is proposed to scope out water resources from the EIA. The FRA will be appended to the ES for reference, and the Drainage Strategy submitted alongside the planning application will stipulate what SuDS measures have been incorporated into the design of the development and/or what measures need to be secured through conditions, which will also be summarised in in the introductory chapters of the ES.



SCOPE SUMMARY

- **416.** To assist the reader, a summary of what is proposed to be 'scoped in' and 'scoped out' of the EIA, is provided in **Table 17**.
- **417.** Further detail on each topic is provided in the preceding technical sections of this request for an EIA Scoping Opinion.

Table 17EIA Technical Topics

Торіс	'Scoped Into' the EIA✓		Additional Assessments to
	'Scoped Out' of the EIA [★]		
	Construction	Completed Development	Application
Socio Economics	\checkmark	\checkmark	
Health	\checkmark	1	Will not form a standalone chapter but will be considered across relevant chapters within the ES. Health is addressed within relevant technical topic in their respective ES Chapters
Traffic and Transport	\checkmark	\checkmark	
Air Quality	\checkmark	\checkmark	
Noise & Vibration	\checkmark	\checkmark	
Ground Conditions and Land Contamination	×	×	Phase 2 - Land Contamination Assessment (to be appended to the ES)
Daylight, Sunlight, Overshadowing	\checkmark	\checkmark	
Light Pollution and Solar Glare	×	×	
Wind Microclimate	\checkmark	\checkmark	
Townscape, Visual and Built Heritage	\checkmark	\checkmark	
Archaeology (Buried Heritage)	×	×	Archaeology Desk Based Assessment (to be appended to the ES)
Climate Change	\checkmark	V	Will not form a standalone chapter but will be considered across relevant chapters within the ES. A Greenhouse Gas Assessment will be appended to the ES which will consider the Proposed Development's impact on Climate Change
Ecology and Biodiversity	×	×	Ecological Impact Assessment (to be appended to the ES)
Electronic Interference (TV and Radio)	×	×	
Project Vulnerability	×	×	
Waste and Materials	×	×	
Water Resources, Flood Risk and Drainage	x	x	Flood Risk Assessment and Drainage Strategy (separate planning reports to be submitted in support of the planning application)



FORMAT AND CONTENT OF THE EIA

- **418.** The proposed scope and structure of the ES is as follows:
 - **ES Volume 1: Main ES** a document which forms the main body of the ES and which comprises of the following non-technical and technical chapters:
 - Chapter 1. Introduction and EIA Methodology;
 - Chapter 2. Alternatives and Design Evolution;
 - Chapter 3. The Proposed Development;
 - Chapter 4. Demolition and Construction;
 - Chapter 5. Socio-Economics;
 - Chapter 6. Traffic and Transport;
 - Chapter 7. Air Quality;
 - Chapter 8. Noise and Vibration;
 - Chapter 9: Daylight, Sunlight and Overshadowing;
 - Chapter 10. Wind Microclimate;
 - Chapter 11: Effect Interactions;
 - Chapter 12. Likely Significant Effects and Conclusions;
 - Chapter 13. Mitigation and Monitoring Schedule; and
 - Chapter 14. Glossary and Abbreviations.
 - ES Volume 2: Townscape, Built Heritage and Visual Impact Assessment a separate townscape, built heritage and visual impact assessment (TBHVIA) document that will be accompanied by a full set of views and verified images, as agreed with LBB as part of this EIA Scoping Process:
 - **ES Volume 3: Technical Appendices** comprises background data, technical reports, tables, figures and surveys. The following appendices are currently envisaged
 - **ES Non-Technical Summary (NTS)** this will be a separate document providing a concise description of the Proposed Development, the alternatives considered, any identified mitigation measures and the residual likely significant environmental and socio-economic effects.
- **419.** Schedule 4 of the EIA Regulations sets out the information for inclusion within an ES. In response to this Schedule of the EIA Regulations, **Appendix B** to this EIA Scoping Report provides a 'way-finding' table which sets out the information for inclusion within an ES and where this information will be presented within the ES.



REQUEST FOR AN EIA SCOPING OPINION

- **420.** This Report requests a Scoping Opinion of the LBB pursuant to Regulation 15 of the EIA Regulations.
- **421.** The EIA Scoping Report suggests a comprehensive scope of work based on previous experience of the assembled team of specialists and existing knowledge of the Site. The LBB and consultees are invited to consider the contents of this Report and comment accordingly within the five-week period prescribed by the EIA Regulations.



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